





NEEDS ANALYSIS FOR THE ERDF AND ESF CO-FINANCED OPERATIONAL PROGRAMMES 2014-2020



Ireland's EU Structural Funds Programmes 2007 - 2013

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Table of Contents

Chapter	1: Overview	1
1.1	Introduction/Context	1
1.2	Objectives of the Needs Analysis	2
1.3	Scope of the Needs Analysis	2
1.4	Process	3
1.5	Report Structure	4
Chapter	2: Overarching EU and National Policy Context	6
2.1	Introduction	6
2.2	Europe 2020 and Flagship Initiatives	6
2.3	EU Cohesion Policy for the 2014-2020 Period	8
2.4	Common Provisions Regulation 2014-2020	9
2.5	Thematic Priorities for the 2014-2020 Period	10
2.6	European Regional Development Fund	11
2.7	European Social Fund	12
2.8	Common Strategic Framework	13
2.9	European Commission Position Paper on Ireland	14
2.10	Administrative Innovations for the 2014-2020 Period	16
2.11	Ireland's National Reform Programme-2013 Update	19
2.12	Country-Specific Recommendations for Ireland	25
2.13	Action Plan for Jobs 2012	26
2.14	Capital Investment Framework 2012-2016	28
2.15	National Spatial Strategy (NSS) 2002-2020	30
2.16	Local and Regional Administrative Reforms	32
2.17	Macro-regional and Sea-basin Strategies	32
2.18	European Code of Conduct on Partnership	34

	3.1	Mac	ro-Economic Situation	36
	3.2	Emp	ployment in Ireland	38
	3.4	Regi	ional Economic Performance	49
	3.5	Dem	nographic Trends	53
	3.6	Pove	erty and Deprivation	56
	3.7	Equ	ality and Equal Opportunities	61
	3.8	Envi	ronment and Sustainability	62
Ch	apter 4	1:	Review of Thematic Objectives	64
	4.1	Stre	ngthening Research, Technological Development and Innovation	64
	4.2	Enha	ancing Access to and Use and Quality of ICT	80
	4.3	Enha	ancing the Competitiveness of SMEs	89
	4.4	Sup	porting the Shift Towards a Low-Carbon Economy in All Sectors	. 102
	4.5	Pror	noting Climate Change Adaptation, Risk Management and Prevention	. 120
4	4.6	Prot	ecting the Environment and Promoting Resource Efficiency	. 127
	4.7 Infrast		noting Sustainable Transport and Removing Bottlenecks in Key Network Ires	. 145
4	4.8	Pror	noting Employment and Labour Mobility	. 156
	4.9	Pror	noting Social Inclusion and Combating Poverty	. 160
	4.10 Infrast		esting in Education, Skills and Lifelong Learning by Developing Education and Trainir	-
	4.11	Insti	itutional Capacity	.191
	4.12	Inte	grated Urban Development	.194
Ch	apter 5	5:	Territorial Analysis	.204
	5.1	SWC	OT Analysis for the Border, Midland and Western Region	.204
	5.1.2	1	Strengthening research, technological development and innovation	.204
	5.1.2	2	Enhancing access to, use and quality of ICT	.206
	5.1.3	3	Enhancing the competitiveness of SMEs	. 208
	5.1.4	4	Supporting the shift towards a low carbon economy in all sectors	.211

5.1.5	Promoting climate change adaptation, risk prevention and management	213
5.1.6	Protecting the environment and promoting resource efficiency	214
5.1.7 infrastro	Promoting sustainable transport and removing bottlenecks in key network uctures	216
5.1.8	Promoting employment & supporting labour mobility	218
5.1.9	Promoting social inclusion & combating poverty	219
5.1.10	Investing in education, skills & lifelong learning	221
5.1.11	Enhancing Institutional Capacity	222
5.1.12	Integrated Strategies for Sustainable Urban Development	224
5.2 SW	OT Analysis for the Southern and Eastern Region	225
5.2.1	Strengthening research, technological development and innovation	225
5.2.2.	Enhancing access to, use and quality of ICT	227
5.2.3	Enhancing the competitiveness of SMEs	229
5.2.4.	Supporting the shift towards a low carbon economy in all sectors	231
5.2.5	Promoting climate change adaptation, risk prevention and management	234
5.2.6	Protecting the environment and promoting resource efficiency	235
5.2.7 infrastru	Promoting sustainable transport and removing bottlenecks in key network uctures	236
5.2.8	Promoting employment & supporting labour mobility	238
5.2.9	Promoting social inclusion & combating poverty	240
5.2.10	Investing in education, skills & lifelong learning	242
5.2.11	Enhancing Institutional Capacity	243
5.2.12	Integrated Strategies for Sustainable Urban Development	244
5.3 Sul	o-Territorial Disadvantages	246
5.3.1	BMW Region	246
5.3.2	S&E Region	247
5.4 Specifi	c Needs of Urban and Rural Areas	249
5.5 Specifi	c Needs of Coastal & Marine Areas	256

5.6 Si	5.6 Summary of Territorial Needs and Imbalance258		
5.6	5.1	BMW Region	258
5.6	5.2	S&E Region	260
Chapter	r 6: Ap	pplication of Horizontal Principles	263
6.1	Intr	oduction	263
6.2	Pro	motion of Equality between Men and Women	263
6.3 Disab		motion of Equal Opportunities, Non Discrimination and Accessibility for persons wi	
6.4	Pro	motion of Sustainable Development	269
6.5	Pro	motion of Social Inclusion	272
6.6	Nor	th South Co-operation	274
Chapter	r 7: Po	tential Complementarities and Synergies	275
7.1	Intr	oduction	275
7.2	ERD 275	DF: Potential complementarities and synergies between priorities and potential acti	ons
7.2	2.1	Strengthening Research, Technological Development and Innovation	275
7.2	2.2	Enhancing Access to and Use and Quality of ICT	276
7.2	2.3	Enhancing the Competitiveness of SMEs	276
7.2	2.4	Low-Carbon Economy	277
7.2	2.5	Integrated Urban Development	277
7.3	Use	e of the European Structural and Investment Funds in a Complementary Manner	278
7.4	Con	nplementarities and Synergies with other Union funds and Instruments	284
7.6	ESI	funds synergies with the Europe 2020 Strategy and Flagship Initiatives	304
7.7	Con	nplementary national investment programmes and strategies	310
7.8	Pot	ential contribution to the Atlantic Strategy Action Plan	311
		onclusions and Justifications for Selection of Thematic Objectives and Investment	313
8.1	Intr	oduction	313

	8.2 Conclusions and Recommendations for the Selection of Thematic Objectives and		
	Investr	nent Priorities	314
	8.4	Potential for integrated approaches to territorial development	345
	8.5	Implementation Arrangements	349
А	nnexes.		350
	Annex	1: Summaries of Submissions Received	350
		2: Summaries of Regional Stakeholder Consultation Workshops on the Regional Needs	
	Analysi	is Report	379
	Annex	3: Financial Instrument Feasibility Study	384
	Annex	4: Sub-Territorial Trends and Disadvantages by NUTS III Region	387
	Annex	5: List of Abbreviations	388

List of Figures, Maps and Tables

Table 1: Europe 2020 Headline & Ireland Targets 21
Table 2: Infrastructure & Capital Investment Priorities 2012–2016
Map 1: National Spatial Strategy 2002-2020 Gateways & Hubs Map
Table 3: Atlantic Area Strategy Priorities 33
Figure 1: Ireland's GDP at Current Market Prices 2002-2011
Figure 2: EU 27, Ireland NUTS II GDP per Capita 2010
Figure 3: EU 27, Ireland & NUTS II GDP per Capita 2010 (Purchasing Power Standard)42
Figure 4: Ireland, NUTS II & NUTS III ILO Unemployment Rate 2003-201343
Map 2: Ireland's Labour Force Unemployment Rate, 201146
Figure 5: Ireland, NUTS II & NUTS III Percentage Increase in Live Register Recipients 2003-2013 47
Figure 6: EU27 & Ireland Long-Term Unemployment Rates 2001-201247
Figure 7: Ireland's Unemployment Rates by Gender & Age Group 201348
Figure 8: Ireland, NUTS II & NUTS III Disposable Income per Person 2010 (€)
Table 4: Total Employment by Region in IDA Supported Companies 2008-2012 50
Figure 9: EU 27, Ireland, NUTS II & NUTS III Indices of GVA per Person at Basic Prices 2002-2010 (EU27 = 100)
Figure 10: NUTS III Regional Contribution to National GVA 2010
Figure 11: Ireland, NUTS II & NUTS III GVA at Basic Prices 2010
Table 5: European Regional Competitiveness Index 2013, NUTS II Ireland Rankings by Selected Pillars
Figure 12: EU27, Ireland, NUTS II & NUTS III Percentage Population
Change 2006-2011
Map 3: Demographic Change in Ireland 2006-201155
Figure 13: EU27, Ireland & NUTS II by Age Band 201156
Figure 14: EU27, Ireland, NUTS II & NUTS III Youth Dependency Rates 201158
Figure 15: EU27, Ireland, NUTS II & NUTS III Old Dependency Rates 201158
Figure 16: Ireland, NUTS II & NUTS III Change in Absolute Pobal HP Deprivation Index Score 201159

Map 4: Ireland Relative Deprivation ScorePobal HP Deprivation Index 2011,6	50
Figure 17: Ireland Change in Transport Use by Mode 2006-2011	53
Figure 18: Ireland's GERD as % of GDP, 2008-2013	59
Table 6: Ireland's Actual BERD Expenditure by Sector of Activity 2009 (€'000)	0
Figure 19: NUTS II Actual BERD Expenditure 2009/10 (€'000)	1′1
Figure 20: Ireland's BERD Expenditure by Type of Research & Size of Enterprise, 2009/107	2
Table 7: Ireland's Technological & Non-Technological Innovation Active Rates by Sector & Numbe of Persons Engaged, 2008-2010	
Figure 21: Ireland's HERD Expenditure & Percentage of GNP 2008-2013	' 5
Table 8: NUTS II Gross HERD Expenditure by Institution 2000-2010 (€m)	′5
Figure 22: EU 27, Ireland & NUTS III Percentage of Households with Computer Connected to the Internet (%) 2007-2012	33
Map 5: Ireland's Percentage of Households with Broadband Connections 2011	35
Map 6: National & Rural Broadband Schemes Availability	37
Figure 23: Ireland, NUTS II & NUTS III Number of active SMEs 2010) 5
Figure 24: Ireland's Growth & Decline of Active SMEs 2006-2010) 6
Figure 25: Ireland's Number of Enterprise Births & Deaths 2006-2010) 7
Figure 26: Enterprise Deaths by Sector 2006-2009	98
Figure 27: Ireland's Greenhouse Gas Inventory 2000-2011 ('000 tonnes Co2 Equivalent)11	10
Figure 28: Ireland's Level of Greenhouse Gas Emissions 2000-2011 (million tonnes CO2 Equivalent	•
Table 9: EU27 & Ireland Greenhouse Gas Emissions in CO2 Equivalent (million tonnes)	1
Figure 29: Ireland's Final Energy Consumption by Economic Sector 201111	12
Table 10: Ireland's Primary Energy Requirement & Final Energy Consumption 2000-2010 (000s ktoe)	13
Figure 30: Ireland's Final Energy Consumption by Fuel Type & Percentage Share 201011	14
Figure 31: Ireland's Percentage Share of Electricity Generated from Renewable Sources 2001-2012	
Table 11: Ireland's Primary Renewable Energy Production (ktoe) by Fuel Type 2011 11	15

Figure 32: Ireland's Total Final Energy Consumption by Consuming Sector 2007-2011 (Ktoe, C	00s)
	116
Figure 33: Ireland's Mean Surface Air Temperature 1900-2011	126
Figure 34: Ireland's Annual Rainfall 1941-2010	126
Figure 35: Ireland's Bathing Water Quality 2000-2012	134
Table 12: Ireland's River Water Quality 2001-2009	134
Table 13: Ireland's Drinking Water Quality 2000-2010	135
Table 14: Ireland's Urban Waste Water by Treatment Type 2000-2010	136
Figure 36: EU & Ireland Protected Areas under the EU Birds & Habitat Directives 2010	136
Figure 37: Ireland's Overall Conservation Status of Habitats 2012	137
Figure 38: Ireland's Land Usage by Type 2000-2009	138
Figure 39: Ireland's Municipal Waste Generated 2001-2010 ('000s tonnes)	140
Figure 40: Ireland's Municipal Waste Disposal Rate Landfill 2001-2010	141
Figure 41: Ireland's Municipal Waste Recovery Rate 2001-2011	142
Figure 42: Ireland, NUTS II & NUTS III Private Transport Rate for Travel to Work, School or Co 2006 & 2011	-
	151
2006 & 2011	151 152
2006 & 2011 Map 7: Ireland's Percentage of Car Based Commuting 2011 Figure 51: Ireland's Percentage of Working Age Adults in Employment by Level of Highest	151 152 175
2006 & 2011 Map 7: Ireland's Percentage of Car Based Commuting 2011 Figure 51: Ireland's Percentage of Working Age Adults in Employment by Level of Highest Qualification (Aged 15-64) - Quarter 4 2011	151 152 175 176
2006 & 2011 Map 7: Ireland's Percentage of Car Based Commuting 2011 Figure 51: Ireland's Percentage of Working Age Adults in Employment by Level of Highest Qualification (Aged 15-64) - Quarter 4 2011 Figure 52: Ireland's Unemployment Rate by Education Attainment & Age (Qtr. 4, 2011)	151 152 175 176 177 Status
2006 & 2011 Map 7: Ireland's Percentage of Car Based Commuting 2011 Figure 51: Ireland's Percentage of Working Age Adults in Employment by Level of Highest Qualification (Aged 15-64) - Quarter 4 2011 Figure 52: Ireland's Unemployment Rate by Education Attainment & Age (Qtr. 4, 2011) Figure 53: Ireland's Early School Leavers' Rates 2011 (NUTS I) Figure 54: Ireland's Early School Leavers & Others Aged 18-24 classified by ILO Employment	151 152 175 176 177 Status 178
2006 & 2011 Map 7: Ireland's Percentage of Car Based Commuting 2011 Figure 51: Ireland's Percentage of Working Age Adults in Employment by Level of Highest Qualification (Aged 15-64) - Quarter 4 2011 Figure 52: Ireland's Unemployment Rate by Education Attainment & Age (Qtr. 4, 2011) Figure 53: Ireland's Early School Leavers' Rates 2011 (NUTS I) Figure 54: Ireland's Early School Leavers & Others Aged 18-24 classified by ILO Employment (%)	151 152 175 176 177 Status 178 179
2006 & 2011 Map 7: Ireland's Percentage of Car Based Commuting 2011 Figure 51: Ireland's Percentage of Working Age Adults in Employment by Level of Highest Qualification (Aged 15-64) - Quarter 4 2011 Figure 52: Ireland's Unemployment Rate by Education Attainment & Age (Qtr. 4, 2011) Figure 53: Ireland's Early School Leavers' Rates 2011 (NUTS I) Figure 54: Ireland's Early School Leavers & Others Aged 18-24 classified by ILO Employment (%) Figure 55: Ireland's Proportion of the Population Aged 30-34 with a Tertiary Degree 2011	151 152 175 176 177 Status 178 179 197
2006 & 2011 Map 7: Ireland's Percentage of Car Based Commuting 2011 Figure 51: Ireland's Percentage of Working Age Adults in Employment by Level of Highest Qualification (Aged 15-64) - Quarter 4 2011 Figure 52: Ireland's Unemployment Rate by Education Attainment & Age (Qtr. 4, 2011) Figure 53: Ireland's Early School Leavers' Rates 2011 (NUTS I) Figure 54: Ireland's Early School Leavers & Others Aged 18-24 classified by ILO Employment : (%) Figure 55: Ireland's Proportion of the Population Aged 30-34 with a Tertiary Degree 2011 Map 11: National Spatial Strategy 2002-2020 Gateways & Hubs Map	151 152 175 176 176 177 Status 178 179 197 197 201
2006 & 2011 Map 7: Ireland's Percentage of Car Based Commuting 2011 Figure 51: Ireland's Percentage of Working Age Adults in Employment by Level of Highest Qualification (Aged 15-64) - Quarter 4 2011 Figure 52: Ireland's Unemployment Rate by Education Attainment & Age (Qtr. 4, 2011) Figure 53: Ireland's Early School Leavers' Rates 2011 (NUTS I) Figure 54: Ireland's Early School Leavers & Others Aged 18-24 classified by ILO Employment 1 (%) Figure 55: Ireland's Proportion of the Population Aged 30-34 with a Tertiary Degree 2011 Map 11: National Spatial Strategy 2002-2020 Gateways & Hubs Map Map 12: Ireland's Gateways & Hubs Functional Areas 2011	151 152 175 175 176 177 Status 178 178 179 197 197 201 202

Table 20: BMW and S&E Regional Assemblies (2013), Gateways and Hubs Development Index	
2012: Key Hubs Findings	

Chapter 1: Overview

1.1 Introduction/Context

In October 2011 the European Commission published its proposals for the legislative package to support Cohesion Policy for the next Programming Period 2014-2020. These proposals consist of an over-arching Common Regulation for all the Common Strategic Framework (CSF) Funds (European Regional Development Fund, European Social Fund, European Agricultural Fund for Rural Development, and the European Maritime & Fisheries Fund), and Fund specific Regulations, together with a separate Regulation for European Territorial Co-operation.

The key programming documents to be prepared include a Partnership Agreement, which is the overall strategic document at national level which defines the scope and manner of the proposed interventions under the ERDF, ESF, EAFRD and EMFF funds, the overall results to be achieved and the arrangements to ensure strategic coherence at EU, national and regional levels; and Operational Programmes, which set out the thematic priorities, implementation arrangements, performance framework and financing plan for the programme.

In order to assist the Irish authorities (Department of Public Expenditure and Reform and the ERDF and ESF Managing Authorities) to comply with Articles 14 (a) (i) and 87(2) (a) of the draft Common Provisions Regulations relating to the provision of an analysis of disparities and development needs, ensuring alignment with the Union strategy for smart, sustainable and inclusive growth and a justification for the selection of prioritised thematic objectives, it has been agreed that a comprehensive needs analysis process should be undertaken. The Needs Analysis is intended to fully meet the requirements set out by the EU Commission in its draft Partnership Agreement and Operational Programme (OP) templates in respect of the ERDF and ESF co-financed programmes. Its findings will be subject to an ex ante evaluation as part of the programme preparation and finalisation processes, for these OPs.

Ireland faces a significant challenge of emerging from the economic crisis and placing the economy on a sustainable path to recovery. It is recognised that CSF funds will deliver a very important contribution as a key source of public investment and serve as a catalyst for

sustainable growth, employment and competitiveness, particularly in less advantaged regions. In order to ensure more effective spending, the new approach to enhanced governance proposed by the European Commission for the 2014-2020 Multi-annual Financial Framework (MFF) places a strong emphasis on aligning CSF investment with the Europe 2020 agenda; a strong integrated approach for optimising synergies; ex-ante conditionality and performance incentives; and, prioritisation and results.

1.2 Objectives of the Needs Analysis

The overall objective of the Needs Analysis is to ensure that the strategic choices made by the Irish programming bodies are justified, that they are consistent with the EU strategies of smart, sustainable and inclusive growth, with the ERDF and ESF fund-specific missions and with the Treaty goals of economic, social and territorial cohesion (Articles 174 and 175 of the Treaty on the Functioning of the European Union).

To this end, the Needs Analysis is intended to provide an evidence-base in setting out the baseline situation and underpinning policies and strategies in respect of the selected prioritised themes for the ERDF and ESF co-financed programmes. It is also designed to take into account the EU 2020 objectives, National Reform Programme targets and relevant country specific Council recommendations and to demonstrate consistency with the Common Strategic Framework for the European Structural and Investment Funds 2014-2020.

The Needs Analysis is also required to take into account specific sectoral and territorial challenges, set out the current position in respect of the horizontal principles of sustainable development, gender equality and non-discrimination and how they can be better integrated into programming.

1.3 Scope of the Needs Analysis

The Needs Analysis is focussed on meeting the above objectives and is not intended to address all regional and national investment needs or review all sectoral potentials or infrastructure capacity needs where these relate to investments that are outside the scope of potential ERDF and ESF co-financing over the 2014-2020 period. The scope of the Needs Analysis is therefore as follows:

- An analysis of the EU, national and regional strategies and policies which underpin the thematic objectives as set out in the Common Provisions Regulation;
- A review of the baseline situation and trends with respect to the thematic objectives for ESF and ERDF co-funding and related sectors, with an emphasis on their potential to stimulate economic growth and employment creation;
- An analysis of development needs and challenges, territorial disparities at NUTS II level, including a SWOT analysis at NUTS II level;
- Identification of any potential constraints or bottlenecks that could inhibit progress and any significant regional (at NUTS II level for ESF programme and NUTS III for ERDF programmes) weaknesses/issues hindering the overall performance of the Regions;
- The identification of geographic areas most affected by poverty or of target groups at highest risk of discrimination or exclusion;
- An analysis of lessons learned from the 2007-13 programming period;
- Key policy challenges, opportunities and other external environment factors likely to be faced in the 2014-2020 programme period;
- A review of the current situation with regard to promotion of sustainable development, addressing climate change, gender equality and non-discrimination in public policy and in respect of their integration into EU co-financed programmes; and
- Identification of key needs to be addressed in the ESF and ERDF¹ co-financed Operational Programmes, a justification for this selection and identification of needs that will be addressed using other EU co-financed programmes and/or national resources.

1.4 Process

The process of undertaking the Needs Analysis was conducted on a collective basis which drew upon the European, National and Regional Policy analysis expertise of the ERDF and ESF Managing Authorities, the spatial analysis and mapping expertise of the National Institute for Regional and Spatial Analysis (NIRSA) at NUI Maynooth (Chapter 3 and trend analysis in Chapter 4) and the territorial analysis expertise of the Limerick Institute of Technology (LIT) (Chapter 5). Due regard has been given in the analysis to a wide range of

¹ Joint European Support for Sustainable Investment in City Areas 2014-2020, Evaluation Study for Ireland, June 2013. This feasibility study outlines the potential use of an ERDF/EIB co-financed financial engineering instrument to meet some of Ireland's investment needs 2014-2020.

relevant EU, national and regional policies, strategies, guidelines and regulatory frameworks. The overall framework that was applied for the identification of investment priorities is provided at the end of this chapter.

In accordance with the draft code of practice on the partnership principle for the 2014-2020 period, the programme planning bodies undertook consultations with all relevant stakeholders prior to commencing the preparation of the Operational Programmes and coinciding with the Needs Analysis process. In April 2013 the ERDF Managing Authorities published a call for public consultation on their websites inviting submissions on the preparation of the respective operational programmes. In addition the Managing Authorities circulated the call notice on an extensive basis to their stakeholders. In November and December 2013 the ERDF Managing Authorities hosted stakeholder's workshops to facilitate consultation on the draft Needs Analysis to further inform the process. This ensured that investment needs identified by relevant stakeholders could be taken into account in the identification of prioritised thematic objectives for Ireland's Partnership Agreement and the ERDF and ESF co-financed Operational Programmes. A summary of the proceedings of both workshops is provided in Annex 2 of this report.

1.5 Report Structure

This report is structured around the key strategic orientations and socio-economic contexts for the 2014-20 programming period, namely:

- Over-arching European, National and Regional Policy frameworks (Chapter 2);
- National and Regional Socio-Economic Context (Chapter 3);
- Review of potential ERDF and ESF thematic priorities (Chapter 4);
- Analysis and mapping of territorial needs and growth potentials (Chapter 5);
- Integration of EU and National Horizontal principles (Chapter 6);
- Potential Complementarities and Synergies (Chapter 7); and
- Conclusions and justification for selection of thematic priorities (Chapter 8).

Strategic framework for the identification of investment priorities 2014-2020



Chapter 2: Overarching EU and National Policy Context

2.1 Introduction

This chapter reviews a range of relevant European, National and Regional Policies, Regulations and Strategies which provide the overarching policy orientation for the 2014-2020 ERDF and ESF co-financed Operational Programmes. These, combined with the socio-economic (Chapter 3) and territorial needs analysis (Chapter 4) and the more in-depth analysis of thematic and sectoral priorities provide the policy and socio-economic context for the selection of prioritised thematic objectives and investment priorities.

2.2 Europe 2020 and Flagship Initiatives

Europe 2020 is the European Union's ten-year growth strategy. It involves integrating EU efforts related to development through greater coordination of national and European policies and creating the conditions for a growth model at EU, national and regional levels that is smarter, more sustainable and more inclusive.

Europe 2020 puts forward three mutually reinforcing priorities for the decade:

- 1. Smart growth: developing an economy based on knowledge and innovation;
- 2. Sustainable growth: developing a more resource-efficient, greener and more competitive economy
- 3. Inclusive growth; and
- 4. Fostering a high-employment economy delivering social and territorial cohesion.

It also sets five overarching objectives to be reached by 2020 – and further translated into national targets which require a mixture of national and EU action. The Europe 2020 Strategy's objectives are:

- Employment (75% of the population aged 20-64 should be employed);
- Innovation (3% GDP should be invested in R&D);
- Climate Change ("20/20/20" climate/energy targets should be met);
- Education (early school leavers ≤10% and at least over 40% of 30-34 year olds should have a tertiary degree).
- Poverty (20M people out of the risk of poverty and exclusion).

Innovation Union	Aims to improve conditions and access to finance for
	research and innovation, so that innovative ideas can
	ultimately be turned into products and services and
	thereby create growth and jobs.
Youth on the move	Aims to enhance the performance of education
	systems and to facilitate the entry of young people
	into the labour market. This is done inter alia through
	EU-funded study, learning and training programmes,
	as well as platforms that help young jobseekers find
	employment across the EU
A digital agenda for Europe	Aims to speed up the roll-out of high-speed Internet
	and uptake of information and communication
	technologies
Resource-efficient Europe	Aims to help decouple economic growth from the
	use of resources. It supports the shift towards a low-
	carbon economy, an increased use of renewable
	energy sources, the development of green
	technologies and a modernized transport sector, and
	promotes energy efficiency.
An industrial policy for the	Aims to improve the business environment notably
globalisation era	for SMEs, for example by helping them to access
	credit and cutting red tape. It also supports the
	development of a strong and sustainable industrial
	base able to innovate and compete globally.
An agenda for new skills and jobs	Aims to modernize labour markets and empower
	people by developing their skills and improving
	flexibility and security in the working environment.
	It also aims to help workers seek employment across
	the EU more easily in order to better match labour
	supply and demand.

In order to achieve these ambitious targets, the EU has identified new engines to boost growth and jobs. These areas are addressed by 7 flagship initiatives:

European platform against	Aims to ensure social and territorial cohesion by
poverty	helping the poor and socially excluded to get access
	to the labour market and become active members of
	society.

A critical element of the overall governance of the Europe 2020 strategy is the European Semester, a yearly cycle of economic policy coordination involving EU level policy guidance by the European Commission and Council, reform commitments by the Member States (National Reform Programmes) and country-specific recommendations prepared by the Commission and endorsed at the highest level by national leaders in the European Council. These recommendations are intended to be taken on board in the Member States' policies and budgets. Ireland's National Reform Programme is reviewed in section 2.11.

2.3 EU Cohesion Policy for the 2014-2020 Period

The Fifth Cohesion Report² was adopted in November 2010. It introduced a strategic framework for aligning Cohesion Policy with the Europe 2020 Strategy highlighting the importance of a strategic programming approach for the post 2013 period. The Report envisaged that a Common Strategic Framework (CSF) adopted by the Commission would translate the Europe 2020 strategy into investment priorities. Based on the CSF, Partnership Agreements will be drawn up on a national level to outline the allocation of national and EU resources between programmes and priority areas, conditionalities and targets. These would be agreed and signed between the Member State and the Commission. Operational Programmes (OPs) would then draw on these strategic documents and translate them into specific investment priorities, with measurable targets.

The adoption of the Territorial Agenda³ 2020 in May 2011, aimed to provide strategic orientation for territorial development, fostering the integration of the territorial dimension within different policies across all governance levels while overseeing the implementation of the "Europe 2020" strategy in accordance with the principle of territorial cohesion.

² http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/cohesion5/pdf/5cr_en.pdf

³ http://www.eu2011.hu/files/bveu/documents/TA2020.pdf

EU Cohesion Policy for the period 2014-2020 has a key role in delivering on the European 2020 objectives and also needs to ensure that the strategy is implemented according to territorial cohesion principles. The legislative architecture for cohesion policy comprises:

- An overarching regulation setting out common rules for the European Regional Development Fund (ERDF), the European Social Fund (ESF), the Cohesion Fund, the European Agricultural Fund for Rural Development (EAFRD), the European Maritime and Fisheries Fund (EMFF), and further general rules for the ERDF, ESF and Cohesion Fund;
- Three specific regulations for the ERDF, the ESF and the Cohesion Fund; and
- Two regulations on the European territorial cooperation goal and the European Grouping of Territorial Cooperation (EGTC).

2.4 Common Provisions Regulation 2014-2020

In October 2011, the European Commission adopted a draft legislative package which will frame cohesion policy for the 2014-2020 programme period. The new proposals are designed to reinforce the strategic dimension of the policy and to ensure that EU investment is targeted on Europe's long-term goals for growth and jobs ("Europe 2020").

In order to ensure that the European Structural and Investment Funds deliver long-lasting impacts, the Commission has proposed a new approach to the way cohesion policy is designed and implemented, namely:

- Concentrating on the Europe 2020 Strategy's priorities of smart, sustainable and inclusive growth;
- Introduction of conditionalities;
- Rewarding performance;
- Supporting integrated programming;
- Focusing on results monitoring progress towards agreed objectives;
- Reinforcing territorial cohesion; and
- Simplifying delivery.

The Common Provisions Regulation (CPR) – which establishes the key areas of support, territorial challenges to be addressed, policy objectives, priority areas for cooperation

activities, coordination mechanisms and mechanisms for coherence and consistency with the economic policies of Member States and the Union – defines the thematic objectives for the Common Strategic Framework Funds that contribute to the EU strategy for smart, sustainable and inclusive growth.

While interventions in the less developed regions will remain the priority for cohesion policy, there are important challenges that concern all Member States, such as global competition in the knowledge-based economy and the shift towards the low carbon economy. The more developed regions category, which includes both of Ireland's NUTS II Regions concerns those regions whose GDP per capita is above 90 % of the average GDP of the EU-27 over the 2008-2010 reference period.

2.5 Thematic Priorities for the 2014-2020 Period

The draft CPR (Article 9) provides that the ESI Funds shall support the following 11 Thematic Objectives:

- Strengthening research, technological development and innovation;
- Enhancing access to, and use and quality of, information and communication technologies;
- Enhancing the competitiveness of small and medium-sized enterprises, the agricultural sector (for the EAFRD) and the fisheries and aquaculture sector (for the EMFF);
- Supporting the shift towards a low-carbon economy in all sectors;
- Promoting climate change adaptation, risk prevention and management;
- Protecting the environment and promoting resource efficiency;
- Promoting sustainable transport and removing bottlenecks in key network infrastructures;
- Promoting employment and supporting labour mobility;
- Promoting social inclusion and combating poverty;
- Investing in education, skills and lifelong learning; and
- Enhancing institutional capacity and an efficient public administration.

These are broken down in the context of the Europe 2020 strategy, as follows: -

Breakdown of the Eleven CSF thematic objectives in the context of the Europe 2020

Strategy



2.6 European Regional Development Fund

The European Regional Development Fund (ERDF) aims to strengthen economic, social and territorial cohesion in the European Union by correcting imbalances between regions. In particular, the ERDF supports the following activities in order to contribute to the investment priorities as set out in Article 5 of the draft ERDF Regulation:

- 1. Productive investment, which contributes to creating and safeguarding sustainable jobs, through direct aid to investment in small and medium-sized enterprises (SMEs);
- 2. Investments in infrastructure providing basic services to citizens in the areas of energy, environment, transport, and information and communication technologies (ICT);
- 3. Investments in business, social, health, research, innovation and educational infrastructure;
- 4. Investment in the development of endogenous potential through fixed investment in equipment and small-scale infrastructure;
- 5. Services to enterprises, support to research and innovation bodies; and investment in technology and applied research in enterprises; and

6. Networking, cooperation, capacity building, studies, preparatory actions and exchange of experience.

To ensure that EU investments are concentrated on those priorities, minimum allocations are set in the ERDF Regulation for a number of priority areas. In addition, the proposed ERDF regulation provides for an increased focus on sustainable urban development.

2.7 European Social Fund

ESF 2014 - 2020

On 6 October 2011, the Commission proposed the rules that will determine how the ESF will work in the 2014-2020 period. The proposal is part of an overall legislative package for the Union's future cohesion policy. It will allow the ESF to continue providing concrete support to people who need help to find a job, or to progress in their current job.

The aim of the European Social Fund is to improve employment opportunities, promote education and life-long learning, enhance social inclusion, contribute to combating poverty and develop institutional capacity of public administration. With the new proposal, the role of the ESF will be reinforced:

• there will be a minimum share of the budget allocated to each category of regions that will be higher than before (at least 25% for less developed regions, 40% for transition regions and 52% for more developed ones). This share corresponds to at least €84 billion for the ESF, compared to the current €75 billion;

• Member States will have to concentrate the ESF on a limited number of objectives and investment priorities in line with the Europe 2020 Strategy, in order to increase impact and reach a critical mass;

• a minimum share of 20% of the ESF will be dedicated to social inclusion actions;

• a greater emphasis is placed on combating youth unemployment, promoting active and healthy ageing, and supporting the most disadvantaged groups and marginalized communities such as Roma;

• greater support will be provided to social innovation, i.e. testing and scaling up innovative solutions to address social needs, for instance to support social inclusion;

• the participation of social partners and civil society, in particular Non-Governmental Organisations (NGOs), will be further encouraged in the implementation of the ESF, through

capacity building, the promotion of community-led local development strategies and the simplification of the delivery system (see also: European Code of Conduct on Partnership). Rules governing the reimbursement of projects by the ESF will be simplified, in particular for "small" beneficiaries, who make up at least 50% of recipients of ESF funding – NGO's, small- and medium-sized enterprises and others;

• equipment linked to investments in social and human capital will become eligible for support from the ESF.

2.8 Common Strategic Framework

To ensure that the European Structural and Investment funds deliver long-lasting economic and social impacts, the Commission proposed a new approach to the use of the funds in its proposal for the 2014-2020 Multiannual Financial Framework. Strong alignment with the policy priorities of the Europe 2020 agenda, macroeconomic and ex-ante conditionalities, thematic concentration and performance incentives are expected to result in more effective spending. This builds on experience from previous programming periods and serves to address several factors affecting the effectiveness of investment including the need for a strategic orientation and concentration, the need to avoid fragmentation of investments and a weak response to actual needs.

The aim of the Common Strategic Framework is to increase coherence between policy commitments made in the context of Europe 2020 and investment on the ground through the Operational Programmes. It encourages integration by setting out how the funds can work together and provides a source of strategic direction to be translated by Member States and regions into the programming of the CSF Funds in the context of their specific needs, opportunities and challenges.

The Common Strategic Framework translates the objectives and targets of the Union priorities of smart, sustainable and inclusive growth into key actions for the ERDF, the CF, the ESF, the EAFRD and the EMFF in order to ensure an integrated use of the CSF Funds to deliver common objectives. The Common Strategic Framework requires a focus on a small number of priorities in order to concentrate resources from the Structural Funds and national budgets on a small number of thematic priorities, linked to the Europe 2020 objectives, including:

- Each of the thematic objectives set out in the proposal for the Common Provisions Regulation,
- the main Europe 2020 targets and policy objectives that should be addressed by Member States in their Partnership Agreements, closely linked to their National Reform Programmes, and key actions, corresponding to investment priorities and Union priorities, which are expected to generate the greatest impact on growth, jobs and sustainability during implementation of the programmes;
- Specific outputs and results to be achieved, within a more results-oriented monitoring and evaluation framework and linkages with the governance process of the European Semester;
- The coordination and integration of the CSF Funds;
- Horizontal principles and policy objectives for the implementation of the CSF Funds;
- The development of Partnership Agreements and programmes to address the territorial challenges of smart, sustainable and inclusive growth; and
- Strengthen partnerships in order to increase the involvement of local and regional stakeholders, social partners and civil society organisations in the implementation of Operational Programmes' priorities for cooperation activities.

2.9 European Commission Position Paper on Ireland

Based on the foregoing context, the European Commission, on an inter-services basis, has developed a position paper on each Member State in order to prioritise direction for the use of Structural Funds in the next programming period. The position paper sets the framework for dialogue between the Commission Services and Ireland on the preparation of the Partnership Agreement and the Operational Programmes. It identifies key country challenges and calls for an optimization of the use of the funds, by concentrating resources in a limited number of priority areas.

Among the key challenges identified are:

- High levels of overall and youth unemployment, increasingly long-term in nature and the increasing risk of social exclusion;
- Insufficient commercialisation of basic research;
- Low availability of finance for the private sector, particularly for SMEs; and

• Inefficient use of resources.

The position paper on Ireland calls for optimising the use of European Structural and Investment Funds by establishing a strong link to productivity and competitiveness enhancing reforms, leveraging private resources and boosting potential high growth sectors, while emphasising the need to preserve solidarity within the Union and ensuring the sustainable use of natural resources for future generations. There is also a need to concentrate future EU spending on priority areas to maximise the results to be obtained, rather than spreading funding too thinly.

The position paper encourages Ireland to focus on fostering competitiveness and employment and to address inefficient use and exploitation of natural resources and exploiting the jobcreation and commercial opportunities provided by the harnessing of Ireland's substantial renewable energy resource including marine renewables. The Position Paper provides an indication of Ireland's current status and identified targets for key areas against headline targets established by the Europe 2020 strategy.

Priorities for funding identified in the position paper include:

- Combating long-term and youth unemployment and social exclusion;
- Measures to increase the employment rate, Including measures in support of women to reenter the labour market need to be implemented in order to increase the employment rate⁴;
- Promotion of R&D investment and the competitiveness of the business sector;
- Promotion of an environmentally friendly and resource-efficient economy;

The position paper also addresses arrangements for efficient programme delivery, coordination, complementarity and synergy, reduction in the administrative burden and partnership arrangements.

⁴ Para 2.1.1

The position paper also addresses arrangements for efficient programme delivery, coordination, complementarity and synergy, reduction in the administrative burden and partnership arrangements.

2.10 Administrative Innovations for the 2014-2020 Period

There are a number of innovative implementation arrangements introduced in the draft Common Provisions Regulation for the 2014-2020 programmes. In order to promote integrated approaches to territorial development, the proposal for a Common Provisions Regulation provides for two mechanisms to facilitate the development of local and subregional approaches. These are Community Led Local Development and Integrated Territorial Investments for the ERDF, ESF and Cohesion Fund. Both seek to engage regional and local actors and local communities in the implementation of programmes.

Community Led Local Development

Community-led local development (CLLD) is a method for involving partners at local level in programme delivery on a bottom-up basis, as exemplified by the LEADER approach to rural development. Community led local development is focused on specific sub-regional territories, led by local action groups that must be composed of representatives of public and private local socio-economic interests. Supported investments are implemented via integrated and multi-sectoral area-based local development strategies. It is a compulsory delivery mechanism for the EAFRD–funded programmes and an optional delivery mechanism for the ERDF, ESF and EMFF- funded programmes.

The main aims of the Commission's proposals in respect of CLLD are to:

- Encourage the development of integrated bottom-up approaches in response to local challenges;
- Build capacity to identify potential and to exploit untapped resources;
- Promote local ownership of development processes, thus increasing participation and involvement; and
- Enable local communities to influence the implementation of EU objectives.

It is recognised that Community-led local development can complement and enhance the delivery of public policies for all CSF Funds. It aims at increasing effectiveness and

efficiency of territorial development strategies by delegating decision-making and implementation to a local partnership of public, private and civil society actors. In accordance with the Common Strategic Framework, Member States are required to define the approach to community-led local development across the Funds and include references to community-led local development in the Partnership Agreements.

Integrated Territorial Investment

An Integrated Territorial Investment (ITI) is an instrument which provides for integrated delivery arrangements for investments. This can be applied on a top-down basis where a territorial strategy for an urban, rural or other defined area involves investment from more than one priority axis of one or more Operational Programme. In this manner, funding from several priority axes and programmes can be bundled into an integrated investment strategy for a certain territory or functional area. Such an integrated territorial investment strategy can be introduced over the lifetime of the Operational Programme(s) and An ITI allows Managing Authorities to delegate the implementation of parts of different priority axes to one body (a local authority) to ensure that investments are undertaken in a complementary manner. The key elements of an ITI are:

- A designated territory;
- An integrated development strategy with a package of eligible actions identified from the priority axes of the OP(s) concerned; and
- Appropriate governance arrangements.

Financial Instruments

European Structural and Investment Funds (including ERDF) may be used to support financial instruments under one or more programmes⁵, including when organised through special purpose holding funds, in order to contribute to the achievement of specific objectives. While not necessarily an administrative innovation, one of the European Commission's objectives for the 2014-2020 period is to increase the overall level of European Structural and Investment Funds delivered through financial instruments (FI).

Financial instruments are geared towards investments which are expected to be financially viable and where a clear market failure currently exists. A financial instrument is essentially a

⁵ Financial Instruments can be supported by several programmes if Member States/regions so choose

fund which is set up using EU Structural Funds with the aim of investing in projects and leveraging other financing, including that from the EIB i.e., instead of using EU funds as a grant, a financial instrument invests in projects that generate a return. The main financial innovation is that instead of paying out capital as a grant, capital is revolving and can therefore be reinvested in new projects (enabling the "recycling of funds"). There are several benefits to be gained from using financial instruments:

- Ensuring long-term durable support to projects through the revolving character of European Regional Development Fund (ERDF) contributions to financial engineering instruments. This leads to a more efficient and effective use of ERDF allocations relative to grants;
- 2. Contributing financial and managerial expertise from specialist institutions such as the European Investment Bank (EIB), the Council of Europe Development Bank (CEB) and other financial institutions;
- 3. Leveraging additional resources for Public Private Partnerships (PPPs) and other projects in the EU. This is enhanced by the ability to leverage not only required matching funds but also the potential for other investment at the fund level and third party finance at the project level; and
- Creating stronger incentives for successful implementation by final recipients, since Fund Managers receive part of the capital backflow of successful projects which can be used for further investment.

The considerable benefits of establishing a financial instrument must be weighed against the associated risks and opportunity costs including the costs of set-up and operation, alternative uses that the funds could be put towards, availability of a sufficiently robust pipeline of viable and eligible projects for investment.

In order to benefit from Structural Funds, any financial instrument, needs a Business Plan produced by co-financing partners, shareholders or their representatives, depending on the legal form they take, establishing the feasibility, the specific activity they aim to finance and justifying the use of Structural Funds. This plan must be subjected to a comprehensive ex ante assessment, based on guidelines to be produced by the European Commission. The contributions which finance the financial instrument can come from three sources; Public Exchequer, Structural Funds and Private Investors. Investment in projects is possible by means of loans, shares and guarantees and as such, there is a wide range of investment possibilities and tools to invest in feasible projects and for the investment to be returned to the funds with the appropriate yield.

Joint Action Plan

A Joint Action Plan (JAP), as provided for under Article 93 of the draft Common Provisions Regulation, is a part of one or several priority axes or operational programmes implemented by a results-based approach, in order to achieve specific objectives agreed jointly between the Member State and the Commission. The JAP comprises a group of projects and is a tool to move the focus of management away from expenditure per se, more to outputs and results. It cannot be applied to infrastructure investments, but it can cover technical assistance as well as sustainable integration of young people into employment. The criterion to use a JAP will mean the possibility to define reliable output and result targets.

The financial management of the JAP is exclusively based on outputs and results, reimbursed via standard scales of unit costs or lump sums applicable to all types of projects. The audits by the European Commission and the Member State Audit Authorities of a JAP will therefore exclusively aim at verifying that the conditions for reimbursement have been fulfilled, e.g. the achievement of agreed outputs and results. When a JAP is used, the Member State may apply its usual financial rules to reimburse the projects. These rules shall not be subject to audit by the relevant Audit Authority or the European Commission. In order to provide legal certainty, the JAP is approved by the European Commission.

2.11 Ireland's National Reform Programme-2013 Update

Although not strictly required as Ireland is currently a party to an EU/IMF Programme of Financial Support, the 2013 Update of Ireland's National Reform Programme (NRP) sets out the progress towards achievements of Ireland's headline targets under the Europe 2020 Strategy. It is presented within the framework of the enhanced economic governance arrangements underpinning the European Semester and in tandem with the medium-term macroeconomic outlook provided by the Stability Programme Update.

The NRP is intended to be consistent with the territorial aspects of the Europe 2020 Strategy, to achieve smart, sustainable and inclusive growth by recognising and harnessing the

potential of different regions, each with their diverse but complementary development opportunities.

In April 2013, the Irish Government submitted its stability programme update for 2013⁶. The Government's stated primary macroeconomic policy objective is to put the economy back on a sustainable growth path so as to move to a point where sustained net employment creation is taking place. It reports that considerable progress is being made towards achieving this objective and that competitiveness has improved substantially in recent years, underpinning strong inward investment flows and robust export growth. In addition, tangible progress is being made to ensure a banking system healthy enough to support productive investment by *inter alia* the SME sector. In relation to the public finances, the policy objective remains the correction of the excessive general government deficit by 2015, as recommended by the ECOFIN Council in late-2010. All of the interim annual deficit ceilings set by the Council have been met, and the Government remains committed to bringing the deficit below 3 % of GDP within the stated time horizon.

The country-specific recommendations for Ireland in 2012 noted that Ireland has been implementing the conditions of the fiscal assistance programme and that structural reforms to enhance competitiveness and allow stronger job creation are significantly advanced. It is recommended that Ireland should continue to implement the measures laid down in the Implementing Decision granting financial assistance under the European Financial Stabilisation Mechanism and further specified in the Memorandum of Understanding agreed in December 2010.

This section reviews progress in the achievement of Ireland's headline targets, as reported in the 2013 NRP Update.

⁶ http://www.finance.gov.ie/documents/publications/reports/2013/spufin2013.pdf

Europe 2020 Headline Target	National Target - Ireland
75% of population aged 20-64 should be	69-71%
employed	
3% EU's GDP should be invested in R&D	2%
20/20/20 climate/energy targets should be met	
(including an increase to 30% of emissions	16% energy from renewables
reduction if the conditions are right):	20% increase in energy efficiency
20% of energy from renewables	20% reduction in greenhouse gases
20% increase in energy efficiency	
20% reduction in greenhouse gas emissions in	
the non-traded sector compared to 2005 levels	
The share of early school leavers should be	Early school leavers under 8%
under 10% and at least over 40% of the younger	30-34 year olds with a tertiary degree
generation should have a tertiary degree.	at least 60%
20m less people should be at-risk-of-poverty	200,000 fewer people in consistent
	poverty

Table 1: Europe 2020 Headline & Ireland Targets

Target 1: Employment Ireland's Headline Target

To raise to 69-71% the employment rate for women and men aged 20-64, including through the greater participation of young people, older workers and low-skilled workers, and the better integration of legal migrants, and to review the target level of ambition in 2014, in the context of a proposed mid-term review of the Europe 2020 Strategy.

Current Situation

The employment rate for women and men aged 20-64 was 64% in 2012, unchanged from 2011 suggesting a stabilisation in the labour market after a fall from 74% in 2007 to 71% in 2008 and 66% in 2009. As noted in the 2011 NRP there is a divergence between male and female employment rates. Recent Eurostat data show that the employment rate for men in Ireland is 68.2% compared with 59.4% for women. The economic downturn has impacted on male employment to a greater extent than on female employment. The gender gap has almost halved from 16 percentage points in 2008 to 9 percentage points in 2012.

The unemployment rate is currently 14.0% (March 2013) and while it has fallen from 15% in February 2012 after several years of increases, the rate remains unacceptably high. The male unemployment rate of 17.8% compares with a female unemployment rate of 11%. It is of additional concern that long-term unemployment (defined as being unemployed for a year or more) accounted for 60% (176,400) of total unemployment in Q4 2012(Figure 2), and for 46% (27,300) of the unemployed under the age of 25.

CSO data show that in mid-2013 there were 580,000 women aged 15 to 64 years outside the labour market (neither employed nor unemployed) compared with 362,000 men. This cadre of women includes over 111,000 graduates. The reattachment of women to the labour market has been identified as a priority for Ireland by the European Commission.

Target 2: Research and Development (R&D) Ireland's Headline Target

Improving the conditions for research and development, in particular with the aim of raising combined public and private investment levels in this sector to 2.5% of GNP (approximately equivalent to 2.0% of GDP).

Current Situation

Gross Expenditure on Research and Development (GERD) is an internationally recognised metric which measures the total amount of expenditure on R&D in an economy. It includes all expenditure by Government and private enterprise and it measures the total amount of expenditure on all research performed in the enterprise, higher education and government sectors.

The NRP 2011 outlined the investment which has been made by Ireland in R&D and the expectations in relation to further investment towards meeting the target, having regard to the National Recovery Plan 2011-2014 and the Programme for Government 2011-2016. The NRP also outlined a number of supporting initiatives. The latest available data show that the research intensity rate for 2012 is now estimated at 2.17% of GNP (1.75% of GDP). The research intensity rate for 2011 is confirmed at 2.13% of GNP (1.77% of GDP).

Target 3: Climate Change Ireland's Headline Target

Reduce greenhouse gas emissions in the non-traded sector by 20% compared to 2005 levels; increase the share of renewables in final energy consumption to 16% by 2020; to move towards a 20% increase in energy efficiency.

Current Situation

Ireland has continued to make progress in relation to its obligations under the Europe 2020 strategy of achieving 20-20-20 targets on greenhouse gas emissions, renewable energy and energy efficiency. The Environmental Protection Agency publishes annual inventories of and projections for greenhouse gas emissions. Ireland will meet its EU greenhouse gas emissions reduction target for the purposes of the Kyoto Protocol, on the basis of the response set out in the National Climate Change Strategy 2007-12. While it will take some time to finalise and validate emissions and removals for the five-year commitment period 2008-12, it is likely that compliance will be achieved, or substantively achieved, on foot of domestic emission reductions.

Ireland has a target under the Renewable Energy Directive (2009/28/EC) to increase renewable sourced energy to 16% of all energy consumed by 2020, along with a public sector energy saving target of 33%. The National Renewable Energy Action Plan (as reviewed in section 4.4 of this Needs Analysis) sets out the planned trajectory for achieving the target across the electricity, heat and transport sub-sectors with 40% needed in electricity, 10% in transport and 12% in heating and cooling to meet Ireland's overall 16% commitment.

In 2005, 2.8% of Ireland's energy came from renewable sources. This had increased to 6.4% by 2011. On average in the period 2005–2011, the Sustainable Energy Authority of Ireland (SEAI) figures show that overall renewable energy usage has increased by 14.3% per annum. Ireland submitted this data to the Commission in the first report on the National Renewable Energy Action Plan in January 2012, which shows that Ireland is meeting the required trajectory to deliver the 2020 target.

Ireland's second National Energy Efficiency Action Plan, which was published in February 2013, reaffirms the commitment to deliver 20% energy savings in 2020.

Target 4: Education Ireland's Headline Target:

To reduce the percentage of 18-24 year olds with at most lower secondary education and not in further education and training to 8%; to increase the share of 30-34 year olds who have completed tertiary or equivalent education to at least 60%.

Current Situation

The percentage of early school leavers in Ireland fell from 11.4% in 2010 to 10.6% in 2011. This represents positive progress towards achievement of Ireland's 8% target. The latest Eurostat data show that Ireland's tertiary education attainment rate for 30-34 year olds was 49.7% in 2011. The rate for 2012 is currently estimated at 50.9%. Ireland has the highest rate for this indicator of all EU27 countries since 2009. In the tertiary education attainment rate for 25-34 year olds indicator presented by OECD, Ireland ranks 1st in EU27 and 4th in OECD. This increase is due to the high participation rates for school leavers that have been growing steadily over the last decade, and the growing participation of adults in higher education.

Target 5: Poverty Ireland's Revised Headline Target

To reduce consistent poverty to 4% by 2016 (interim target) and to 2% or less by 2020, from the 2010 baseline rate of 6.3%. The Irish contribution to the Europe 2020 poverty target is to reduce by a minimum of 200,000 the population in combined poverty (either consistent poverty, at-risk-of-poverty or basic deprivation).

Current Situation

In 2011, a third of the Irish population (33.6%) was in combined poverty, i.e. consistent poverty, at-risk-of poverty or basic deprivation. This equates to 1.5 million people. This was an increase of 2.6 percentage points on the 2010 rate of 31%. In nominal terms, the increase year-on-year of those in consistent poverty, at-risk-of poverty or basic deprivation was 127,000.

2.12 Country-Specific Recommendations for Ireland

The 2013 assessment of the National Reform Programme Update did not make any additional recommendations for Ireland to avoid duplication with measures set out in the Economic Adjustment programme formally agreed with Ireland.

The Economic Adjustment Programme for Ireland includes a joint financing package of 85 billion with contributions from the EU/EFSM (22.5 billion), euro area Member States/EFSF $\oiint{17.7}$ billion, bilateral contributions from the United Kingdom ($\oiint{3.8}$ billion), Sweden ($\oiint{0.6}$ billion) and Denmark ($\oiint{0.4}$ billion) as well as funding from the IMF ($\Huge{122.5}$ billion). Moreover, there is an Irish contribution through the Treasury cash buffer and investments of the National Pension Reserve Funds. The following objectives were set for the programme:

- Immediate strengthening and comprehensive overhaul of the banking sector;
- Ambitious fiscal adjustment to restore fiscal sustainability, correction of excessive deficit by 2015; and
- Growth-enhancing reforms, in particular on the labour market, to allow a return to robust and sustainable growth.

The plan set out a proposed programme of budget adjustments over the 2011 to 2014 period, with a greater emphasis on expenditure reductions than revenue raising measures, largely based on broadening the revenue base. It recognises that the vitality of the Irish economy depends heavily on the vitality and dynamism of its internationally trading sector, which, together with the local firms that supply it, create a multiplier effect throughout the wider economy, as the people employed in these sectors spend their wages and salaries.

It also recognises that research and innovation are key drivers of productivity growth and competitiveness and will be concentrated in areas with the greatest potential economic and social returns. The Recovery Plan takes account of the fact that strategic R&D investment is one of the Government's infrastructure investment priorities and to that end includes a range of actions to support innovation in the economy, drawing in particular on the recommendations of the Innovation Taskforce, with a strong emphasis on commercialisation of research and supporting start-up enterprises. Next generation broadband networks are also recognised as key enablers of economic growth. Supports are to be increased for innovative start-ups and firms with export potential. The National Recovery Plan identifies Ireland as a

test-bed location and research hub for green economy sectors with potential to converge ICT and energy management systems.

The most recent (10th) review in April 2013 found that Ireland's programme remains on track, the gradual recovery is continuing and there have been further improvements in market conditions for the exchequer and the banks. It acknowledges that the Irish authorities have made significant progress on financial sector repair and restoring sustainability to the public finances, yet remaining challenges require continuing policy efforts.

It recommends that sustaining Ireland's fiscal performance is key to durable market financing and that the strict implementation of Budget 2013 measures, including in the health sector, is essential to meet the government's commitment to a 2013 deficit ceiling of 7.5 percent of GDP. It states that further progress by banks in resolving unsustainable SME debts is needed to help bolster job creation.

In relation to employment creation, it acknowledges that a pick-up in growth is needed to meaningfully reduce high unemployment, while further policy efforts are important to address its increasingly structural nature. It recommends that further progress in enhancing engagement with the unemployed, including through the continued rollout of INTREO offices (which provide a single point of contact for all employment and income supports) and a redeployment of case workers, will ensure an even quality of activation and training services throughout the country.

It also recommends that the significant progress Ireland has made in recovering lost competitiveness in recent years should be continued through opening up competition in sheltered sectors such as legal services. Concluding disposal of state assets can support job-creating investment projects.

2.13 Action Plan for Jobs 2012

Ireland's key challenge is getting people back to work. The Government's Action Plans for Jobs (2012 and 2013) are aimed at rebuilding our economy, protecting existing jobs and creating new ones. The objectives of the Action Plans are to create the environment where 100,000 net new jobs will be created over the five year period to 2016: 20,000 in
manufacturing, 30,000 in internationally traded services and an additional 50,000 indirect spin-off jobs. The multi-annual *Action Plan for Jobs* process aims to have 100,000 more people in work by 2016 and 2 million people in work by 2020 through the introduction of additional employment supporting measures. Assuming the current 20-64 year old population holds constant, attaining the *Action Plan for Jobs* target would have a significant positive impact on Ireland's 2020 employment rate target, reaching 67.6% by 2016 and 70.1% by 2020, almost exactly the mid-point of Ireland's employment rate range of 69%-71% for 2020.

The Government's first *Action Plan for Jobs* was launched in February 2012 and contained 270 distinct actions to be implemented across 15 Government Departments, as well as a number of State Agencies and Offices to improve the operating environment for business and support the creation of jobs. 249 (92%) of the 270 actions for delivery in 2012 were implemented on time and while unemployment remains high, there are signs of progress in the labour market; for example, in 2012, IDA Ireland-supported multinational companies created the highest number of new jobs in a decade with 6,570 net new jobs recorded, whilst Enterprise Ireland-supported indigenous companies had their best performance since 2006 with the creation of more than 3,000 net new jobs.

In February 2013, the Government launched the 2013 *Action Plan for Jobs* which will build on the progress made in 2012. The 2013 Plan contains a total of 333 actions for delivery across all Government Departments and 46 State agencies. These actions will; support improved access to finance by SMEs; help to build competitive advantage; further improve the skills base; encourage entrepreneurship and support start-up activity; assist businesses to grow, and develop and deepen opportunities from global investment. The Plan includes seven landmark projects, or "Disruptive Reforms", which have been selected for particular attention because of their potential to have a significant impact on job creation.

Entrepreneurship is an explicit policy priority for Government and a key area of focus. An Entrepreneurship Advisory Forum, was established in May 2013 by the Minister for Jobs, Enterprise and Innovation to draft appropriate policy conclusions and recommendations which will support entrepreneurship, business start-ups, sustainable growth and long-term job creation. The work of the Forum will feed into the drafting of a National Entrepreneurship Policy Statement which the Government will deliver for Q4 of 2013. The work will involve

reviewing current supports available, assessing the potential for new or alternative ways of strategically supporting entrepreneurship performance, and identifying objectives, targets and responsibilities for further Government action in this space. Following the publication of the Government Policy Statement, a number of actions, incorporating both commitments from the Government Policy Statement, and the Entrepreneurship Forum's recommendations will be included for immediate implementation in the Action Plan for Jobs 2014.

2.14 Capital Investment Framework 2012-2016

In November 2011 the Irish Government published its medium-term capital investment framework, *Infrastructure and Capital Investment 2012–2016*. The report presented the outcomes of a Government-wide review of infrastructure and capital investment policy led by the Department of Public Expenditure and Reform, taking account of the constrained fiscal environment.

The framework looked at four components of the investment strategy, namely,

- 1. Economic infrastructure: encompassing transport networks, energy provision and telecommunications capacity;
- 2. Investment in the productive sector and human capital: such as direct supports for enterprise development and science, technology and innovation advancement and capital investment in educational infrastructure;
- 3. Critical social investment: such as the health service and social housing programmes; and
- 4. Environmental infrastructure; including waste and water systems and investment for environmental sustainability.

Table 2: Infrastructure & Capital Investment Priorities 2012–2016

Infrastructure Investment Priorities 2012 - 2016

- 1. Economic Infrastructure
 - Adequate maintenance of the National Road Network and targeted improvements to specific segments including advancing PPPs;
 - Development of the Cross-City Luas line and continued investment in rail safety, replacement of public buses, upgrading bus corridors and completion of important pedestrian and cycle lane projects;
 - Support investment in Next Generation Broadband; and

• Enhancement of Ireland's tourism product offering.

2. Productive Sector and Human Capital

- Continued support to industry and to RTDI investment;
- Investment in Agriculture, food and the marine programmes;
- Expand stock and capacity of primary and second level schools; and
- Completion of existing higher education capital commitments.

3. Environmental Infrastructure

- Water services investment to ensure adequate capacity and meet environmental targets;
- Transition to alternative funding models to meet energy efficiency targets; and
- Investment in flood defence and mitigation and continued investment in forestry support programmes.
- 4. Social Investment
 - Maintain health capital spending;
 - Support primary care, long-term care and community care facilities;
 - Further investment in social housing; and
 - Sports capital investment.

In June 2013 the Irish Government announced details of the National Treasury Management Agency (Amendment) Bill which will provide for the establishment of the Ireland Strategic Investment Fund (ISIF) by reorienting the National Pension Reserve Fund and making the \pounds 6.4 billion in the Fund's discretionary portfolio available for commercial investment in Ireland. The Bill will also formally establish NewERA which will identify new investment opportunities and will take a commercial approach with an emphasis on return on capital to the oversight of the Semi State Sector.

The ISIF will develop a clear investment strategy which will deliver investment in areas of strategic importance to Ireland particularly in areas that support economic growth and job creation and will seek to recycle its capital investments over time so as to be in a position to

make new investments in line with its mandate. It will also work with stakeholders to accelerate investment in sectors of strategic importance in order to boost economic activity and create employment.

2.15 National Spatial Strategy (NSS) 2002-2020

The NSS⁷ provides a twenty-year planning framework aimed at achieving a better balance of social, economic and physical development and population growth across the regions. The NSS represents an important territorial development framework and defines a long-term spatial development strategy, to which other national policies should adhere. In particular, the NSS calls for a focussing of investment around a network of nine competitive Gateways, supported by an additional nine Hub towns as well as other large towns in order to drive the development of their wider regions.

The NSS recognises the divergent levels of economic growth between and within the BMW and S&E Regions. It underlines the importance of more balanced regional development as a policy priority and proposes that the principal way of addressing this is to harness the development potential of key Gateways and Hubs, which will help generate critical mass in the regional economies. The development of these urban centres is intrinsically linked to the development of the surrounding hinterlands. The NSS sees population growth as a key asset which can be harnessed in order to achieve balanced regional development. Balanced regional development will depend on building strong urban structures to accommodate this population growth right across the country. There are five designated Gateways in the BMW Region: Dundalk, Galway, Letterkenny, Sligo; and the Midland Gateway of Athlone, Mullingar and Tullamore and four in the S&E Region (Cork, Dublin, Limerick-Shannon and Waterford). In addition a number of support hubs towns are identified in each region (BMW Region: Castlebar/Ballina, Tuam, Cavan, Castlebar/Ballina, Monaghan and Tuam. S&E Region: Ennis, Kilkenny, Mallow, Tralee/Killarney, and Wexford).

⁷ The Department of Environment and Local Government (2002). National Spatial Strategy for Ireland 2002-2020: People, Places and Potential.



Map 1: National Spatial Strategy 2002-2020 Gateways & Hubs Map

Source: CSO, National Income and Expenditure, Annual Results 2011

The NSS underlines the importance of the Gateways as drivers for regional growth, recognising that this growth is mainly generated by urban centres. It stresses the importance of enhancing the role of the Gateways in regional areas in order to provide balanced growth within Ireland. This supports the justification for the inclusion of an urban development priority in the Regional OPs in order to strengthen the capacity of the designated growth centres in both regions to drive the regions' competitiveness growth and to counterbalance the spatial imbalances that currently exist across the regions. The Department of Environment, Community and Local Government (DECLG) recently announced their intention to undertake a full review of the NSS to be completed by the end of 2014 or early 2015⁸.

⁸ The announcement was made by the Minister for the Environment, Community and Local Government Phil Hogan T.D. at the Regional Studies Association 'New Regional Governance in Ireland' held on January 21st 2013.

2.16 Local and Regional Administrative Reforms

The Action Programme for Effective Local Government "Putting People First"⁹ launched in October 2012 proposes significant revisions in local and regional structures and functions in Ireland. One of the key reforms will be the replacement of the existing eight Regional Authorities and two Regional Assemblies by three new Regional Assemblies.

In addition to their current European funding functions, the new Regional Assemblies will be responsible for the formulation of Regional Spatial and Economic Strategies, other strategic functions (e.g., waste, transport) and oversight of local authority performance and national policy implementation.

2.17 Macro-regional and Sea-basin Strategies

The European Union Strategy for the Atlantic¹⁰ (2011) represents a key strategy for growth and investment in the Atlantic Area, providing a sea-basin focus on the opportunities and challenges facing the Atlantic Area and taking stock of region-specific issues and existing initiatives that can support growth and job creation through the shared development of this important shared resource. The strategy will be implemented through the Action Plan¹¹ published in May 2013 via inputs from the five relevant Member States, from five Atlantic Fora Workshops and an open consultation process.

The Action Plan identifies four overarching priorities each of which contain a number of specific ideas which Member States are invited to implement using EU funds that are managed by Member States (Structural/Cohesion Funds), EU managed funds (LIFE, Horizon 2020, COSME, etc.), funding from the European Investment Bank and private sector involvement. It is up to the Member States to incorporate actions from the Atlantic Action Plan into their Partnership Agreements and Operational Programmes on Structural/Cohesion Funds.

⁹ http://www.environ.ie/en/PublicationsDocuments/FileDownLoad,31309,en.pdf

¹⁰ http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0279:FIN:EN:PDF

¹¹ <u>http://ec.europa.eu/maritimeaffairs/policy/sea_basins/atlantic_ocean/index_en.htm</u>

Table 3: Atlantic Area Strategy Priorities

Priority 1: Promote entrepreneurship and innovation

- Increase capacity through research and innovation;
- Improving skills in traditional and new emerging sectors; and
- Supporting reform of Common Fisheries Policy and revitalising aquaculture.

Priority 2: Protect, secure and develop the potential of the Atlantic marine and coastal environment

- Reinforce safety and security of seafarers, coastal populations, property and ecosystems;
- Develop a European Atlantic Ocean Observing and Predictive Capability;
- Address global climate change issues including mitigation and adaptive strategies;
- Support environmental protection and efforts to achieve "Good Environmental Status" (MSFD);
- Assess the social and economic value and functioning of Atlantic ecosystems and biodiversity;
- Contribute to maritime spatial planning and integrated coastal management;
- Support technical feasibility, economic viability and environmental impact of mining for marine minerals;
- Lay foundation for sustainable, high-value-added European marine biotechnology sector; and
- Accelerate deployment of sustainable offshore renewable energy.

Priority 3: Improve accessibility and connectivity

• Facilitate the development of ports as hubs of the blue economy.

Priority 4: Create a socially inclusive and sustainable model of regional development

- Best Practice in enhancing the health, social inclusion and well-being of coastal populations, including development of appropriate and usable socio-economic indicators; and
- Diversification of maritime and coastal tourism.

2.18 European Code of Conduct on Partnership

Article 5.3 of the proposed Common Provisions Regulation provides for a European Code of Conduct on Partnership. A draft code has been prepared by the European Commission and this is currently subject to discussions between the European Commission and the Member States. The code lays down a framework within which the Member States, in accordance with their institutional and legal framework, shall pursue the partnership principle and multi-level governance.

Under the proposed code, Member States are required to organise a partnership with the competent regional and local authorities; competent urban and other public authorities; economic and social partners; and relevant bodies representing civil society, and other groups which can significantly influence or be significantly influenced by the implementation of the programmes, in a transparent manner, with regard to the identification of partners, their involvement in all key programming stages (preparation through to evaluation) and access to necessary information. The code details the different categories of partners who should be involved, including where necessary the establishment of platform or umbrella organisations to facilitate such involvement.

The draft code details the aspects of the Partnership Agreement and Operational Programme preparation processes in which the partners should be involved and the requirement that these strategic documents should include: the list of partners involved, actions taken to ensure participation, how partners have been identified and the results of the consultation in terms of added value.

The draft code also recommends best practices to be followed by Member States and Managing Authorities in relation to the establishment and operating procedures of the Programme Monitoring Committees.

In accordance with the draft code, Member States and Managing Authorities may involve the relevant partners in the design and assessment of calls for proposals, in the preparation of progress reports and in the implementation and evaluation of programmes. Competent

authorities in the Member States may use the funds to strengthen the institutional capacity of the relevant partners to effectively participate in the preparation, implementation, monitoring and evaluation of the programmes.

The European Commission will monitor the partnership principle with the aim of supporting capacity building, exchange of experience and the dissemination of good practice. There is also an obligation on Managing Authorities to monitor the performance and effectiveness of the partnership arrangements during the programme period.

Chapter 3: Socio-Economic Overview

The purpose of this chapter is to provide a summary overview of the current baseline context in Ireland in respect of key economic, social, demographic and environmental trends. Ireland faces a very significant challenge of emerging from the economic downturn that has affected the country since 2008 and placing the economy on a sustainable path to recovery. It is acknowledged that CSF funds will deliver a very important contribution as a key source of public investment and serve as a catalyst for sustainable growth, employment and competitiveness, particularly in less advantaged regions. In order to ensure this Needs Analysis demonstrates consistency with the CSF, the current context and trends in respect of each of the three broad themes emerging from the Europe 2020 strategy, namely Smart, Sustainable and Inclusive Growth, and their associated CSF sub-themes are considered in further detail in Chapter 4. The aim of this chapter is to provide an introductory analysis of the current national socio-economic context, including in respect of the regional¹² disparities in economic, employment, demographic and deprivation trends.

3.1 Macro-Economic Situation

The Irish economy has suffered considerable dislocation in recent years in the aftermath of the collapse of the real estate bubble in 2007 with Gross Domestic Product (GDP) down 9% in real terms from peak values. Between 2000 and 2007, the annual average growth in real GDP and real GNP was 5.8 % and 5.2 %, respectively (see Figure 1). During this time period, property prices soared by a compound annual growth rate of 11 %. However, with the onset of the global financial crisis, the Irish property sector collapsed, with prices of residential properties falling by 47 % from their peak in September 2007 to December 2011¹³. The resulting collapse of the construction and banking sectors meant that the Irish economy entered a very deep recession in 2008.

¹² In this chapter, where available, data and evidence is provided at EU, NUTS I (National), NUTS II (South & East (S&E) and Border, Midlands & Western (BMW)) and NUTS III (Border, West, Midlands, Mid-East, Dublin, Mid-West, South-East and South-West).

¹³ <u>http://www.esri.ie/irish_economy/</u>



Figure 1: Ireland's GDP at Current Market Prices 2002-2011

Source: CSO, National Income and Expenditure, Annual Results 2011

Economic activity contracted for three full years between 2008 and 2010, with sharp falls in investment and private consumption due to the effects of the banking crisis, fiscal consolidation, household deleveraging, low business investment and weak confidence. Public finances have also deteriorated markedly, with a government deficit (net of banking recapitalisation costs) of 9% of GDP recorded in 2011, one of the largest in the EU. In December 2010 a 3-year IMF-EU-ECB financial assistance programme was put in place, providing financing of €85 billion, which aims at bringing the general government deficit to below 3% of GDP by 2015. Significant progress has been made in closing this deficit and it is anticipated that Ireland will emerge from the IMF-EU-ECB financial assistance programme at the end of 2013.

While the economic crisis has hit Ireland particularly hard, a modest recovery in GDP growth of 1.4% in 2011 and 0.9% in 2012 was recorded, mostly driven by a robust performance of net exports on the back of competitiveness gains, lower business costs and the continued attractiveness of Ireland as a location for Foreign Direct Investment (FDI). Total exports grew by 2.9% in 2012 in real terms to their highest level ever. Nationally, GDP per capita exceeds the EU-27 average by approximately thirty percent (see Figure 2). These developments, together with the improvements seen in Government bond yields, represent a strong vote of confidence in Ireland.



Figure 2: EU 27, Ireland NUTS II GDP per Capita 2010

Source: Eurostat, Regional GDP Regional GDP per capita in the EU in 2010

3.2 Employment in Ireland

Having been in decline for a number of years in succession, total employment rose in the year to Quarter 3 2013 by 3.2% (58,000 jobs). The total number of people at work now stands at 1.899 million, which already takes Ireland above the level in the same period in 2010. Significantly, 53,500 of these jobs are full time and will contribute strongly to economic activity in those households. The employment rate stands at 61.1%, up from 59% a year earlier. While this is still a long way off the NRP target for Ireland of an employment rate of 69-71% by 2020, it is a sign of positive progress and first steps along that path. The EU27 employment rate at the middle of 2013 was 64.2% and the rate for the Eurozone was 63.5%, giving some indicator of how we are doing relative to other Member States. A continuation of that level of employment growth would reduce these gaps and would confirm that the recovery is taking hold across the economy.

Both male and female employment increased in 2013. For males, the rise was 4.3%. The male participation rate is now 68.4% and the employment rate is 65.9%. The male employment rate shows a big increase of 2.7% in one year. Notably, the part-time male underemployed numbers have also decreased by over 7,000 in the year. The rise in males at work is reflected across all age groups, except for the 25-34 group. It is also reflected across the majority of sectors in the economy with the only notable falls being in public administration, health and social work sectors.

Female employment rose by 15.900 in 2013 (1.9%). The female employment rate has risen by 1.3% to 56.3% and the participation rate is also up at 53.3%. The number of part-time underemployed females has come down by 3,500 and the full time number of females at work has increased by almost 14,000 in the year. The rise in employment is reflected across all age groups except for the 20-24 and 25-34 groups, which continue to see a decline in people at work. The rise in jobs is also reflected across the majority of sectors in the economy with notable falls noted in only the transport and "other activities" sectors.

The data on where jobs are being created and the sectors in which people are obtaining employment is particularly informative in terms of planning labour market interventions and for economic planning into the medium term. The employment data are showing annual growth in all major sub-categories of the economy, most notably in the agriculture, forestry and fishing sector where 25.000 extra jobs have been added in a year (some caution is advised on the interpretation of this trend due to sampling issues but it is still very positive). This is supported by growth in employment in both industry and construction for the year, while services generally also show an increase in employment despite some sub-sectors shedding jobs. The construction sector improvement, if maintained, offers prospects to many skilled workers who have been out of work for a significant period of time. Jobs in the transportation and food service and the professional, scientific and technical sectors reflect the trend in future skills requirements expected. Further analysis underpinning these trends demonstrates that the occupations showing growth in 2013 are the professions, skilled trades and elementary occupations.

While the economic crisis has affected all age groups in terms of employment levels since it began, it is worth examining the latest trend from this perspective. The issue of youth employment will be addressed separately in the context of the Youth Employment Initiative chapter. All age groups experienced employment growth in 2013 with the exception of the 25-34 group. Job numbers have continued to fall for this category of people and unemployment cross-referencing would suggest that something more than gaining or losing jobs is relevant for this cohort. There have been significant rises in employment for persons aged over 55 in the last year, perhaps reflecting the effects of the crisis on incomes and outgoings for older workers.

The data for self-employment show that those with paid employees have increased marginally in the year, but that those working on their own has increased markedly by almost 15% in 2013. This is a significant statistic in terms of how people are choosing to achieve gainful employment and a reflection of a strong growth in entrepreneurship during the period. However, in terms of total self-employment levels, the numbers overall at some 310,000 still leaves some way to go to reach the 2008 levels of 350,000 operating enterprises of their own. It will be interesting to see if this trend continues into the medium term.

At a regional level, employment has grown for both the BMW (19,000) and the South and East (39,000) regions in the year. The growth rate was over 4% in the BMW region and some 3.25% for the S and E region. All of the NUTSIII regions with the exception of the mid-East have experienced jobs growth. When compared to 2008 figures, the BMW region has a greater proportional challenge in getting back to employment levels experienced at that time. The numbers in employment in that region are similar to those at work in 2004. For the South and East, the gap to peak time employment in 2008 is circa 180,000 jobs. The current employment level is circa the level experienced in early 2005. Having experienced the most severe economic recession, employment in the regions is now, therefore, equivalent to a level of ten years ago rather than at some historic low level in nominal terms.

There is evidence of increased activity in the economy during 2013 that suggests a modest recovery in domestic demand and employment outcomes. Forecasts project that the economy will continue to grow modestly over the medium term, even with a conservative outlook. Increased consumer spending and a decline in the savings rate should further assist in driving domestic demand and jobs growth. Employment levels are projected to grow by an average of circa 1.5% per annum until 2016. The exit from the bailout programme and the management of public expenditure policies should also help the investment and employment growth strategies. Investment levels are very low in the economy at this time and it is possible that investment will increase faster than forecast over the medium term. Better recovery in the international economy could also further improve the employment situation here. On the risk side, a slower international recovery or a negative impact of household debt on consumption forecasts could halt or impair employment growth.

The latest Skills Bulletin from the Expert Group on Future Skills Needs from July 2013 indicates shortages in a number of areas across the economy. Demand for *biopharma* and

pharmachem scientists, professional and technical precision engineers, ICT software developers, project managers and security experts, business and finance professionals, some healthcare professionals and specialist sales and customer service staff in online and contact centre sectors remains strong and presents opportunities for people with relevant and appropriate skills. Meeting the profiled shortages through relevant education and training opportunities for those in the education system and for those unemployed persons on labour market activation measures will be necessary to maintain employment growth, investment and confidence.

As a small and highly open economy, Irish economic prospects are primarily determined by world economic activity. Although challenges remain for many countries, the working assumption of most international forecasting agencies is that the global economy will improve during the second half of 2013, with the pace of growth accelerating in 2014. While the consequences of the economic collapse have been severe, the past fifteen years has also seen unprecedented capital investment in the Irish economy, particularly in transport infrastructure and the development of Ireland's R&D base. On this basis, Ireland is well placed to capitalise on the global upturn and a strengthening of Irish export growth is expected over the medium term. The improvement in exports should also translate into higher investment and confidence, with beneficial effects in the labour market and, eventually, on personal consumer spending. As a result, domestic demand, particularly in respect of the domestic service economy, is projected to increase once again in 2014, although the pace of growth will likely be moderate given the scale of the imbalances that will still need to be worked through¹⁴¹⁵.

There are very significant regional asymmetries in economic performance and the historical difference between the regions has re-emerged since the onset of the economic crisis. In 2010, GDP per capita (purchasing power standard) in the Southern and Eastern (S&E) region exceeded that recorded in the Border, Midland and Western (BMW) region by more than half (see Figure 3). This is largely due to the greater reliance of the BMW Region on construction activity, which masked the structural weakness of the underlying economy and has since contracted sharply. The dominance of Dublin and to a lesser extent Cork and Galway, as the economic engines for the country has become ever more pronounced in recent years. The

¹⁴ Government of Ireland (2013), National Reform Programme for Ireland - 2013 Update

¹⁵ http://www.centralbank.ie/polstats/econpolicy/Pages/forecast.aspx

combined share of manufacturing employment¹⁶ in firms assisted by Ireland's development agencies in Dublin, Cork and Galway rose from 42.5% in 2006 to 51.8% in 2011. In the services sector the domination of the "big three" cities was most pronounced with the combined share rising from 77.7% to 80.6%. A major future challenge for Ireland is managing these regional asymmetries and creating a more balanced economic structure while maintaining national competiveness.



Figure 3: EU 27, Ireland & NUTS II GDP per Capita 2010 (Purchasing Power Standard)

Source: Eurostat, Regional GDP Regional GDP per capita in the EU in 2010

As a result of the economic downturn, almost all sectors of the economy experienced a sharp contraction in output. Consequently, this led to large-scale job losses and a rise in unemployment. Between 2000 and 2007 the unemployment rate averaged 4.5 % per annum. With the onset of recession the level and rate of unemployment increased substantially and employment has shrunk by almost 17% from its 2007 peak. Unemployment has risen ten percentage points since 2007 to a high of 14.8% in 2010 - one of the highest in Europe. Ireland's unemployment challenge has been identified by both the European Commission and the Irish Government as the greatest challenge facing the country.

¹⁶ Assisted by either the Industrial Development Authority or Enterprise Ireland.



Figure 4: Ireland, NUTS II & NUTS III ILO Unemployment Rate 2003-2013

Source: CSO Statbank 2013¹⁷

3.3 Unemployment in Ireland

There were 282,900 people unemployed in Ireland at the end of Q3 2013. This was 41,700 people fewer than in 2012, a percentage fall of 12.8% in twelve months. This reaffirms the employment figures and demonstrates that the Irish economy has improved very well in that period. However, total unemployment is still much too high and it represents 12.9% of the labour force without work on a seasonally adjusted basis. The unemployment figure has now fallen for six quarters in a row and this confirms that increased economic activity is finding its way into the jobs market. One of the key factors in our return to growth will be the ability to turn that growth into jobs. The employment intensity of economic growth was poor during the recovery after the 1980's recession and it placed a drag on the benefit to ordinary working people and on the Exchequer returns. Growth in domestic investment and domestic demand tends to produce more jobs and, as such, will be central to the rate at which Ireland can get its people back to work in the coming years. The unemployment rate is still above the EU average rate of 11% but the gap is narrowing.

The total number of males unemployed stands at 179,000 at Q3 2013. This is a reduction of over 34,000 in the year (i.e. 19%). It is almost entirely made up of those seeking full time

¹⁷ http://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=QNQ20&PLanguage=0

work. The unemployment rate has fallen a full 3 percentage points in the year for males (now 14.8%). There is, however, only a small increase in the participation rate to 68.4%. The total number of unemployed females stands at 103,800, a fall of over 7,000 year on year, almost all again seeking full time employment. The unemployment rate has fallen by less than one percent to 10.6% and the female participation rate has only risen by less than one % to 53.3%. This indicates a continuation of the detachment of women from the labour market.

Long-term unemployment was at 165,100 at the end of Q3 2013. This represents almost 58.5% of total unemployed persons. It is a reduction in nominal terms and in percentage terms on the year before although the percentage drop is only 1 %. It indicates severe challenges for the people of Ireland in preventing permanent structural unemployment from ratcheting upwards and for public services in trying to deliver effectively to this population and in trying to get them back to work in the short term. The long-term unemployment rate for men is very high at almost 65% and less so for females at 47%. In overall terms, the long-term unemployment rate is at 7.6% of the labour force, a fall of over 1 % in a year. All of the indicators for LTU are down in 2013, but there is still a long way to go to effectively tackle this problem.

Unemployment has fallen for all age groups in the year, except for the 60-64 age group. The fall was greatest for those aged 20-34 with a drop of almost 23,000. The majority of the reduction was for males. There were 60,400 young people unemployed in 2013, a fall of almost 14,000 in the year. This gives a youth unemployment rate of 26.5% at end Q3 2013 and indicates a continued fall of almost 5 percentage points in the year. A further analysis of youth unemployment is contained in the chapter on the Youth Employment Initiative.

The fall in unemployment occurred in both regions, with the majority in the South and East (almost 30,000 down). In the BMW region, unemployment fell by over 13% in the year with the smallest effect felt in the West region. For the South and East, unemployment fell for all regions except the Mid-East where it stagnated at 35,900. Substantial falls in the Dublin and Mid-West regions were recorded in the year.

Unemployment is forecast to continue falling over the medium term, projected to reach 11.4% in 2016. The forecast is not correlated strongly with the employment growth forecast as increases in labour supply and migration flows tend to affect the take up to of jobs as the economy grows in Ireland. However, the trend is positive and while there are risks to the

forecast, there are also upsides. In particular, the Government's Action Plan for Jobs and Pathways to Work strategies may provide better results than expected by forecasters in terms of the impact on unemployment. A key focus of the Action Plan for Jobs is to build employer engagement and buy-in that will lead to more job opportunities for the registered unemployed in particular. Substantial engagement directly with employers and firms should increase awareness of employers of initiatives in the labour market. Initiatives that focus on work experience such as JobBridge, TUS and JobsPlus are providing more labour market relevant job opportunities for the unemployed and this is expected to continue in the coming years. In addition, more targeted access to further education and training programmes and more labour market activation offerings in the FET and higher education space are also serving to enhance the prospects for the unemployed, especially those on the Live Register, in terms of upskilling, re-skilling and getting back to work. The continued improvement of the FET sector structure and provision should contribute further to transitions to work for the unemployed in coming years. The SOLAS project and the INTREO approach to employment services improvement should yield benefits over time to the unemployed. This gives hope that better labour market outcomes can be achieved.

The unemployment rate fell back to just over 13% in late-2013 and is expected to continue to reduce further in the coming years, albeit at a slow, pace as the economy stabilises. Reaching the Europe 2020 goal of 69-71% of those aged 20-64 in employment will be extremely challenging and require sustained and determined effort. Unemployment has been highly regionally disaggregated with notable increases in the Midland (17.1%) and the South-East (18.4%) Regions (See Figure 4 and Map 2). As shown in Figure 5, nationally, the total amount of people on the Live Register has increased by 144% with acute increases in the Midland and Mid-East Regions¹⁸. This reflects a sharp rise in those seeking State benefits to subsidise part-time, seasonal and casual working arrangements which has been brought about by the much changed economic conditions.

¹⁸ The Live Register is not designed to measure unemployment. It includes part-time workers (those who work up to three days a week), seasonal and casual workers entitled to Jobseeker's Benefit or Allowance.

Map 2: Ireland's Labour Force Unemployment Rate, 2011



Source: CSO, Census 2011, Theme 8 - Economic Status



Figure 5: Ireland, NUTS II & NUTS III Percentage Increase in Live Register Recipients 2003-2013

Source: CSO, Statbank¹⁹

Unemployment is also increasingly long-term in nature with a steep rise in the number of people unemployed for longer than one year now representing 60% of all unemployed and, at 9.1%, significantly exceeds the EU average of 4.6% in 2012 (see Figure 6).



Figure 6: EU27 & Ireland Long-Term Unemployment Rates 2001-2012

Source: CSO, Statbank²⁰

 $^{^{19}} http://www.cso.ie/px/pxeirestat/Database/eirestat/Live\%20 Register/Live\%20 Register_statbank.asp?SP=Live\%20 Register_statbank.asp?SP=Register_stat$ Register&Planguage=0

Youth unemployment²¹ is also a particular problem and reached 30.4% in 2012, well above the EU average of 22.8%. This has resulted in a new wave of emigration of highly trained and skilled young people, particularly to countries such as Australia, New Zealand and Canada which in part serves to disguise to true extent of the unemployment challenge. Following a number of years of continued youth emigration the youth unemployment rate has now actually declined and stands at 26.6% (taking 15-19 and 20-24 cohorts together). In general, youth unemployment rates are much higher for males as can be seen from Figure 7.



Figure 7: Ireland's Unemployment Rates by Gender & Age Group 2013

Nationally, unemployment is higher for men, particularly low-skilled men, than for women, with the male unemployment rate at 16% as compared with a female unemployment rate of 11.1%. This reflects the acute collapse of the construction sector, in particular. The NEET²³ rate rose 8.2% to 18.9% with the main driver behind this a rise in male NEET rates. The sectors most adversely impacted by job losses include construction, business and financial services as well as retail and manufacturing sectors. Falling household incomes have held back consumer spending leading to weak consumer demand and an extremely fragile domestic economy (See Figure 8).

²¹ Youth Unemployment includes all the youth (i.e. people between the ages of 15 and 24, inclusive) who are unemployed

²² http://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=QNQ20&PLanguage=0

²³ Not in Employment, Education or Training.



Figure 8: Ireland, NUTS II & NUTS III Disposable Income per Person 2010 (€)

3.4 Regional Economic Performance

Nationally productivity per capita significantly exceeds the EU average (See Figure 9). However, as discussed above, inward investment continues to be typically attracted to the (more populous) areas of Greater Dublin and Cork in the S&E Region than the predominantly rural BMW Region, with the exception of Galway in the West region which has a strong medical technology cluster and has contributed to an impressive regional economic performance. The north-east portion of the Border region also recorded some impressive gains, partly due to its location on the Dublin – Belfast corridor and the presence of the large urban centres of Dundalk and Drogheda (See Table 4).

²⁴ http://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=CIA01&PLanguage=0

Total Employment by Region in IDA Ireland Supported Companies						
Area / Region	2008	2009	2010	2011		% change 2011/2012
Border						
North-West/						
Donegal	5,336	5,261	5,113	5,318	5,199	-2.2%
North-East	3,356	3,023	2,833	2,909	3,211	+10.4%
West & Mid-W	est					
West	14,531	13,435	13,867	15,714	16,430	+4.5%
Mid-West	11,245	8,209	7,963	8,117	8,641	+6.4%
Midlands & Eas	it .					
Midlands	5,643	4,955	4,633	4,707	5,120	+8.8%
East	73,016	66,517	67,326	70,987	74,440	+4.9%
South						
South-West	26,118	24,206	25,629	26,583	27,860	+4.8%
South-East	13,665	13,048	12,917	11,880	11,884	0%
IDA Ireland	152,910	138,654	140,281	146,215	152,785	+4.4%

Table 4: Total Employment by Region in IDA Supported Companies 2008-2012

Source: IDA Ireland Annual Reports and Accounts 2012

As illustrated in Figure 10, GVA figures for 2010 show that Greater Dublin Areas accounted for 42% of total national GVA due to the high proportion of the workforce working in high value-added sectors, particularly finance, business services and information technology. On the other hand, the BMW Region (outside of Galway) and more peripheral parts of the S&E Region are characterised by an industrial structure which has an under-representation of higher value added sectors and relatively low productivity on an individual sectoral basis. Figure 10 also illustrates the productivity gap between NUTS III regions. The Dublin region, for example, contributes 42.1% of national GVA with 28.8% of the total employment. On the other hand, the Border region contributes just 6.5% with 10.1% of national employment. A number of structural challenges continue to hamper economic growth within these peripheral regions, with some having become more prominent over the past few years as a result of the economic downturn. These are considered further in the sections that follow and detailed SWOT analyses for both regions are provided in Chapter 5.



Figure 9: EU 27, Ireland, NUTS II & NUTS III Indices of GVA per Person at Basic Prices 2002-2010 (EU27 = 100)

Source: CSO (2013), County and Regional Incomes 2010



Figure 10: NUTS III Regional Contribution to National GVA 2010

Source: CSO (2013), County and Regional Incomes 2010

The sectoral breakdown of GVA shows the strong dominance of high value added sectors of Market and Non-Market Services (M_NMS), particularly in the Dublin region. In the South-West and West regions the higher proportion of Manufacturing, Building and Construction (MBC) sectors is indicative of the regionally successful pharma and medical services clusters

in Cork and Galway respectively. Agriculture, Forestry and Fishing (AFF) remains an important part of regional economies particularly in the South-East Region (See Figure 11).



Figure 11: Ireland, NUTS II & NUTS III GVA at Basic Prices 2010

Source: CSO (2013), County and Regional Incomes 2010

The European Regional Competitiveness Index²⁵, which covers a wide range of issues related to territorial competitiveness including innovation, quality of institutions, infrastructure (including digital networks) and measures of health and human capital, places the S&E Region as the 131st most competitive region out of 262 European regions, this represent a drop of from 46th position in 2010. Similarly the BMW Region has slipped down these rankings but its decline has been less dramatic. In 2010 the Region was ranked 132nd and in 2013 the Region is placed in the bottom third of regions at 173rd position reflecting the challenging economic position in which it continue to operate.

²⁵ European Commission (2013). EU Regional Competitiveness Index (RCI) 2013.

Some addition pillars of the Index are selected and further illustrated in Table 5 below.

Table 5: European Regional Competitiveness Index 2013, NUTS II Ireland Rankings by
Selected Pillars

	BMW	S&E
	Region	Region
Infrastructure	195	167
Health	129	76
Higher Education and Lifelong		
Learning	120	74
Labour Market Efficiency	222	192
Market Size	193	151
Technological Readiness (Household)	148	116
Technological Readiness (Enterprises)	104	75
Business Sophistication	170	50
Innovation	64	38

Source: European Commission (2013). EU Regional Competitiveness Index (RCI) 2013.

3.5 Demographic Trends

Despite the severe economic downturn since 2008, Census 2011 results show that Ireland's population continues to grow, increasing by 348,000 persons since 2006 to 4.6 million, mostly driven by immigration in 2006 and 2007 and by a very high birth rate. This growth rate has been tempered since 2008 by increased emigration which was estimated to have increased to 87,100 from 80,600 in the year to April 2011, while the number of immigrants is estimated to have fallen marginally to 52,700 from 53,300 over the same period. These combined changes resulted in an increase in the net outward migration from 27,400 in the year to April 2012. The combined effect of natural increase and negative net migration resulted in an overall small increase in the population of 10,500 bringing the population estimate to 4.59 million in April 2012²⁶. Ireland's population performance and high fertility rate are distinctive in the European context, and Ireland is one of the few remaining developed economies to continue to experience significant population growth is regionally uneven with higher rates of growth recorded in the Mid-East and Midland regions due to the strong economic pull of Dublin (See Figure 12 and Map 3).

²⁶ Population and Migration Estimates; April 2012 (with revisions from April 2007 to April 2011), CSO, 2012



Figure 12: EU27, Ireland, NUTS II & NUTS III Percentage Population

Change 2006-2011





Map 3: Demographic Change in Ireland 2006-2011

Source: CSO, Census 2011

With an average age of 36.1 years in 2011, Ireland's population is relatively young compared to the rest of the EU. 34.1% of persons are aged 0-24 as compared to the EU average of 27.5%. Despite some significant sub-regional variations, the age profile between the regions does not differ markedly. However, there is a slightly higher ageing population in the BMW Region with 12.6% of the population aged 65+. This compares to 11.4% in the S&E Region (See Figure 13).



Figure 13: EU27, Ireland & NUTS II by Age Band 2011

3.6 Poverty and Deprivation

The National Reform Programme for Ireland 2013 sets as a target the reduction of consistent poverty levels to 4% by 2016 and to 2% or less by 2020. It also sets out an aim to reduce those in consistent poverty or at risk of poverty or basic deprivation by 200,000 by 2020 as part of our contribution to the EU objectives in this area. Ireland's active inclusion strategy is set out in the National Action Plan for Social Inclusion, which has a key policy component for activation and inclusive labour markets. Recent research has highlighted the high proportion of the population in jobless households15 and the attendant social and economic disadvantages. The population in jobless households has risen from 15% in 2005 to 24% in 2011. They comprise adults who are furthest from the labour market with a strong pattern of educational and social class disadvantages. The high proportion of the population in jobless the unremployment. The problem not only reflects the high percentage of the adult population who are not economically active but also the greater likelihood that jobless adults live with other jobless adults. It also indicates the high proportion of children living in jobless households. Household joblessness has intensified

Source: CSO, Census 2011

with the onset of the economic recession and the rise in unemployment. Furthermore, Ireland has almost two and a half times the rate of household joblessness as the EU (10 %).

National data on poverty can be disaggregated at NUTS 2 and 3 levels. The highest rate of consistent poverty was recorded for the Border, Midland and Western region at 8.4 %. This compares to a national rate of 6.9 % and 6.3 % in the Southern and Eastern region. Another geographical pattern that can be examined is the rural-urban distinction: the consistent poverty rate in rural areas in 2011 was 7.1 %, as compared to 6.8 % in urban areas.

Active labour market policies are key to addressing the employment needs and capacities of jobless households in an inclusive labour market. A Programme for Government priority for 2013 was to make sure that economic recovery does not bypass jobless households. It is an imperative to lift those in jobless households out of welfare dependency and to ensure that joblessness does not become an inter-generational phenomenon. The provision of targeted places on education, training and activation programmes, including work experience, for the long-term unemployed and those in jobless households is central to the progression of anti-poverty and social inclusion objectives for Ireland. The Pathways to Work and Action Plan for Jobs approaches enshrine this principle in labour market policy and should support the reduction of the numbers affected by both of these circumstances.

The total dependency rate is the population aged 65+ (primarily retired population) and the population aged 0-14 (children) expressed as a percentage of the population aged 15-64 (the most economically active age groups). High values indicate areas of relatively high percentages of less economically active population, a more dependent population. The total dependency rate of 49.3% is slightly lower than the EU average of 50.2%. Splitting between the Old Age (65+) and Young (0-15) age dependency rates it is evident that the total rate in Ireland is much more heavily weighted on the young dependency rate (31.9% as compared to EU average of 23.4%) and points to the fact that Ireland is currently experiencing a high fertility rate with a significant proportion of the population in the 0-14 age category (See Figure 14). Conversely, the old age dependency rate in Ireland at 17.4% is significantly lower than the EU average of 28.8%.



Figure 14: EU27, Ireland, NUTS II & NUTS III Youth Dependency Rates 2011

Source: CSO, Census 2011 & Eurostat (EU27 rate is for 2012)



Figure 15: EU27, Ireland, NUTS II & NUTS III Old Dependency Rates 2011

Source: CSO, Census 2011 & Eurostat (EU27 rate is for 2012)

The 2011 Pobal HP Deprivation Index²⁷ shows the level of overall affluence and deprivation at the level of 3,409 Electoral Divisions (EDs) in 2006 and 2011 in Ireland. Map 4 details the relative deprivation scores across Ireland at the ED level. Comparing the relative changes in

²⁷ The 2011 Pobal HP Deprivation Index is the latest in a serious of deprivation indices developed by Trutz Haase and Jonathan Pratschke and funded by Pobal. Based on the just recently released data from the 2011 Census of Population, the index shows the level of overall affluence and deprivation at the level of 18,488 Small Areas in 2006 and 2011, using identical measurement scales.

the HP Index Scores between 2006 and 2011, we can conclude that the dominance of Ireland's urban environs has continued unabated, albeit in a differentiated manner (see Figure 16).



Figure 16: Ireland, NUTS II & NUTS III Change in Absolute Pobal HP Deprivation Index Score 2011

Source: Pobal HP Deprivation Index 2011

Map 4: Ireland Relative Deprivation ScorePobal HP Deprivation Index 2011,



Source: Pobal HP Deprivation Index 2011

In stark contrast to the 1991 to 2006 period, the previous growth belts, particularly those located at the outer periphery of the Greater Dublin Area have seen their fortunes most strongly reversed, whilst the five city areas (Dublin, Cork, Limerick, Galway and Waterford) have withstood the economic downturn comparatively well. Ireland as a whole has seen a decline in the Absolute HP Index Score by 6.6 points. By comparison, Dublin City has declined by 3.8 points, Cork City by 4.1 points, Limerick City by 6.2, Galway City by 4.9 and Waterford City by 5.8 points. Overall, the waning tide has lowered all boats, but the cities have declined less than the rest of the country. In contrast, the counties most affected by the decline are the distant commuter counties. Kildare, Meath, Wexford, Roscommon, Cavan,

Laois and Offaly are the counties that have experienced the most significant decline, as expressed in the largest reduction in their Relative HP Index Scores.

3.7 Equality and Equal Opportunities

The National Reform Programme for Ireland aims to increase male and female employment to between 69% and 71% by 2020. In 2013, it was over 61% and recovering. However, there is a long way to go to achieve the target set in the NRP. The labour market activation initiatives mentioned earlier will and are helping to address this issue and the ESF can also continue to contribute to the improvement in the area of employability and progression for, in particular, women.

The National Women's Strategy 2007 – 2016 has as one of its key objectives "equalising economic opportunity for women and men" and specifically encourages Government Departments to undertake actions to increase women's labour market participation. Under the Human Capital Investment Operational Programme 2007 – 2013, funding was allocated for the Equality for Women Measure (EWM) which was designed to foster gender equality with a particular focus on women's engagement in the labour market and their engagement as entrepreneurs. The economic downturn limited the scope of the Measure and its principal activities were targeted at actions to increase women's employability with a particular focus on women from disadvantaged communities. At present, unemployed women and women who are on the live register can avail of a wide range of retraining and upskilling opportunities to enable them to resume work. The need to maximise the economic engagement of women to achieve the goals of Europe 2020 has been clearly established, as has the large number of women of all educational backgrounds who are detached from the labour market. The need to assist women to return to the labour market is a central challenge for the next programming period.

Member States are required to meet the horizontal equality and anti-discrimination objectives contained in the ESF Regulation across the nine equality grounds in Irish legislation.²⁸ Member States are expected to balance robust horizontal mainstreaming with specific actions

²⁸ These grounds are: Gender, Civil status, Family status, Sexual orientation, Religion, Age (does not apply to a person under 16), Disability, Race and Membership of the Traveller community.

to promote gender equality and prevent discrimination on other equality grounds.²⁹ The ESF in Ireland has co-funded gender mainstreaming activities for some time now. The measures to date have been provided by the Department of Justice and Equality and the Equality Authority. The Equality Authority has identified further needs in the area of promotion of equal opportunities requirements for employers and for social partners that are well suited to the objectives of the ESF. Their work in these areas will continue to enhance the awareness of opportunities for those facing barriers to participation or discrimination in their attempts to enter the workforce.

3.8 Environment and Sustainability

The rapid pace of recent growth experienced in Ireland has had a significant impact on the quality of the environment. By European standards, Ireland has experienced a relatively high rate of land use change since the early 1990s. Since 2000 the area under artificial surfaces increased by approximately 15%. This mainly occurred on former agricultural lands on the periphery of existing urban areas, including significant low density and private car dependent suburbanisation (See Figure 17). As a consequence, in many regions the urban structure is weak. A significant legacy of the property bubble is both town centre and suburban vacancy and housing oversupply. Irish greenhouse gas emissions rose significantly since 2000 and Ireland now has the second highest per capita greenhouse gas emissions in Europe.

Transport and agriculture account for 20% and 30% of emissions respectively and are two sectors which present significant challenges in mitigating. Ireland is also one of the most fossil fuel dependent countries in Europe and diversifying the energy mix and enhancing energy security is a key government priority. Incentivisation of renewable energy, particularly wind energy given Ireland's large resource, has seen a 14.3% year-on-year in renewable energy usage between 2005 and 2011. However, Ireland still has a significant distance to go to reach the 2020 renewable energy, greenhouse gas reduction and energy efficiency targets, as outlined in section 2.11 of this Needs Analysis. The majority of Ireland's habitats that are listed under the Habitats Directive are reported to be of poor or bad conservation status. Only 7% of listed habitats are considered to be in a favourable state. Progress has been made in the designation of EU-protected areas in Ireland, but several areas

²⁹ This is expressed in Article 7 Promotion of equality between men and women and Article 8 Promotion of equal opportunities and non-discrimination.
of national importance remain undesignated, and significant aspects of biodiversity in Ireland are under considerable threat from unsustainable activities. By European standards water quality in Ireland is good but the country still faces major challenges to achieve water quality targets set for 2015, 2021 and 2027 as required by the Water Framework Directive (WFD).



Figure 17: Ireland Change in Transport Use by Mode 2006-2011

Source: CSO, Census 2006 and 2011

Chapter 4: Review of Thematic Objectives

The purpose of this chapter is to review in detail each of the thematic objectives as set out in the draft Common Provisions Regulation. The review commences with an overview of the EU and national policy drivers that are relevant to each theme. This is followed by a presentation of current regional and national trends and comparative data. The activities funded under the current Operational Programmes is then set out, along with a review of achievements over the 2007-13 period of relevant activities and relevant evaluation findings. Each section concludes with a summary of the feedback from the public consultation that is relevant to each thematic objective. The chapter also includes a review of potential integrated urban development actions.

4.1 Strengthening Research, Technological Development and Innovation <u>EU Policy Framework</u>

Innovation Union Agenda for Europe

In 2010, the European Commission published a key strategy document, Europe 2020³⁰, and set out a vision of Europe's economy for the twenty-first century being driven by smart, sustainable and innovative businesses providing high levels of employment and strong productivity. The Europe 2020 Strategy has subsequently been accompanied by a range of specific initiatives. The Commission's focus on strengthening Research, Technology, Development and Innovation (RTDI) Strategy is encompassed in the Europe 2020 Flagship Initiative Innovation Union³¹ which noted the that the 'EU and Member States need to continue to invest in education, R&D, innovation and ICTs'³² despite the difficult economic climate affecting all of Europe.

Significantly therefore, the Europe 2020 Strategy emphasised the contribution to a 'smart' Europe that can be made by regions and regional development. Furthermore, a Staff Working

³⁰ European Commission (2010), Europe 2020: A European Strategy for Smart Sustainable and Inclusive Growth, March 2010.

³¹ European Commission (2010), Europe 2020: Flagship Initiative Innovation Union. October 2010.

³² Ibid p.3.

Document³³ that followed highlighted the contribution that regional policy can make to the achievement of the 2020 objectives and within this document the role of innovation, research and development and knowledge intensive sectors (and SMEs) is given significant prominence. This concept of a 'smart' approach to RTDI regional strategies has been further articulated as part of the process of preparing Partnership Agreements and Regional Operational Programmes. The Commission has asked Member States to prepare Smart Specialisation Strategies as a pre-requisite for drawing down Cohesion Funding (Structural Funds, INTERREG funds, etc). According to the Commission's Guidelines³⁴, National/Regional Research and Innovation Strategies for Smart Specialisation (RIS3 strategies) should be 'integrated and place-based economic transformation agendas',³⁵.

Irish Policy Framework

Innovation features strongly as a core priority in the national policy framework. In particular, innovation and technology are increasingly expected to play a key role in driving enterprise and economic growth throughout Ireland. The vision and ambitions set out in these and other national policy documents are consistent with the sentiments expressed in European Union policy statements described above. For example, the vision and challenge set out in the Strategy for Science, Technology and Innovation 2006-2013³⁶ (SSTI) is that 'Ireland, by 2013, will be internationally renowned for the excellence of its research, and will be at the forefront in generating and using new knowledge for economic and social progress, within an innovation driven culture'. This Strategy was implemented through a number of key funding programmes, in particular the scale of the Government's commitment to build the research base in Ireland is most clearly demonstrated by the level of funding provided to the Science Foundation Ireland Programme (€1.707bn, 2001-2012) and the Programme of Research in Third Level Institutions (€1.212bn, 1998-2012).

The persistence of the national policy commitment to innovation, R&D and the smart economy is demonstrated by policy statements and strategies that, despite the challenging economic climate in recent years, have continued. For example, in setting out its policy

³³ European Commission (2010), Regional Policy Contributing to Smart Growth in Europe 2020. October 2010.

³⁴ European Commission (2012), Guide to Research and Innovation Strategies for Smart Specialisation. May 2012.

³⁵ Ibid p.8.

³⁶ Department of Enterprise, Trade and Employment (2006), Strategy for Science Technology and Innovation 2007-2013.

response to the economic downturn, the Irish Government included a major area for action relating to 'Building the Smart Economy'³⁷.

The Report of the Innovation Taskforce³⁸ was published in March 2010 and outlined the Government's vision for Ireland to be 'an innovative, high-value, export-led economy with some of the world's leading research-intensive multinationals and thousands of innovative small and medium enterprises'. The Taskforce's vision is of an Ireland that, by 2020, will be an Innovation Hub with a significant number of large, world leading, innovation-intensive companies, each having a global footprint, many of which are Irish headquartered and owned and with thousands of innovative companies, from very small start-ups through small, medium and large companies, many of which aspire to increase the scale of their operations. Implementation of the Innovation Taskforce recommendations will be overseen by an expert group of technology transfer practitioners and cross-sector industry.

The Report of the Research Prioritisation Group³⁹ published in November 2011 identified fourteen priority areas for research (see table below) has become the focus of future State investment in RTDI. This represents also an explicit emphasis on prioritising research that can achieve commercial outcomes within a reasonable timescale and for that research to be valorised accordingly.

1.	Future Networks and Communications;
2.	Connected Health and Independent Living;
3.	Data Analytics Management, Security and Privacy;
4.	Diagnostics Therapeutics - synthesis formulation, processing and drug
delive	ery;
5.	Digital Platforms, Content and Applications;
6.	Food for Health;
7.	Future Networks and Communications;
8.	Manufacturing Competitiveness;

³⁷ Department of the Taoiseach (2008), Building Ireland's Smart Economy, A Framework for Sustainable Economic Renewal'.

³⁸Department of the Taoiseach (2010), Innovation Taskforce: Report of the Innovation Taskforce.

³⁹ Department of the Jobs, Enterprise and Innovation (2011), Report of the Research Prioritisation Steering Group.

9.	Marine Renewable Energy;
10.	Innovation in Services and Business Processes;
11.	Medical Devices;
12.	Processing Technologies and Novel Materials;
13.	Smart Grids and Smart Cities; and
14.	Sustainable Food Production and Processing.

Action Plans have been developed for each of the 14 priority areas by working groups chaired by Prioritisation Action Group members, supported by Forfás, and comprising members from all research funders supporting that particular Priority Area. The Action Plans⁴⁰ represent the detailed blueprint for actions to be taken by funding Departments and agencies to re-align the majority of competitive public research funding around the priority areas over the next five years.

In July 2013 the Irish Government set new targets and measures for investment of the core 500million Science and Technology budget in line with the National Research Prioritisation Exercise, referred to above. The Government also approved the publication of individual Action Plans on each of 14 Priority Areas of research which show the greatest opportunity in terms of supporting jobs.

Ambitious targets at national and agency level include:

• Increase the share of publicly performed R&D financed by enterprise to €180m over 2013 to 2017 – an average of €36m per annum, from a baseline of €31.2 m in 2010;

• Increase the number of spin-out companies greater than 3 years old from 44 to 69 by 2017;

• Increase the number of firms engaged in R&D projects of significant scale by 115 firms by 2017, from 1070 companies in 2011 to 1185 companies in 2017;

• Increase, by 10%, the turnover due to new-to-firm or new-to-market product innovations from 9.3% to 10.3% by 2017;

• A further 1,100 researchers will be employed in the enterprise sector in addition to the circa 10,600 currently employed.

⁴⁰ www.djei.ie/science/technology/rpmaps.htm

The Framework⁴¹ of Metrics and Targets for STI Investment was developed based on work carried out by Forfás. The Framework will firstly monitor the impact of public STI investment in broad terms, and secondly, monitor the impact of the implementation of research prioritisation in the 14 Priority Areas. The purpose of setting these targets is twofold: to stretch the public enterprise support system in order to maximise the impact of public investment in R&D; and, to assess the success over time of the implementation of research prioritisation. The Framework comprises three levels of targets – Overarching National Targets; Departmental/Agency-level Targets; and Priority Area Targets. The targets are underpinned by a wide range of 79 monitoring metrics covering the enterprise support environment, including inputs, outputs and outcomes. The metrics are to be monitored annually and the Prioritisation Action Group will oversee this monitoring process.

In May 2013, the Minister for Education and Skills announced a major re-organisation of the higher education sector in Ireland following the acceptance of recommendations put forward in a report by the Higher Education Authority (HEA) to the Minister. This sector undertakes a large proportion of Government-funded research activity in Ireland. The report from the HEA set out: (i) the consolidation of the Institute of Technology (IT) sector; (ii) the creation of a small number of technological universities; (iii) the formation of regional clusters between universities and more developed ITs; and (iv) proposals for an increased sustainability and capacity in higher education.

Trends

Gross Expenditure on Research and Development (GERD) is an internationally recognised metric which measures the total amount of expenditure on R&D. It includes all expenditure by Government and private enterprises and it measures the total amount of expenditure on all research performed in the enterprise, higher education and government sectors. As illustrated in Figure 18, the research intensity rate has been climbing in recent years and estimated to be 1.77% of GDP in 2013 (2.2% of GNP). Based on the latest comparative data from 2013 the Irish GERD rate is less than the EU27 average of 2.03% and approximately 0.3% below the Irish Europe 2020 target of 2%. GERD expenditure is also largely from private sources.

⁴¹ www.djei.ie/science/technology/rpmaps.htm

Based on the current trajectory it appears likely that it will be towards the end of the decade before the Europe 2020 target will be achieved⁴².



Figure 18: Ireland's GERD as % of GDP, 2008-2013

Source: Forfás, The Higher Education R&D Survey 2008⁴³

The Central Statistics Office (CSO) and Forfás published a joint survey on Business Expenditure on R&D (BERD) activities of enterprises in Ireland⁴⁴. The survey asked businesses across all sectors to report on R&D expenditure for 2009 and provides the most recent comprehensive view. Small enterprises (<50 employees) accounted for 16% of R&D expenditure, while medium-large enterprises accounted for the balance. Foreign-owned enterprises accounted for the vast majority of expenditure, with approximately one-third coming from Irish indigenous businesses. Table 6 shows that Irish enterprises spent almost €1.9bn on R&D activities in 2009.

In 2009, 15,773 persons were engaged in research and development activities. There were 8,960 researchers engaged, of which 1,639 held a PhD qualification while there were 3,572 technicians and 3,241 support staff. There were more research personnel engaged in the services sector, 61%, than in the manufacturing sector, 39%. There were also 559 PhD

⁴² Government of Ireland (2013). Ireland's National Reform Programme – 2013 Update, Pg. 16.

⁴³ Data courtesy of Jonathan Healy at Forfás. Database updated on 26.2.2012

⁴⁴ CSO & Forfás (2011), Business Expenditure on Research and Development 2009/10.

qualified researchers working in the manufacturing sector compared to 1,080 in the services sector. In the S&E Region, 12,420 people were engaged as research staff, which is 79% of the total, compared to over 3,350 or 21% in the BMW Region⁴⁵.

	Actual Total Current Expenditure	Actual Total Capital Expenditure	Actual Total Research & Development Expenditure
Manufacturing Industries (10-33)	593,965	149,340	743,305
Services (05-09, 35-99)	948,878	176,272	1,125,150
Total	1,542,843	325,612	1,868,455

Table 6: Ireland's Actual BERD Expenditure by Sector of Activity 2009 (€000)

Source: CSO & Forfás (2011), Business Expenditure on Research and Development 2009/10

Since the introduction of the R&D tax credit, there has been a significant increase in BERD, increasing as a percentage of GNP, from 0.93% in 2003 to 1.46% in 2011. BERD intensity now exceeds the EU27 average of 1.2% and is moving closer to the OECD average of 1.58%⁴⁶. Two thirds of BERD spending in 2009 was in the services sector and the remaining was in manufacturing. As illustrated in Figure 19, the majority of this spend was on current expenditure. Breaking down expenditure on BERD by region shows that the vast majority was attributable to the S&E Region which also provides the greatest contribution to national employment and economic output (See Chapter 3).

Irish researchers have also performed well in the EU Framework Programmes, securing more than the national target. The target for FP7 was a drawdown for Ireland of 1.25% of total funding. Currently the Irish drawdown stands at almost 1.5%⁴⁷. Drawdown of FP7 funding is also highly disaggregated with the Dublin region having 48.9% of the total as compared to the next highest which is the South-West region at 17.8%. The West Region had 10.9%, the

⁴⁵ CSO & Forfás (2011), Business Expenditure on Research and Development 2009/10, Pg.31.

⁴⁶ Government of Ireland (2013), Ireland's National Reform Programme – 2013 Update, Pg.17

⁴⁷ Enterprise Ireland (2013), Eighth Interim Report of Irish Involvement in the Seventh European Union Framework Programme for Research and Technological Development (FP7).

South-East 7.2% and the Mid-West 4.8%. In terms of higher education institutions, University College Cork (91) had the highest level of FP7 research participation followed by Trinity College Dublin (86) and University College Dublin (82), all in the S&E Region. NUI Galway in the BMW Region had the next highest level of participation in FP7 research projects (58)⁴⁸.



Figure 19: NUTS II Actual BERD Expenditure 2009/10 (€000)

Source: CSO & Forfás (2011), Business Expenditure on Research and Development 2009/10

Figure 20 highlights that the majority of Irish-based businesses invested in experimental development in 2009 and only a small amount was spent on basic research. Small enterprises were more likely to engage in basic or applied research, and indigenous businesses were more likely to engage in basic research compared to foreign-owned businesses. The majority of all research was self-funded with a smaller percentage coming from public sources. In 2009, only a small percentage (less than 4%) of research was funded by organisations such as education institutions. Over one- third of R&D active enterprises were engaged in a joint research project in 2009; fewer than 20% of those were jointly engaged with other firms outside Ireland and 11% with firms in Ireland. A total of 20% engaged with higher education institutes or other institutions in Ireland, while fewer than 10% were engaged with these types of institutions abroad. 40% indicated that finding a collaboration partner in a higher education

⁴⁸ CEC (2011), Innovation Union Competitiveness Report – Country Profile: Ireland.

institution in Ireland was difficult or very difficult and 48% considered it difficult or very difficult to find a partner to work on a relevant topic within a research type⁴⁹.



Figure 20: Ireland's BERD Expenditure by Type of Research & Size of Enterprise, 2009/10

As shown in Table 7, over the period 2008-2010, 60% of all enterprises were innovation active. These enterprises generated 78% of total turnover as well as employing over three-quarters of total persons in employment. Enterprises (both innovative and non-innovative) indicated that the three most significant factors hampering innovation were lack of funds, lack of external finance and high innovation costs⁵⁰. This suggests a justification for continued public investment to promote RTDI activities by firms.

Source: CSO & Forfás (2011), Business Expenditure on Research and Development (BERD) 2009/10

⁴⁹ CSO & Forfás (2011), Business Expenditure on Research and Development 2009/10.

⁵⁰ CSO (2011), Measuring Ireland's Progress.

Table 7: Ireland's Technological & Non-Technological Innovation Active Rates by
Sector & Number of Persons Engaged, 2008-2010

Number of Persons Engaged	% of total enterprises with innovation active activities	% of total turnover generated by enterprises with innovation activities	% of total persons engaged who work in enterprises with innovation activities
Total Industry	66.0	90.8	82.4
Total Selected Services	55.9	71.1	73.8
All Enterprises			
10-49	54.8	61.8	57.3
50-249	76.2	81.8	78.3
250+	85.2	83.4	85.8
Total: All Enterprises	59.5	78	77.2

Source: CSO/Forfás (2012), Community Innovation Survey 2008-2010

The Global Entrepreneurship Monitor (GEM)⁵¹, an international project involving 59 countries which provides information on entrepreneurship, an important measure of innovation. In 2011, early entrepreneurial activity in Ireland was 7.2%, the lowest in ten years. The 9-year period shows early-stage entrepreneurial activity peaking in 2005 at 9.8%. After a sharp drop in 2006 and recovery in 2007, the overall activity declined in line with the recession. The rate of applications from Ireland to the European Patent Office is significantly lower than the EU average. Given the relatively strong scientific performance and the relatively recent development of the research base in Ireland, this may rather reflect a time-lag in bringing new ideas to market or be due to the fact that in ICT and pharmaceuticals, Intellectual Property (IP) is often held in the country of head office and can also comprise copyright rather than patents. There were approximately 60 applications per million of the population during 2001 to 2006. This rate increased slightly over the following four years to stand at 79 per million of the population in 2010. The EU rate has stayed reasonably stable over this time period and in 2010 stood at close to 109 patent applications per million of the

⁵¹ www.gemconsortium.org

population⁵². Patents per billion of GDP in Ireland stands at 2.63 as compared to the EU average of 4.0^{53} .

Ireland has increased significantly its investment in research in higher education in the period since 1996. Higher Education R&D (HERD) spending from all sources has almost quadrupled in current terms in the past ten years and has now reached OECD and EU-25 average levels (see Figure 21). Table 8 details the HERD spend by institution and NUTS II region between 2000 and 2010. Given that the majority of third level institutions are based in the S&E region, this has resulted in the S&E region winning the majority of the funding. A major contributor to HERD funding has been through the Programme for Research in Third-Level Institutions (PRTLI) which was launched in 1998 and has awarded €1.22 billion in exchequer and private match funding⁵⁴ to date. PRTLI provides integrated financial support for institutional strategies, programmes and infrastructure in key areas of research spread across all disciplines. The programme supports research in humanities, science, technology and the social sciences, including business and law. Trinity College Dublin was the largest beneficiary with €249 million while NUI Galway was the fourth largest with €150 million.

HERD investment has resulted in significant progress in the volume and quality of research being conducted in Irish higher education. Ireland now ranks 8th out of 28 countries (EU, Japan and the US) in terms of research publications per 1,000 inhabitants⁵⁵. The quality of research output (as measured by citation impact) has also increased, and in 2008 Ireland entered the top-20 list for citations in all fields for the first time.

⁵² CSO (2011), Measuring Ireland's Progress.

⁵³ CEC (2011), Innovation Union Competitiveness Report – Country Profile: Ireland.

 $^{^{54}}$ The bulk of private funding, almost one-third of the total, came from Atlantic Philanthropies

⁵⁵ St. Aubyn, M., Pina, A., Garcia, F. & Pais, J. (2009), Study on the efficiency and effectiveness of public spending on tertiary education, European Economy, Economics Papers 390, November 2009, ECOFIN, European Commission.



Figure 21: Ireland's HERD Expenditure & Percentage of GNP 2008-2013

Source: Forfás, The Higher Education Research and Development (HERD) Survey

	2000	2002	2004	2006	2008	2010
BMW Region						
NUIG	20.46	31.83	58.47	79.78	93.23	103.20
Dundalk IT	0.54	0.22	5.22	3.40	10.90	3.90
Athlone IT	1.33	0.41	0.80	1.70	3.07	3.30
IT Sligo	0.18	0.84	0.83	1.06	1.09	1.60
Galway-Mayo IT	0.39	0.51	0.90	2.57	1.88	1.00
Letterkenny IT	0.12	0.07	0.30	0.44	0.83	0.60
S&E Region						
TCD	37.80	61.48	96.31	100.96	114.29	148.70
UCD	40.93	64.65	113.28	135.56	153.33	123.10
UCC	43.56	39.99	87.14	119.26	152.09	95.30
UL	14.55	20.81	34.63	49.30	48.49	60.80
DCU	12.68	20.87	28.76	36.10	55.11	43.70
DIT	13.38	15.82	10.98	6.72	20.46	26.60
Waterford IT	1.63	2.58	6.20	9.22	15.24	23.50

Table 8: NUTS II Gross HERD Expenditure by Institution 2000-2010 (€m)

NUIM	11.84	11.05	22.85	24.55	32.91	22.50
Royal College of Surgeons	3.57	29.69	15.11	14.26	19.96	20.90
Cork IT	1.91	3.20	3.23	4.65	14.68	13.20
Mary Immaculate College	0.00	0.63	1.31	3.85	6.27	4.10
St Pats Drumcondra	2.03	1.60	3.46	4.57		3.90
IT Tallaght	0.54	0.61	0.93	1.88	2.72	3.00
IT Carlow	3.77	0.90	0.33	0.34	0.80	1.50
IT Blanchardstown				0.27	0.67	1.30
IT Limerick	0.19	0.12	0.47	0.19	0.15	1.10
IT Tralee		0.00	0.19	0.28	1.58	1.00
Dun Laoghaire IADT						0.40

Source: Forfás, The Higher Education Research and Development (HERD) Survey

Actions co-funded 2007-13

Under the 2007-13 Regional OPs, significant resources have been allocated to strengthening research capacity, and to commercialisation and technology transfer through a number of schemes largely targeted at building research and technology transfer capacity in the higher education institutions. A summary of these initiatives is shown in the table below.

RTDI Initiatives Co-Financed 2007-13

Border, Midland and Western Region	Southern and Eastern Region				
PRTLI Capital	PRTLI Capital				
PRTLI Recurrent	PRTLI Recurrent				
Technological Sector Research	Technological Sector Research				
Research Facilities Enhancement Scheme	Research Facilities Enhancement Scheme				
Science Foundation Ireland Initiatives	Research Equipment Renewal Scheme				
Marine Institute Initiatives	Enterprise Ireland Applied Research and				
	Commercialisation				
Enterprise Ireland Applied Research and					
Commercialisation					

The most significant co-funded initiative is the Programme for Research in Third Level Institutions (PRTLI) which was designed to facilitate Irish institutions to produce world class research, and supports research in science, technology, humanities, and the social sciences, including business and law. The PRTLI is a combination of capital funding (for infrastructural development) and recurrent funding (to support development of human capital, PhD programmes etc.) and there have been five cycles of funding since 1998.

The objective of the Technological Sector Research programme was to support and strengthen the research capability of the Technological Sector by enabling Institutes to focus on research projects based on their core strengths, either of individual Institutes or of the sector as a whole. The programme comprised a Postgraduate R&D Skills Programme Enterprise Platform Programme was a third Strand of the TSR programme.

The Research Facilities Enhancement Scheme (RFES) targeted the elimination of substandard research facilities. In so doing, it permits institutions to undertake the necessary refurbishment, conversion and / or upgrade of facilities in their ownership so as to permit the conducting of high-quality research in line with institutions' strategic priorities. It also extends to enabling institutions to acquire necessary equipment for the conducting of research.

The Research Equipment Renewal Grant Scheme targeted deficits with existing research infrastructure, including equipment as identified in the Strategy for Science, technology and Innovation and by a HEA/Forfás Research Infrastructure Review conducted by an Independent International Steering Committee. It was delivered via agencies that support science research in Ireland including Enterprise Ireland (EI), the Higher Education Authority (HEA) and Science Foundation Ireland (SFI) via a coordinated call for equipment proposals from the Higher Education Institutions (HEIs).

The HEA Science Foundation Ireland theme provides for the development of human capital in research excellence in strategic areas relevant to Irish economic development, particularly in the areas of Biotechnology, Information & Communications Technologies and Sustainable Energy/Energy Efficient Technologies. SFI funded research programmes are assisting in the enhancement of the innovation and ICT infrastructure and capacity of the BMW Region and nationally.

Six marine research projects managed by the Marine Institute have also been funded in the BMW Region.

The Applied Research Enhancement (ARE) Programme administered by Enterprise Ireland provides an opportunity for the Institutes to develop research capability in areas of relevance to industry both regionally and nationally and of strategic importance to the individual college. The benefits may be in the development of the research capabilities of existing companies in the region or the creation of new companies within the region. The Programme supports the building of the applied research competency of the research team in the supported institutions to compete successfully for National and International research funding to support a growing applied research presence in the Institute of Technology.

The Enterprise Ireland Commercialisation Fund provides support to researchers in third level institutions and research performing organisations in the Republic of Ireland for applied research generating outputs for commercial exploitation for the benefit of the Irish economy. In so doing, the programme fosters a dynamic and commercially aware research community and an environment that promotes entrepreneurship.

Achievements of the schemes 2007-13

The performance of the above schemes in terms of physical implementation, achievement of performance indicators and expenditure profile has largely been on track for both Regional OPs over the 2007-13 period. Allocated expenditure under categorisation code 1 (RTDI Activities in research centres) for the BMW Regional OP was over €105m up to December 2012 and €418m for the Southern and Eastern Regional OP. The projects co-funded are combinations of new buildings, refurbishments and/or new equipment. Outturns under the Research, Technological Development and Innovation themes include a total of 207 (representing 103.5% of BMW target) and 819 (representing 97% of S&E target) for additional researchers employed in the higher education institutes. Furthermore, there were 21and 48 (representing 100% of target) Principal Investigator Awards in the BMW and the S&E Regions respectively up to end December 2012.

Relevant Evaluation Findings

The Mid-Term Evaluation of the BMW Regional OP (2010) found that RTDI measures under Priority 1 – Innovation, ICT and the Knowledge Economy, were performing reasonably well. While expenditure had not been frontloaded as originally envisaged, expenditure had at the mid-term point reached a point equivalent to what one would expect if expenditure was to be spread evenly over the seven years of the OP. Further increases in expenditure were anticipated, partly due to the addition of the SFI Actions sub-theme in 2009.

The Mid-Term Evaluation of the S&E Regional OP found that the RTDI themes under Priority 1 – Innovation and the Knowledge Economy were performing very well. This was largely driven by the robust performance of the PRTLI sub theme which accounted for well over 50% of total spending at that time and this excellent performance has continued. Consequently it was suggested that there is scope for further absorption of ERDF funds given the anticipated expenditure for the remainder of the OP.

Public Consultation

A number of the submissions received highlight the need for investment in actions directed towards supporting the investment in RTDI initiatives and a summary of these can be found in Annex 1A and 1B (the full submissions are also available at <u>www.bmwassembly.ie</u> and <u>www.seregassembly.ie</u>). Public submissions received called for a continued focus and ongoing support for RTDI investment, in particular the link between academia and industry was proposed as a key area to act as a catalyst of regional economic development. In addition, submissions focus upon the role of incubation services and how best these could be linked to developed local SMEs. Individual contributors placed emphasis upon the need to capitalise upon previous RTDI invest and in particular support local and regional initiatives which seek to maximise competitive advantages (smart specialisation).

4.2 Enhancing Access to and Use and Quality of ICT

EU Policy Framework

Digital Agenda for Europe

The Digital Agenda for Europe⁵⁶ (DAE) is one of seven flagship initiatives under the Europe 2020 Strategy for Smart, Sustainable and Inclusive Growth. The DAE focuses on the twenty-first century technologies and online services that will enable Europe to boost job creation, promote economic prosperity and improve the daily lives of EU citizens and businesses in a variety of ways. The overall aim of the Digital Agenda is 'to deliver sustainable economic and social benefits from a digital single market based on fast and ultra-fast internet and interoperable applications'⁵⁷.

The provision of high speed broadband is also a key deliverable under the European Commission's DAE under which all Member States are required to meet ambitious broadband targets and to publish plans in 2012 which will result in the achievement of these targets. The specific targets identified under the DAE in respect of broadband are (i) basic broadband to be available to all citizens by 2013; (ii) speeds of 30Mbps to be available to all citizens by 2020; and (iii) 50% of EU households subscribing to speeds of above 100Mbps by 2020.

Irish Policy Framework

Successful delivery and implementation of the DAE in Ireland is a priority of the Government. In light of the importance of digital engagement for Ireland, the Next Generation Broadband Taskforce was established with a view to identifying the legislative, policy and regulatory levers that would facilitate faster investment in high speed services across Ireland. The Taskforce was a collaborative approach between industry and the Department of Communications, Energy and Natural Resources aimed at assisting the Government in developing an informed and ambitious National Broadband Plan for Ireland.

Five Working Groups were established under the Taskforce to consider issues such as appropriate targets for broadband speed; demand stimulation; the removal of barriers which were perceived as hampering investment; spectrum policy; and the role of State entities in

⁵⁶ European Commission (2010), A Digital Agenda for Europe. May 2010.

⁵⁷ Ibid p.3.

providing access to infrastructure and services. The Reports of each of the Working Groups are set out in the main Taskforce Report⁵⁸. In addition, the Report sets out a number of key recommendations / requirements which the industry participants identified and wished to see progressed to facilitate the roll-out of next generation broadband. Following a period of public consultation, the report formed the basis for the adoption by Government of a National Broadband Plan.

At the end of August 2012, the Minister for Communications, Energy and Natural Resources published the National Broadband Plan⁵⁹, setting out the Government's Strategy to enable the delivery of high speed broadband throughout Ireland. The National Broadband Plan states that (a) an estimated 50% of the population will receive high speed broadband via industry investment and that no State investment is required for this segment of the population; and (b) the State will invest to ensure higher speeds are available to the remaining 50% of the population. The ambition will be for speeds of between 40Mbps and 70Mbps in as many areas as possible and a minimum of 30Mbps for harder to reach areas (estimated to be up to 30% of the population).

The Plan will deliver on these targets by leveraging investment from both the private and public sectors. Other actions which are included in the Plan include: (i) addressing planning and road opening challenges; (ii) assisting in getting citizens; and (iii) businesses online, measures relating to spectrum policy and maximising the use of State assets where possible. This Plan provides for a greater level of ambition than that set out in the European Commission's DAE with at least 30Mbps connectivity being available to all citizens well ahead of the target, and a substantial proportion of the country being able to access considerably higher speeds.

⁵⁸<u>http://www.dcenr.gov.ie/Communications/Communications+Development/Next+Generation+Broadband/Next+Generation</u> +Broadband+Taskforce.htm ⁵⁹ http://www.dcenr.gov.ie/NR/rdonlyres/1EA7B477-741B-4B74-A08E-6350135C32D2/0/NBP.pdf

Progress on the rollout of the Plan is being overseen by a High Level Group, which is chaired by the Department of Communications, Energy and Natural Resources and comprises representatives from the Department of Environment, Community and Local Government, Department of Transport, Tourism and Sport, Office of Public Works, NewERA, ComReg and Forfás. Ongoing progress is reported to the Cabinet Committee on Economic Infrastructure as well as under the Action Plan for Jobs.

National Digital Strategy⁶⁰

The first phase of Ireland's National Digital Strategy "Doing More with Digital" was launched in July 2013. The strategy aims to set a vision and build momentum in digital adoption, which is described as a pervasive economic and social force, and to address low adoption rates and low on-line presence by micro-enterprises and some categories of SMEs The initial phase of the National Digital Strategy is focussed on:

- 1. Stimulating the indigenous economy by helping small Irish business to expand on-line;
- 2. Support in preparing the next generation for future jobs; and
- 3. Making sure everyone in society benefits from digital.

New research commissioned as part of the National Digital Strategy shows that the digital economy now accounts for 4.4% of GDP and supports 95,000 jobs, with a relative share growing at 16% per year, 10 times the rate of growth of the rest of the economy.

The strategy will for the first time, provide financing for smaller businesses to develop their online trading presence through a Trade On-Line Voucher Scheme. The vouchers will put up to €2,500 directly into the hands of 2000 small businesses to help them prioritise digital, get the resources, training and expertise needed to develop an online trading presence.

The strategy will also support a range of interventions to enable schools and teachers learning from each other and sharing best practice, ultimately facilitating young people using digital technology and content to learn. In addition, the strategy commits to halve the number of non-liners by 2016, thus bringing an additional 288,000 people into the digital community.

⁶⁰ www.dcenr.gov.ie/nds

Trends

The Central Statistics Office (CSO) collects statistics on information and communication technology (ICT) usage in households as part of the Quarterly National Household Survey $(QNHS)^{61}$. 83% of all households in 2012 have access to a computer. This was an increase of 18% since 2007. Internet access in households has increased over the period 2007-2012 with an estimated 81% now connected to the internet compared with 72% in 2010 and just 57% in 2007. At the end of June 2011, there were over 1.66 million active internet subscriptions in Ireland - a 5.2% increase on June 2010. In 2012, Ireland was 5% above the EU27 average (76%) in terms of households connected to the internet (Figure 22). Access to the internet displayed some regional differences with 74% of households in the Midland recorded as having an internet connection as compared to 87% in the Mid-East (see Figure 22). The majority of those who did not have access to the internet cited lack of need rather than accessibility as the main factor⁶².

Figure 22: EU 27, Ireland & NUTS III Percentage of Households with Computer Connected to the Internet (%) 2007-2012



Source: CSO, Information Society Statistics – Households (2012)

Ireland has made significant progress in recent years in terms of broadband connectivity at all levels including international connectivity, backhaul networks, Metropolitan Area Networks (MANs) and local access networks. This progress is reflected in improved broadband

⁶¹ CSO (2012), Quarterly National Household Survey.

⁶² CSO(2011), Information Society and Telecommunications in Households 2009 – 2011.

availability and take-up with the number of broadband subscribers increasing from 602,000 to over 1.666 million over the last five years⁶³. Map 5 below details the percentage distribution households across Ireland that has an active broadband connection⁶⁴. Broadband connections now account for 90% of internet connections, compared to 58% in 2007, which represents a significant transition from dial-up.

In 2010, 87% of enterprises and 58% of households in Ireland had a broadband connection. Ireland's enterprise take-up rate is just below the EU-15 average of 89%. Of the firms in Ireland with internet access, 94% have a broadband connection – on a par with the EU-15 average. The use of e-commerce by Irish enterprises is high and exceeds the EU Average⁶⁵. Ireland still lags behind the EU and OECD average with regard to total fixed broadband take-up (excluding mobile). According to European Commission figures, at the end of 2010, fixed broadband penetration reached 23.3% in Ireland, while the EU-27 average was 26.6% of population. In Ireland, 0.5 % of fixed broadband connections are provided via fibre connections compared to 9.6 % of OECD-27 subscriptions. Given Ireland's spatial patterns and low population density, wireless solutions will have a key role to play in reaching universal coverage as it will not be possible to deploy fixed advanced broadband infrastructure everywhere (e.g. fibre). Ireland currently has one of the highest levels of mobile broadband subscription (47.1%), and is above the EU-15 average (43.4%) and the OECD average (41.6%)⁶⁶.

⁶³ DECNR (2012), Delivering a Connected Society: A National Broadband Plan for Ireland.

⁶⁴ Map based on results from Census 2011, CSO.

⁶⁵ <u>http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tin00111&plugin=1</u>

⁶⁶ Forfás (2012), Ireland's Advanced Broadband Performance and Policy Priorities, Pg. 4.





Source: CSO, Census 2011

Despite recent progress, the European Commission in their 2011 assessment of the Irish telecommunications market concluded that "*broadband speeds are relatively slow in Ireland compared to other member states*". There is limited data available on the take-up of different speeds by household. However, according to ComReg, 14.2% of total broadband

subscriptions (including mobile) in 2011 were to broadband services at or above 10 Mbps⁶⁷. The share of broadband lines in Ireland at 10 Mbps and above increased from 8.9% at the end of 2009 to 13.4% at the end of 2010; the EU average was 38.9% of subscriptions at 10 Mbps and above in 2010, up from 23.4% the previous year. By way of comparison, in Denmark and Sweden, 47.6% of connections were at speeds of 10 Mbps, in the UK, 44.8% of connections were at or above 10 Mbps.

While the advanced broadband needs of ICT-intensive enterprises are generally well met in the large urban centres, businesses, particularly SMEs, outside the main urban centres have significantly less choice and less access to good quality services. The policy actions taken and investment made to date are necessary but are not sufficient to ensure the widespread availability of world class advanced broadband services within a timescale that will allow Ireland to catch up with competitor countries. As can be seen from Map 4 above, the penetration and quality of access to broadband is lower outside of the main urban centres, particularly in rural regions. The Rural and National Broadband Schemes were established to enable a basic broadband service to be provided to individual premises which were not capable of obtaining a broadband service from existing internet service providers or where broadband services were deemed insufficient (see Map 6).

The target is that all citizens will have access to 30 Mbps broadband services by 2020 in accordance with EU-wide targets. The rollout of the provision of the National Broadband Scheme was completed in October 2010 and broadband services are now available to all premises within each of the 1,028 designated Electoral Divisions⁶⁸. 5,000 applications were received under the Rural Broadband Scheme and of these, approximately 3,700 qualified under the terms of the scheme. However, to date only 509 applicants have taken up their offers.

⁶⁷ ComReg (2011), Quarterly Key Data Report, Q2 2011.

⁶⁸ http://www.dcenr.gov.ie/communications/communications+development/national+broadband+scheme.htm







Note: This map illustrates where the National and Rural Broadband Schemes are available

Actions co-funded 2007-13

The 2007-13 Regional Operational Programmes supported the delivery of broadband services to all remaining un-served areas of Ireland addressing regional infrastructure and service deficits. Investments undertaken include:

- Roll-out of the National Broadband Scheme;
- Completion of Metropolitan Area Networks (MANs) in collaboration with local and regional authorities; and

• Schools Broadband Initiative.

The National Broadband Scheme (NBS) aimed to provide affordable, scaleable broadband services to fixed residences and businesses within certain designated rural areas where the extent of broadband coverage by commercial operators, at the time the Scheme was launched in 2008, was deemed to be insufficient. Extension and take-up of broadband facilities in rural areas is an important policy objective. Since October 2010, broadband services under the NBS are available to all fixed residences and businesses in the designated NBS electoral divisions.

The scheme to provide 100Mbps broadband access and associated services to all 730+ postprimary schools, which is co-funded in the BMW Region, follows on from the successful pilot project which has been running in 78 selected post-primary schools since 2010. The strategic rationale for the scheme (and the proposed national rollout) is that second level schools must be equipped to benefit from digital technologies and that this must be facilitated by the availability of high bandwidth broadband. The capital appraisal undertaken in conjunction with the pilot project confirmed the benefits that can accrue from such investment.

Achievements of the schemes 2007-13

The implementation of the ICT infrastructure and services initiatives over the 2007-13 period has been effective with all parts of Ireland now having access to at least a basic broadband service, with minimum upload speeds of 1.4Mbps⁶⁹. This is ahead of the European Union's "Digital Agenda for Europe" target of universal coverage by 2013.Full delivery of 100Mbps services to all post-primary schools will be completed by 2014. Almost €48m has been allocated to this category in the BMW Region up to the end of 2012, while the equivalent figure for the Southern and Eastern Region is over €34m. Under the BMW OP the NBS provided a broadband service to 127,111 additional users which exceeds the OP target of 122,986 additional users. The target number of additional businesses with access to broadband has been exceeded in the S&E Region and stands at 25,843 as at end of December 2012.

⁶⁹ Department of Communications, Energy and Natural Resources: http://goo.gl/CxSC0z

Relevant Evaluation Findings

The Mid-Term Evaluation of the BMW Regional OP found that expenditure had been steady up to the mid-term and that the theme was on track to meet its expenditure and performance targets.

Progress under the ICT and Accessibility theme was reported as satisfactory in the Mid-Term Evaluation of the S&E Regional OP stating that financial and physical progress targets should be achieved.

Public Consultation

A number of the submissions received highlight the need to investment in actions directed towards supporting the investment in ICT infrastructure and a summary of these can be found in Annex 1A and 1B (the full submissions are also available at <u>www.bmwassembly.ie</u> and <u>www.seregassembly.ie</u>). Investment in ICT infrastructure to deliver high speed next generation broadband was highlighted in the submissions received. The Department of Communications, Energy and Natural Resources provided a description of the proposed next generation National Broadband Plan 2012. The need for further investment in ICT infrastructure was highlighted as was the poor quality of broadband service available in some rural areas. The synergies arising from investing in ICT in terms of reduction in requirements to travel and the attendant reduction in emissions was noted. Measures were called for to encourage businesses to develop/expand ICT usage and demand stimulation amongst the general public and improvements in e-Government services. The provision of high-speed broadband to address regional competitiveness was noted.

4.3 Enhancing the Competitiveness of SMEs

EU Policy Framework

There are more than twenty-three million SMEs spread across Europe and the EU has put in place a number of policy frameworks to overcome the challenges they face. Central to this is the Small Business Act (SBA) for Europe⁷⁰ which was published in 2008. The SBA is a set of ten principles (see table below) aimed to guide the design and implementation of policies both at EU and national level.

⁷⁰ European Commission (2008), Think Small First: A Small Business Act for Europe. June 2008.

1.	Create an environment in which entrepreneurs and family businesses can thrive
	and entrepreneurship is rewarded;
2.	Ensure that honest entrepreneurs who have faced bankruptcy quickly get a
	second chance;
3.	Design rules according to the "Think Small First" principle;
4.	Make public administrations responsive to SMEs' needs;
5.	Adapt public policy tools to SME needs: facilitate SMEs' participation in
	public procurement and better use State Aid possibilities for SMEs;
6.	Facilitate SMEs' access to finance and develop a legal and business
	environment supportive to timely payments in commercial transactions;
7.	Help SMEs to benefit more from the opportunities offered by the Single
	Market;
8.	Promote the upgrading of skills in SMEs and all forms of innovation;
9.	Enable SMEs to turn environmental challenges into opportunities; and
10.	Encourage and support SMEs to benefit from the growth of markets;

The focus of the SBA is to create a level playing field for SMEs throughout the EU and to improve the administrative and legal environment to enable SMEs to create jobs and growth.

In 2011 a review⁷¹ of the SBA highlighted progress that has been achieved through a number of initiatives related to (i) E-invoicing; (ii) Optional cash accounting scheme for firms with less than €2m; (iii) Directives requiring public authorities to pay SMEs within 30 days; (iv) Giving greater priority to SMEs in terms of RTDI policy development; and (v) Enabling internationalisation of SMEs to third-country markets, e.g. opening of an EU SME Centre in China.

As part of the Review of the Small Business Act for Europe (SBA), the Commission invited Member States to nominate a national SME Envoy to complement the role of the European Commission's SME Envoy. Together with representatives of EU-level SME business organisations, the Network of SME Envoys will make up an SBA advisory group.

⁷¹ European Commission (2011). Review of the Small Business Act for Europe. February 2011.

The review also recognised that more needed to be done in a range of areas some examples include: (i) Lighter administrative burdens; (ii) Access to finance; (iii) Opportunities for internationalisation; (iv) Better roll-out of European standardisation systems; (v) Enabling SMEs to maximise opportunities in emerging sectors; (vi) Promoting entrepreneurship; and (vii) Promoting second chances for (honest) entrepreneurs through the reduction of discharge and debt settlement times.

In addition, the European Commission has recognised the importance of the social economy and social innovation its Europe 2020 Strategy. In 2011, the Commission launched the Small Market Act and included the social enterprise sector as one of the twelve priorities under this act. The Commission hopes to grow social enterprise sector from 6% to 9% by 2020.

Irish Policy Framework

The Irish Government has undertaken a number of key initiatives to address some of the financial challenges that are facing the SME sector in Ireland⁷².

- 1. Access to Credit
- The Credit Guarantee Scheme was launched in October 2012 to assist viable SMEs on the margins of commercial lending decisions in accessing credit. It provides a 75% State guarantee to banks against losses on qualifying loans to micro, small and medium enterprises with growth and job creation potential. The Scheme will facilitate up to €150 million of additional lending to eligible SMEs per annum;
- The Microenterprise Loan Fund was launched in September 2012 to improve access to credit for micro-enterprises and facilitate the growth and expansion of viable businesses from all industry sectors across the country, which have been refused access to credit from the banks. The Fund will provide support in the form of loans for up to €25,000, available to start-up, newly established, or growing microenterprises employing less than 10 people, with viable business propositions, that do not meet the conventional risk criteria applied by banks; and
- The Credit Review Office was set up in 2009 to help SMEs or farm borrowers who have had an application for credit of up to €00K declined or reduced, and who feel that they

⁷² http://www.djei.ie/enterprise/smes/work.html

have a viable business proposition. The Office will examine cases where borrowers feel that the terms and conditions of their existing loan, or a new loan offer, are unfairly onerous or have been unreasonably changed to their detriment.

2. Late Payment Legislation

- The EU Directive on combating late payment in commercial transactions came into effect March 2013; this legislation will act as a deterrent to late payment and a driver for payment on time by establishing a clear expectation in law that payment will be made according to agreed terms that creditors will not be penalised financially when paid late and debtors will not benefit; and
- The Prompt Payment Rule place a requirement upon all public bodies (excluding Commercial Semi-State Bodies) to complete the payment of supplies within fifteen-days of receipt of invoices.

Implementation of the EU Late Payment Directive which came into effect on 16th March this year, aimed at improving payment practices in commercial transactions between businesses and between businesses and Public Authorities;

Introduction of a Prompt Payment Code of Conduct for Business which is currently being developed by the various small business representative bodies with the support of the Department of Jobs Enterprise and Innovation. The aim of the Code of Conduct is to improve cash flow between businesses and also help address the culture of late payments in Ireland; and

Late Payment Information Campaign will be 'rolled out' in late-2013 by the Department of Jobs, Enterprise and Innovation aimed at providing businesses with information on the Late Payment Directive and also providing a forum for sharing best practice to help SMEs obtain prompt payment.

The Advisory Group for Small Business (AGSB) was established by the Taoiseach in June 2011. The broad terms of reference for the AGSB are to facilitate structured and regular dialogue between the Minister for Small Business and representatives of the small business sector on issues of concern to that sector and how to promote the economic development and job potential of the sector having regard to the current restraints imposed on the national

finances. The recommended action points are then addressed through the Action Plan for Jobs process. Membership of the AGSB includes entrepreneurs, nominees from the main small business representative bodies, officials from the Department of Jobs, Enterprise and Innovation, the Credit Review Office as well as from the state enterprise support agencies, Forfás, Enterprise Ireland and the County and City Enterprise Boards (CEBs).

In May 2013 the Government announced⁷³ the establishment of 31 LEOs (Local Enterprise Offices) to replace the existing 35 County and City Enterprise Boards (CEBs) to focus on the delivery of services to micro and small enterprises. These LEOs will bring together the skills and resources of CEBs, Enterprise Ireland and Local Authorities. These new offices will be integrated as part of local authorities to service the needs of local businesses. Among the services to be provided by Solas include:

- Mentoring programmes overseen by Enterprise Ireland;
- Training and management development programmes overseen by Enterprise Ireland;
- Pathway into the range of Enterprise Ireland supports for high-growth companies with ambitions to export;
- Advice on and access to a range of services from across Government, including Revenue, Credit Review Office, the Companies Registration Office;
- Companies with over 10 employees operating exclusively in the domestic market, which currently in most cases are not supported by the State, will be eligible for supports under the new system;
- Access to the range of support services including planning and licensing offered by the Business Support units of Local Authorities;
- Access to the various training services offered by SOLAS; and
- Access to the Microfinance Ireland Loan Fund.

In July 2013, Forfás published a report⁷⁴ highlighting the potential of social enterprises to contribute to job creation, growth and economic well-being. The report outlined that the social enterprise sector is currently comprised of 25,000 to 30,000 people working in 1,400 social enterprises generating approximately 1.4bn to the national economy and has the potential to double by 2020 if appropriate measures are rolled-out.

 ⁷³ <u>http://www.djei.ie/press/2013/20130520.htm</u>
⁷⁴⁷⁴ Forfás (2013). Social Enterprise in Ireland: Sectoral Opportunities and Policy Issues.

Trends

The private sector in Ireland consists largely of an indigenous Small and Medium Enterprise (SME) base⁷⁵. The Irish business environment is dominated by SMEs, with 99% (192,531) of businesses being classified as SMEs in 2010. As a consequence, the SME base acts as a major source of employment accounting for 69% of persons engaged, 51.5% of turnover and 46.8% of gross value added (GVA)⁷⁶. Despite this SMEs make up only 52% of both turnover and gross value added in the economy. Despite Ireland's reputation as one of the world's most globalised economies, 64% of private sector workers are employed by indigenous non-exporting firms, with 56% working for indigenous, non-exporting SMEs. These numbers highlight the importance of domestic demand for sustaining and generating employment, and suggest that an export orientated growth policy may not have as large an impact on number of people employed as might be expected. The dependence of SME's on domestic demand given their largely non-exporting structure is significant in light of high savings rates, poor consumer sentiment and retail sales index figures all pointing towards a flagging domestic economy⁷⁷.

In terms of spatial distribution, the S&E Region predominates (73%), particularly Dublin with 30% of the total SMEs in the country (see Figure 23). In general, the number of active enterprises in Ireland have been in decline since 2006 with SMEs declining by -7.8% whereas larger enterprises (+250 engaged), albeit from a smaller base, have decreased by -8.4% (See Figure 24).

⁷⁵ The revised European Union definition, used for EU statistical comparisons, defines a small enterprise as one with under 50 employees, and a medium enterprise as one with at least 50 but under 250 employees. Large enterprises have 250 or more employees.

⁷⁶ Lawless et al (2012), SMEs in Ireland: Stylised facts from the real economy and credit market.

⁷⁷ http://taxpolicy.gov.ie/wp-content/uploads/2012/11/ Economic-Assessment-of-SME-Sector-in-Ireland.pdf



Figure 23: Ireland, NUTS II & NUTS III Number of active SMEs 2010

Source: CSO, Business in Ireland, 2010⁷⁸

 $^{^{78}} http://www.cso.ie/en/media/csoie/releases publications/documents/multisectoral/2010/business inireland 2010.pdf$



Figure 24: Ireland's Growth & Decline of Active SMEs 2006-2010

Source: CSO, Business in Ireland, 2010

The SME sector in Ireland is very diverse and dominated by micro-enterprises (<10), accounting for 90.8% enterprises and 27.2% of employment. SMEs are most dominant in the construction, services and distribution sectors compared to large enterprises. Just over 50% of industry (Manufacturing, Energy and Water) and 25% of the financial and insurance sector are SMEs. Within SMEs themselves, almost 50% are operating in the services sector, followed by a 20% in each of distribution and construction.

SMEs accounted for over 50% of total turnover and over 46% of GVA in the economy. Services accounted for over 40% of GVA, followed by distribution at 27% and industry at 23%. However, following the collapse of the property sector in 2008, construction only contributed to just over 6%. Despite being by far the most numerous business-type, micro-enterprises only account for 11% of turnover and 12.4% of GVA. Moving into the bigger SME brackets, turnover almost doubles and contribution to GVA increases, showing the potential for micro-enterprises to contribute more if supported to grow and expand within the SME sector.

The economic downturn has had a major impact on the SME sector. The percentage of those employed in SMEs in 2010 fell to 81.6% of 2006 levels, with the construction sector and

industry bearing most of the brunt. For example, the number of construction-related businesses fell by 19,500 or 40.9% in the period. Between 2010 and 2011, around 4,200 construction businesses ceased operations, falling from almost 32,300 in 2010 to just over 28,100 in 2011, a decline of 13%. Employment in the industry also fell by 40.7%, from 152,000 workers in 2008 to just over 90,000 in 2011⁷⁹. Figure 25 shows the number of enterprise births that fell over the period 2006 to 2010. In 2006 there were almost 16,700 enterprises born and by 2010 this figure had fallen to just over 11,200. By contrast the number of enterprise deaths/closures rose steadily over the period to 2009. Enterprise closures increased from 11,900 in 2006 to 24,500 in 2009. Prior to 2009, the vast majority of enterprise deaths were in the construction sector. However, by 2010 this had been overtaken by the services sector (see Figure 26).



Figure 25: Ireland's Number of Enterprise Births & Deaths 2006-2010

Source: CSO, Business in Ireland, 2010

⁷⁹ CSO (2011), Building and Construction Inquiry.



Figure 26: Enterprise Deaths by Sector 2006-2009

Source: CSO, Business in Ireland, 2010

SMEs have traditionally experienced difficulty in accessing external credit finance and the onset of the banking crisis has compounded this problem. The number of successful loan applications from SMEs fell from 96.9% in 2007 to just over half of applications (52.2%) in 2010. The number of applications receiving part funding increased from 2.1% to 20.2%. Just over a quarter of applications (26.6%) were unsuccessful in 2010 compared with only 1% in 2007. The stock of lending to indigenous SMEs was down 5.0% year-on-year at just under \pounds 26 billion, although gross new lending in the first quarter of 2013 quarter rose year-on-year to \pounds 77 million⁸⁰. However, the Irish Central Bank has reported that half of SME businesses are in arrears, and that of the \pounds 0bn lent to the sector by the domestic banks, some \pounds 25bn was impaired. This is a consequence of the precipitous collapse of the Irish economy since 2008 and particularly the collapse of domestic consumer demand which has an adverse impact on the turnover of SMEs, in particular.

Access to finance is only one of many factors constraining SME business growth. The most significant barriers still appear to be the general unfavourable economic conditions as well as

⁸⁰ Government of Ireland (2013), Irish Stability Programme- April 2013 Update.
small profit margins and a lack of demand in both domestic and export markets. Forfás has highlighted that many Irish SMEs are relatively new businesses and the importance of supporting these young innovative SMEs cannot be underestimated⁸¹. Promoting entrepreneurship and new businesses is critical, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms. Entrepreneurship is globally recognised as an important driver of economic growth, productivity, innovation and employment. In most high income countries, men are twice as likely to be entrepreneurially active than women. In Ireland in 2011, the ratio of male to female entrepreneurial activity was 2.5:1. In 2010 the rate among women involved in early state entrepreneurial activity in Ireland was 3.9% compared 9.5% for men. This means that men are nearly two and a half times more likely to be an early stage entrepreneur. The difference in rates between men and women in Ireland is higher than is typical across OECD (2 to 1) and EU-15 (1.8 to 1) countries⁸². International comparisons suggest that the rate of entrepreneurial activity amongst young people in Ireland is well below that of some of the international leaders. The Total Early-stage Entrepreneurial Activity (TEA) rate in the United States and Germany for the age group 18-24 is 9.3% and 8.1% respectively. This compares with a rate of 4.8% in Ireland. This is below the EU27 average of 7.2%⁸³

Actions co-funded 2007-13

Under the 2007-13 Regional Operational Programmes, enhancing the competitiveness of micro-enterprises has been supported via two initiatives:

- Micro-enterprise theme administered locally by the County Enterprise Boards; and
- Enterprise Platform programme (New Frontiers) administered by Enterprise Ireland⁸⁴.

The Micro-enterprise theme for the 2007-13 period is delivered through the 35 County and City Enterprise Boards (CEBs) located across Ireland. CEBs were established in 1993 and their statutory function is to stimulate economic and entrepreneurial activity at local level and to develop local indigenous enterprise in the micro-business sector. Following a Government decision the 35 existing CEBs will be replaced by the Local Enterprise Offices (LEO's) later in 2013.

⁸¹ Forfás (2012), The Irish Funding Environment.

⁸² Network Enterprise Europe - Female Entrepreneurship in Ireland.

⁸³ Global Entrepreneurship Monitor, 2011.

⁸⁴Not co-financed under the S&E Regional Operational Programme.

Currently Enterprise Ireland supports the CEBs through centralised co-ordination including annual Exchequer allocations, provided to Enterprise Ireland for that purpose, which fund expenditure co-financed under the Regional OP.

A suite of focused business supports and services are made accessible by CEBs to enterprises, to enable existing and start-up entities to increase their capability, raise productivity, to adapt Information and Communication Technology (ICT) applications and to increase employment. These include:

- Support business start-ups and expansions through financial grants;
- Promote a local enterprise culture and entrepreneurship by means of initiatives such as 'Start-Your-Own-Business' Programmes, provision of Business Information, Schools Enterprise Programmes, Awards schemes, thematic networks based on identified sectoraland enterprise-requirements, to include addressing specific needs under networks such as 'Women-in-Business', 'New Enterprising Women', 'Plato' and cross- Border cooperation as appropriate;
- Encourage and facilitate greater innovation and effective ICT usage and adaptation and export output and sales within small businesses; and
- Build the capacity of owner/managers of micro-enterprises through general business training, tailored mentoring Programmes and business networks.

Since 1st January 2010 new financial instruments, approved for use by the Boards, came into effect. The aim of the new Financial Instruments is to build more sustainable, innovative start ups and to support expansion of small companies. The new financial instruments, which replace all existing grant schemes, consist of a Priming Grant, a Business Expansion/Development Grant and a Feasibility / Innovation Grant.

The County and City Enterprise Boards operate a refundable grant scheme whereby a minimum percentage of total approvals of grants made by each Board each year must be in refundable form. Refundable aid can take two forms – refundable grants or equity (redeemable preference shares).

Entrepreneurship development courses have been operated since 2000 by the Institutes of Technology (IoT) as a mechanism for the development of entrepreneurs and the creation of

start-up businesses across the regions. Operating as the Enterprise Platform Programme (EPP), they were funded up until the middle of 2010 by the Higher Education Authority (HEA), at which point budgetary responsibility transferred to Enterprise Ireland (EI) to administer.

EI carried out a review of the programme 2011, involving a representative team from EI and the IOTs which resulted in a revised programme framework which was approved by the EI Board in July 2011. The new programme was re-branded as New Frontiers and launched in February 2012. As EI further develops its strategic relationship with the IoTs, the Enterprise Platform Programme / New Frontiers is an important part of a developing suite of integrated EI Programmes that underpin the Institutes' role in the support and creation of new innovative and knowledge intensive enterprises.

The programme is designed to capitalise on the expertise available across the IoT sector and the supportive environment of the IoT business incubation centres, and the applied research centres. Additional benefits include as enhancing teaching and learning at undergraduate and postgraduate levels, facilitating interaction between academia and entrepreneurs, and promoting regional development.

Achievements of the schemes 2007-13

Under the BMW Regional Operational Programme €43m has been allocated to microenterprise support actions up to the end of 2012, while €75m has been allocated in the S&E Region. Notwithstanding the challenging economic and business environment that has pertained for the past 5 years in Ireland, the micro-enterprise theme has made steady progress in the delivery of a wide range of essential supports and in the achievement of job gains. A broad range of enterprise supports are delivered under these themes with 1,556 (representing 62% of target) and 2,944 (representing 74% of target) enterprises receiving supports in the BMW and S&E Regions respectively. Significant progress has also been made in respect of women in business activities, with training provided for 21,105 women (representing 62% of target) in the BMW Region and 61,937 (representing 74% of target) in the S&E Region up to end December 2012.

Relevant Evaluation Findings

The Mid-Term Evaluation of the BMW Regional OP (2010) found that the micro-enterprise measure under Priority 1 – Innovation, ICT and the Knowledge Economy, was performing reasonably well and that the Performance Indicators show that outputs and results are being achieved in line with expectations.

The S&E OP Mid-Term evaluation also found that the Entrepreneurship in Micro Enterprises theme was performing well considering the challenging conditions and that the physical targets should be achieved.

Public Consultation

A number of the submissions received highlight the need for investment in actions directed towards supporting the investment in enhancing the competitiveness of SMEs and a summary of these can be found in Annex 1A and 1B (the full submissions are also available at www.bmwassembly.ie and www.seregassembly.ie). SMEs remain a key area for investment and this is highlighted by a number of submissions which set out the challenges that are facing SMEs in the current economic climate. These included issues such as a lack of business confidence, the challenge of access to capital, the need to facilitate and enable greater levels of entrepreneurship to lead to job creation and the contracted labour market. Synergies were expressed with both the RTDI thematic area, whereby calls were made for greater business collaboration and SME innovation supports and the Sustainable Transport and Removing Bottlenecks in Key Network Infrastructures thematic area in particular as an enabler of east-west and north-south access and connectivity. Submissions also outlined the challenges faced by rural SMEs and in particular sought a greater targeting and maximising the potential of local and regional endowments as these related to rural tourism, agri-food initiatives, marine, renewable energies and the creative industries.

4.4 Supporting the Shift Towards a Low-Carbon Economy in All Sectors EU Policy Framework

Resource Efficient Europe

A Resource Efficient Europe (REE) is one of seven EU flagship initiatives underpinning the Europe 2020 strategy to deliver smart, sustainable and inclusive growth. The 2020 strategy

emphasises the interrelatedness of the targets of these three priorities⁸⁵. The REE aims to decouple economic growth from the use of resources. It supports the shift towards a lowcarbon economy, an increased use of renewable energy sources, the development of green technologies and a modernised transport sector, and promotes energy efficiency.⁸⁶ The REE is a part of Europe's main strategy for generating growth and jobs, backed by the European Parliament and the European Council⁸⁷.

The REE aims to create a framework for policies to support the shift towards a resourceefficient and low-carbon economy with an objective to assist Members States to achieve the following:

- Boost economic performance while reducing resource use;
- Identify and create new opportunities for economic growth and greater innovation and boost the EU's competitiveness;
- Ensure security of supply of essential resources;
- Fight against climate change and limit the environmental impacts of resource use⁸⁸.

The Commission's position paper reinforces the need for an increase in share of 'marine and wind energy and biomass energy' in Ireland's energy mix⁸⁹.

The EU Atlantic Action Plan a Maritime Strategy in the Atlantic area published May 2013 identifies the need to accelerate deployment of sustainable offshore renewable energy through a series of actions which includes:⁹⁰

Encouraging assessment and mapping of the potential of the European Atlantic Ocean's energy resource and determining how to mitigate the environmental and navigational impact of the construction, operation and decommissioning of installations as part of regional Smart Specialisation Strategies for offshore renewable energy;

⁸⁵ European Commission (2010), Europe 2020, A strategy for smart, sustainable and inclusive growth, March, 2010.

⁸⁶ European Commission (2011), A resource-efficient Europe – Flagship initiative under the Europe 2020 Strategy, January, 2011.

⁸⁷ Ibid.

⁸⁸ Ibid.

⁸⁹ Position of the Commission Services on the development of Partnership Agreement and programmes in IRELAND for the period 2014-2020, November 2012, p. 12. ⁹⁰ European Commission (2013), Action Plan for a Maritime Strategy in the Atlantic area, May, 2013.

- Contributing to a European electricity transmission system that allows the balancing of loads between national systems and provides better links between offshore and onshore energies;
- Promoting research, development and demonstration of technologies for the construction and maintenance of renewable energy installations for offshore wind, wave, tidal and biomass energies including integration with desalination plants and multipurpose offshore platforms.

The strategic energy technology plan (**SET plan**) presented by the Commission (COM 2007/723) aims to help achieve European objectives and face up to the challenges of the energy sector by increasing research in the short term to reduce costs and improve performance of existing technologies, and by encouraging the commercial implementation of these technologies. Activities at this level in particular involve second-generation biofuels, capture, transport and storage of carbon, integration of renewable energy sources into the electricity network and energy efficiency in construction, transport and industry. In the longer term, it supports the development of a new generation of low carbon technologies. The activities to be carried out focus, among other things, on the competitiveness of new technologies relating to renewable energies, energy storage, sustainability of fission energy, fusion energy, and the development of Trans-European Energy networks.

A steering group, created by the Commission in 2008 and made up of representatives of the Member States, is tasked with improving coherence by developing joint actions, making resources available and evaluating progress. The SET plan also improves the effectiveness of the implementation of the jointly decided actions, so as to take full advantage of the possibilities offered by the European research area and the internal market.

The EU's approach focuses on the European Industrial Initiatives (EII). Industry-led, the EIIs aim to strengthen industrial participation in energy research and demonstration, boost innovation and accelerate deployment of low-carbon energy technologies. EIIs target sectors in which working at EU level adds most value, and technologies for which the barriers, the scale of the investment and the risk involved can be better tackled collectively.

The Commission has launched new European industrial initiatives, in the following sectors:

- The European Industrial Bioenergy Initiative
- The European CO2 Capture, Transport and Storage Initiative
- The European Electricity Grid Initiative
- The Fuel Cells and Hydrogen (FCH) Joint Technology Initiative
- The Sustainable Nuclear Initiative
- Energy Efficiency The Smart Cities Initiative
- The Solar Europe Initiative
- The European Wind Initiative

The SET plan makes provision for intensified international cooperation, in order to promote the development, marketing, deployment and accessibility of low carbon technologies worldwide.

Irish Policy Framework

The Programme for Government seeks to strengthen the renewable manufacturing base in Ireland to assist in attracting international and domestic investment and to position Ireland as a leading player in the global carbon market, and as a centre of excellence in the management of carbon. Under the Programme, the Irish Government further commits to facilitating the development of energy co-operatives to make it easier for small scale renewable energy providers to contribute to Ireland's renewables target⁹¹.

Energy Efficiency in Ireland

Member States are required to adopt a National Renewable Energy Action Plan under Directive 2009/28/EC. The plan set the National targets for the share of energy from renewable sources consumed in transport, electricity and heating and cooling in 2020, taking into account the effects of other policy measures relating to energy efficiency on final consumption of energy.⁹² Ireland's 2020 target under the renewable energy Directive is 16%. The shift to higher resource efficiency and to a low-carbon economy has the high potential to enhance economic growth and employment creation in Ireland. The Commission's position

⁹¹ Programme for Government, 2011.

⁹²National Renewable Energy Action Plan – IRELAND, 2010.

paper on Ireland identifies the need to increase the share of renewable energy sources, emphasising marine and wind and biomass energy.⁹³

Ireland's Strategy for Renewable Energy 2012-2020 prioritises the development of renewable energy stating it is *"central to overall energy policy in Ireland*,"⁹⁴. In support of its energy policy the Government articulates 5 strategic goals namely:

- Progressively more renewable electricity from onshore and offshore wind power for the domestic and export markets.
- A sustainable bioenergy sector supporting renewable heat, transport and power generation.
- Green growth through research and development of renewable technologies including the preparation for market of ocean technologies.
- Increase sustainable energy use in the Transport sector through biofuels and electrification.
- An intelligent, robust and cost efficient energy networks system⁹⁵.

Planned investment in the National Grid as envisaged under the GRID25 Investment programme⁹⁶ will actively enable the attainment of a number of the Ireland's renewable energy strategic goals.

Within Northern Europe, Ireland enjoys a location with one of the highest wind energy potentials. While the exploitation of this potential needs to be tempered with environmental and landscape protection considerations, the development of the wind energy industry is widely acknowledged as an opportunity for job creation. In the EU, jobs in this green-economy sector grew by approximately 30% between the years 2007 and 2010. Investment in wind energy technology R&D is crucial to strengthen the sector⁹⁷.

⁹³ Position of the Commission Services on the development of Partnership Agreement and programmes in IRELAND for the period 2012-2020, (2012).

⁹⁴ Strategy for Renewable Energy 2012-2020, May, 2012, p. 1.

⁹⁵ Ibid p. 9.

⁹⁶ EirGrid, 2013: "Evaluation of the wider economic benefits of GRID25 Investment Programme", April, 2013.

⁹⁷ Espon Atlas, Territorial Dimension of the Europe 2020 Strategy, June 2013.

The National Energy Efficiency Action Plan (NEEAP) to 2020⁹⁸ sets out 97 actions to achieve Ireland's 2020 energy efficiency target. This is equivalent to a 20% reduction (31,925GWh) in energy demand across the whole economy. A specific 33% energy reduction target has been set for the public sector, equivalent to 3,240GWh. These are ambitious targets and will require considerable investment in order to be achieved.

The Department of Communications, Energy and Natural Resources and the Sustainable Energy Authority of Ireland (SEAI) are encouraging further activity in the non-residential sector (a separate work-stream is assessing the suitability of the residential sector for a market-based financing programme). In pursuit of this objective, the Department is working towards the publication of a National Energy Services Framework⁹⁹, which is anticipated to play a central role in the delivery of the energy and climate targets. The Department proposes the Framework as a means to assist in stimulating retrofit activity and investment into the energy efficiency sector.

In 2013 the Department of Communications, Energy and Natural Resources announced the establishment of a €70 million Energy Efficiency Fund. The fund is set to provide finance for public and commercial projects:

- Energy Performance Contracts, where funding is drawn down by an energy services company (ESCO) – a commercial business that designs and implements energy savings for clients, and
- Direct lending to client companies.

Ireland has been making good progress in terms of meeting commitments on improving the energy performance and reducing CO^2 emissions from the built environment and the building regulations are an important tool in meeting these standards.

Ireland has 1,994,845 domestic dwellings according to the Central Statistics Organisation¹⁰⁰, with 1,658,243 permanently occupied¹⁰¹. The current median Building Energy Rating (Energy Performance Certificate – EPC) for domestic dwellings is a D1. The distribution is as follows:

⁹⁸ National Energy Efficiency Action Plan 2, March 2013.

⁹⁹ National Energy Services Framework. Available at: http://goo.gl/PFZXF

¹⁰⁰ http://www.cso.ie/en/census/census2011reports/census2011profile4theroofoverourheads-housinginireland/

 $[\]label{eq:linear} $101 http://www.cso.ie/quicktables/GetQuickTables.aspx?FileName=CNA33.asp&TableName=Number+of+private+households+and+persons+in+private+households+in+each+Province+,+County+and+City&StatisticalProduct=DB_CN $101 http://www.cso.ie/quicktables/GetQuickTables.aspx?FileName=CNA33.asp&TableName=Number+of+private+households+and+persons+in+private+households+in+each+Province+,+County+and+City&StatisticalProduct=DB_CN $101 http://www.cso.ie/quicktables/GetQuickTables.aspx?FileName=CNA33.asp&TableName=Number+of+private+households+in+each+Province+,+County+and+City&StatisticalProduct=DB_CN $101 http://www.cso.ie/quicktables/GetQuickTables.aspx?FileName=CNA33.asp&TableName=Number+of+private+households+in+each+Province+,+County+and+City&StatisticalProduct=DB_CN $101 http://www.cso.ie/quicktables/GetQuickTables.aspx?FileName=CNA33.asp&TableName=Number+of+private+households+in+each+Province+,+County+and+City&StatisticalProduct=DB_CN $101 http://www.cso.ie/quicktables/GetQuickTables.aspx?FileName=CNA33.asp&TableName=Number+of+private+households+in+each+Province+,+County+and+City&StatisticalProduct=DB_CN $101 http://www.cso.ie/quicktables/GetQuickTables.aspx?FileName=CNA33.asp&TableName=Number+of+private+households+in+each+Province+,+County+and+City&StatisticalProduct=DB_CN $101 http://www.cso.ie/quicktables/GetQuickTables.aspx?FileName=CNA33.asp&TableName=Number+of+private+households+in+each+Province+,+County+and+City&StatisticalProduct=DB_CN $101 http://www.cso.ie/quicktables/GetQuickTables$



Source SEAI

However, it should be recognised that there is a considerable stock of social housing in public ownership, generally in disadvantaged areas, which do not meet the new building requirements in terms of energy efficiency and performance. Currently the national social housing stock is comprised of some 130,000 rental properties, most of which are located in the country's cities and towns. It is estimated that there are some 25,000 older properties with low levels of energy performance, due mainly through heat loss through the fabric of the building. A targeted measure to address these issues will be necessary with the objective of securing positive outcomes in terms of improved energy efficiency, carbon savings, and improved comfort levels.

In addition there are large numbers of owner occupied non-Local Authority homes, which were constructed before 2006, where the energy efficiency and performance is very poor. A further targeted measure to address energy efficiency improvements in these homes, specifically targeting the elderly and vulnerable, making the homes more comfortable, healthier and more cost effective to run will also be required.

The shift to higher resource efficiency and to a low-carbon economy also has the high potential to enhance economic growth and employment creation in Ireland. As a part of its commitment under the Action Plan for Jobs 2012^{102} , the Government published a policy statement on growth and employment in the Green Economy – *Delivering Our Green Potential*¹⁰³. The Expert Group on Future Skills (EGFS) estimates that up to 10,000 extra

¹⁰² Action Plan for Jobs 2012.

¹⁰³ Delivering Our Green Potential, 2012.

jobs could be created in six key sub-sections of the Green Economy by 2015¹⁰⁴, one of which is Efficient Energy Use and Management.

Harnessing Our Ocean Wealth, An Integrated Marine Plan for Ireland ¹⁰⁵ sets out a roadmap for the Government's vision and high-level goals and integrated actions. The implementation of the Off-shore Renewable Energy Development Plan¹⁰⁶ is recognised as a key action in the Plan. Marine Renewable Energy is one of the fourteen priority areas identified in the Research Prioritisation Steering Group Report (2011)¹⁰⁷ for future State investment in research and innovation.

As a part of its commitment under the Action Plan for Jobs 2012^{108} , the Government published a policy statement on growth and employment in the Green Economy – *Delivering Our Green Potential*¹⁰⁹. The Expert Group on Future Skills (EGFS) estimates that up to 10,000 extra jobs could be created in six key sub-sections of the Green Economy by 2015^{110} .

Trends

The Environmental Protection Agency (EPA) publishes annual inventories (See Figure 27) and projections for greenhouse gas emissions¹¹¹. Ireland's current major commitment in relation to greenhouse gas (GHG) emissions relates to Europe 2020 which requires the reduction of greenhouse gas emissions in sectors not covered by the Emissions Trading System (ETS) by 20% compared to 2005 levels. The main challenge for Ireland is the inclusion of the three sectors, agriculture (30%), energy (22%) and transport (19%) which fall outside the ETS and together account for over 70% (41.7Mt CO2e) of Irish GHGs. Ireland's large proportion of its total emissions from agriculture is due to the fact that there is less industry and energy related emission, and hence agriculture emissions are comparatively more important. Emissions from the transport sector tend to be large as a result of increasing population and increasing demand for private transportation due to increasingly dispersed settlement patterns. Private cars are the most frequently used method of travel, with 73% of

¹⁰⁴ Future Skills Needs of Enterprise within the Green Economy in Ireland, November, 2010.

¹⁰⁵ Harnessing Our Ocean Wealth, An Integrated Marine Plan for Ireland, July, 2012.

¹⁰⁶ Ibid.

¹⁰⁷ Department of the Jobs, Enterprise and Innovation (2011). Report of the Research. Prioritisation Steering Group.

¹⁰⁸ Action Plan for Jobs 2012.

¹⁰⁹ Delivering Our Green Potential, 2012.

¹¹⁰ Future Skills Needs of Enterprise within the Green Economy in Ireland, November, 2010.

¹¹¹ http://coe.epa.ie/ghg/

all journeys made by private car. Just 4% of all journeys were made by bus and 1% by rail¹¹². As noted in Ireland's 2013 National Reform Programme Update, mitigating greenhouse gas emissions from the transport and agriculture sectors presents a particular challenge for Ireland.



Figure 27: Ireland's Greenhouse Gas Inventory 2000-2011 ('000 tonnes Co2 Equivalent)

Source: EPA, Ireland's Greenhouse Emissions in 2011

As illustrated in Figure 28, GHG emissions dropped abruptly in 2009 to 61.8 million tonnes of carbon dioxide equivalent, just below the limit set under the Kyoto Protocol. This can be widely attributed to the fall in economic output in response to the recession. However, Ireland still has one of the highest levels of GHG emissions in the EU, second only to Luxembourg (See Table 9). At 13.8 tonnes of carbon dioxide per capita, Ireland is 50% higher than the EU average¹¹³. However, while Ireland's per capita aggregate GHG emissions are the second highest in the EU, its CO2 emissions per capita are the 10th highest. This reflects the fact that non-CO2 GHGs, mainly methane and nitrous oxide from agriculture, make up a significant proportion of total emissions in Ireland¹¹⁴.

¹¹² CSO (2011). National Travel Survey 2009.

¹¹³CSO (2012), Environmental Indicators Ireland.

¹¹⁴ EPA (2012), Ireland's Environment – An Assessment.



Figure 28: Ireland's Level of Greenhouse Gas Emissions 2000-2011 (million tonnes CO2 Equivalent)

Source: EPA, Ireland's Greenhouse Emissions in 2011

Table 9: EU27 & Ireland Greenhouse Gas Emissions in CO2 Equivalent (million tonnes)

	1990	2010	% Change 1990-2010
Ireland	55.25	61.5	11.3%
EU27	5574.4	4705.2	-15.6%

Source: Eurostat, Greenhouse gas emissions, base year 1990¹¹⁵

A key component of Ireland's drive to reduce GHGs is the decarbonisation of the energy system. Directive 2009/28/EC on the promotion of the use of energy from renewable sources establishes the basis for the achievement of this renewable energy target through the contribution of each Member State. Ireland's overall target is to increase the source of final energy consumption from renewables to 16% by 2020. In response to the requirements of the Directive, Ireland submitted its National Renewable Energy Action Plan to the European Commission in 2010, setting out how targets will be achieved.

 $^{^{115}\} http://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-gases-gases-gases-gases-gases-gases-gases-gases-gases-gases-ga$

From 2000 to 2008 Ireland's primary energy requirement increased steadily in line with strong economic growth increasing from 9.5 million tonnes of oil equivalent (Mtoe) in 1990 to 16.5 Mtoe in 2008. Final energy consumption (as a proportion of primary energy requirement) followed the same trend. Ireland's energy requirement fell to 14 Mtoe in 2011 as a consequence of the economic recession (similar to 2000 levels). Final energy demand also reduced by 6.7% in 2011 to 11 Mtoe¹¹⁶).



Figure 29: Ireland's Final Energy Consumption by Economic Sector 2011

Source: SEAI, Energy Statistics Databank, Fuel Consumption (ktoe) by Year, Sector and Fuel Type¹¹⁷

As shown in Figure 29, transport consumes over one third of all energy in Ireland. Transport primary energy use grew by 120% over the period 1990 - 2011 to 4,515 thousand tonnes of oil equivalent (Ktoe) (3.8% per annum). The highest growth was experienced in the 1995 – 2000 period when the average annual growth was 11.6%. Transport primary energy use fell for the first time during 2008, by 4.7%, again as a result of the economic downturn. The total reduction in transport energy demand since the peak in 2007 is 23% with consumption levels now back at those of a decade ago (2001/2002 levels).

¹¹⁶ SEAI (2012), Energy in Ireland 1990- 2011: 2012 Report.

¹¹⁷ http://www.cso.ie/px/sei/database/sei/sei.asp

	Primary Energy Requirement	Final Energy Consumption	Final Energy Consumption as % of Primary Energy
			requirement
2000	13,780	10,814	78.5%
2001	14,579	11,262	77.2%
2002	14,756	11,308	76.6%
2003	14,629	11,630	79.5%
2004	15,150	12,013	79.3%
2005	15,794	12,686	80.3%
2006	15,948	13,051	81.8%
2007	16,202	13,290	82.0%
2008	16,454	13,325	81.0%
2009	14,815	12,154	82.0%
2010	14,763	12,044	81.6%

Table 10: Ireland's Primary Energy Requirement & Final Energy Consumption 2000-2010 (000s ktoe)

Source: SEAI, Energy Statistics Databank

As shown in Figure 30, oil accounted for just under two thirds of Ireland's total final energy consumption in 2010, compared to the EU27 average of 40%. Ireland had an imported energy dependency ratio of 88% in 2011 down from a peak of 90% in 2006, the fourth highest in the EU and with a total energy import bill of approximately 6 billion. There is a 100% import dependence on oil for the transport sector¹¹⁸. Oil consumption fell by 7.4% in 2011 to 6.8 Mtoe and represented 49% of Ireland's overall energy supply, 59% of final energy demand and 1.2% of fuel inputs for electricity generation. Oil demand in buildings fell by 15% in 2011. In 2011, natural gas accounted for 56% (2,500 ktoe) of the fuel inputs to electricity generation. Natural gas consumption fell by 12% in 2011 to 4.1 Mtoe, comprising a 17% reduction in use for electricity generation and a 3.6% reduction in final demand¹¹⁹.

¹¹⁸ SEAI (2011), Energy Security in Ireland: A Statistical Overview 2011 Report.

¹¹⁹ SEAI (2012), Energy in Ireland 1990- 2011: 2012 Report.



Figure 30: Ireland's Final Energy Consumption by Fuel Type & Percentage Share 2010

Source: SEAI, Energy Statistics Databank¹²⁰

Renewable energy accounted for just 2% of Ireland's total final energy consumption in 2010 compared to the EU27 average of 7%). Nonetheless, Ireland has seen a rapid increase in the use of renewable sources for generating electricity with the 2011 rate now just below the EU27 average (see Figure 31). Renewable energy grew by 24% in 2011 and represented 6.4% of Ireland's gross final energy consumption. On average, in the period 2005–2011, the Sustainable Energy Authority of Ireland (SEAI) figures show that overall renewable energy usage has increased by 14.3% per annum. Electricity generated from renewable energy reached 18% of gross electricity consumption in 2011. Ireland's target for 2020 is 40%. In 2011 displacement of fossil fuel for electricity generation by renewable energy resulted in an avoidance of almost €300 million in natural gas imports¹²¹.

¹²⁰ http://www.cso.ie/px/sei/database/sei/sei.asp

¹²¹ Government of Ireland (2013), Ireland's National Reform Programme - 2013 Update.

Figure 31: Ireland's Percentage Share of Electricity Generated from Renewable Sources 2001-2011



Source: Eurostat, Electricity generated from renewable sources 2013

The main source of renewable energy used in the consumption of electricity is from onshore wind. Wind contribution to electricity generation increased by 56% in 2011 largely due to a 13% growth in installed capacity while the contribution from hydro increased by 18%. Other renewables in the form of landfill gas, biogas and biomass make up the remainder of the contribution at 1.7% of fuel inputs and their use in electricity generation increased by 5.6% in 2011 (see Table 11).

Renewable Energy Type	ktoe	%
Hydro	61	8%
Wind	377	51%
Biomass	198	27%
Landfill gas	44	6%
Biogas	14	2%
Liquid Bio-fuel	24	3%
Solar	8	1%
Geothermal	18	2%

Table 11: Ireland's Primary Renewable Energy Production (ktoe) by Fuel Type 2011

Sum of all renewable energies 742 100%
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Source: SEAI, 1990-2011 Energy Balances

The National Energy Efficiency Action Plan (NEEAP)¹²², which was launched in February 2013, is committed to deliver 20% of energy savings by 2020, with a 33% target set for the public sector. Considerable challenges remain to achieve this owing to the state of the economy and the ability of the *Better Energy* national retrofit programme to attract consumers and businesses to invest in energy saving measures. The NEEAP identifies a current shortfall of 8,000GWh to reach the 2020 target.

The energy efficiency of dwellings in rural areas is not likely to be significantly different to that in urban areas when age of construction is used as a proxy. In 2011 43% of houses in urban areas were built prior to 1980 with 46% of the houses in rural areas built prior to the same year. The corresponding figures for houses built before 1990 were 53% and 57%.

Ireland had the third lowest energy intensity in the EU in 2010, at 113 kgs of oil equivalent (kgoe) per \textcircled 1,000 of GDP. Figure 32 shows the total final energy consumption by the highest consuming sectors between 2007 and 2011. All three sectors have reduced energy consumption overall, with the exception of residential which increased in 2010 but dropped the following year to below the 2007 rate.



Figure 32: Ireland's Total Final Energy Consumption by Consuming Sector 2007-2011 (Ktoe, 000s)

Source: SEAI, 1990-2011 Energy Balances

¹²² DCENR (2012), Ireland's second National Energy Efficiency Action Plan to 2020.

The reduction in energy usage in the transport sector was mainly due to reduced economic activity and energy demand in recent years. The reduction in energy consumption in the business sector (industry & commercial) can also be largely attributed to the changing economic outlook since 2008 and increasing fuel costs¹²³. There has been some evidence of behavioural change particularly through the introduction of the Carbon Tax, which is designed to send a price signal to incentivise a change in behaviour in both companies and households as regards reducing their carbon emissions, and the higher take up of more fuel efficient vehicles. The Irish vision for the residential sector is that all new Irish housing will be nearly zero-energy and the efficiency standards of older homes will improve through retrofitting activity. However, as noted above there are considerable challenges in achieving this vision given the current economic environment and as yet there has been little significant improvement in the energy efficiency of the national housing stock.

Actions co-funded 2007-13

Under the 2007-13 Regional Operational Programmes measures to support a shift towards a low carbon economy were delivered via a number of schemes and initiatives administered by the Sustainable Energy Authority of Ireland. These include:

- Energy for Business Programme;
- Strategic Development Zones;
- Renewable Energy Research, Demonstration & Development Programme (RE RD&D);
- CHP & Bioheat Programme¹²⁴; and
- Ocean Energy¹²⁵.

The objective of the Energy for Business Programme was to deliver energy cost- and carbonreduction services to all sectors of business through networking, training and advisory programmes. This programme also includes Better Energy workplaces: a scheme that delivers a major increase in the pace, scale and depth of sustainable energy investments in upgrading existing buildings and facilities. This includes sustainable energy upgrading projects in the public, commercial, industrial and community sectors.

¹²³ SEAI (2012), Energy in Ireland 1990-2011: 2012 Report.

¹²⁴ The sub-theme was delivered under the S&E ROP as the CHP & Bioheat (ReHeat) Programme.

¹²⁵ An initiative under the Renewable Energy, R,D&D Programme.

The Strategic Development Zones Programme rewards collaborative actions at Local Authority level by helping to fund targeted activities within designated sustainable energy communities in order to trigger the accelerated delivery of the Government Energy White Paper targets. In 2011 SEAI announced Tralee, Dublin City and Tallaght as the three new exemplar Sustainable Energy Communities (SEC), all of whom will commit to specific energy saving projects for the next five years. The selection of the three SECs follows a competitive selection process and builds on the success of Ireland's pilot SEC, Dundalk 2020.

The main focus of the RE RD&D programme has been on stimulating the deployment of renewable energies. It adopts an aggressive technology-led approach to renewable resolving technology and market barriers such as energy storage and demand management in the electricity sector. It involves the deployment of renewable and alternative energy technologies in residential, commercial, public, and community buildings through a combination of grant and regulatory interventions.

The CHP & ReHeat (Bioheat) Programmes are aimed at stimulating the installation of new renewable energy plants supplying space, water and process heating in the commercial, industrial, services, public sectors as well as ESCO (Energy Supply Company) installations by means of grant assistance. The Programme is focussed on biomass boilers (fuelled by wood chips and wood pellets), solar thermal collectors and heat pumps. The CHP Deployment Programme provides grant support to assist the deployment of small-scale (<1MWe) fossil fired CHP and biomass (anaerobic digestion (AD) and wood residue) CHP systems. The Programme includes biomass (anaerobic digestion (AD) and wood residue) CHP, and micro CHP.

The Ocean Energy Development Unit (OEDU) has been established to implement the Government's policy decision to accelerate the development of Ocean Energy (Wave and Tidal) in Ireland and it was established to advance the deployment of ocean energy technologies in Ireland by increasing the capacity for research and development both with academic institutions and commercial entities developing devices in Ireland.

Achievements of the schemes 2007-13

Over €17m is now allocated to these actions in the BMW Region up to the end of 2012, while for the S&E Region the figure is €46m. This falls somewhat short of the indicative targets originally set for this category of expenditure in the Regional OPs. There has also been the introduction of several new initiatives under the above schemes over the lifetime of the programmes. The Renewable Energy Development and Deployment and Ocean Energy subtheme delivered 88 R&D projects nationally to accelerate the deployment of renewable energy (representing 88% of target). To end December 2012 a total of 23 projects were delivered by beneficiaries of ocean energy prototype funds which exceed the target set at the outset of the programmes.

Relevant Evaluation Findings

The Mid-Term Evaluation of the BMW Regional OP found that expenditure was much less than forecast on these themes under Priority 2 – Environment and Risk Prevention. It was anticipated that activity would pick up in the latter period of the OP.

For the S&E OP the Mid-Term Evaluation found that the Renewable Energy theme had not registered strong progress and has a mixed record of achievement across its constituent sub themes due to a changing environment and the flux in the overall portfolio of energy themes. It was anticipated there would however be some level of progress for this theme for the remainder of the OP. Significant dependencies include emerging budgetary constraints in the policy area and the potential re-focussing of interventions for energy generally. However, it was recommended in the evaluation report that resources should be prioritised in Priority 1 for the remainder of the Programme and consequently the 35% of the ERDF allocated to Renewable Energy was transferred to Priority 1.

Public Consultation

A number of the submissions received highlight the need for investment in actions directed towards supporting the shift towards a low-carbon economy and a summary of these can be found in Annex 1A and 1B (the full submissions are also available at <u>www.bmwassembly.ie</u> and <u>www.seregassembly.ie</u>). Submissions favoured supports for a broad range of measures namely district heating systems; large scale industrial biomass production; anaerobic

digesters; sustainable energy communities and social housing retrofitting. Schemes to assist SMEs to reduce their carbon footprint through training are recommended. The benefits to be derived from improvements in the national grid and inter-connectors in terms of uptake of energy from renewables and export potential were noted. Revolving fund facilities were highlighted as mechanisms for funding renewable energy and energy efficiency schemes. The potential in marine renewable energy schemes is noted and as is the inherent synergies to be gained from the development of an urban Green Digital Charter. The ring-fencing of carbon taxes for associated actions was recommended. A recommendation was made to incorporate energy/carbon proofing for all actions to be funded.

4.5 Promoting Climate Change Adaptation, Risk Management and Prevention

EU Policy Framework

The Europe 2020 Strategy set key targets for climate change and energy sustainability for the EU over the period to 2020:

- Green House Gas (GHG) emissions 20% (or even 30%, if the conditions are right) lower than 1990;
- 20% of energy from renewable; and
- 20% increase in energy efficiency.

The 20% GHG reduction target for 2020 compared to 1990 levels is implemented through the EU and the Effort Sharing Decision which defines reduction targets for the non-ETS sectors, and its achievement is supported through EU and national policies to reduce emissions. In 2011 GHG emissions as covered by the climate and energy package were estimated at 16% below 1990 levels across the EU 27. The EU is making progress towards meeting the 2020 target of 20% renewable energy in gross final energy consumption. In 2010, the renewables share in the EU was 12.7% compared to 8.5% in 2005¹²⁶.

¹²⁶ European Commission (2013), Green Paper - A 2030 Framework for Climate and Energy Policy, March, 2013.

The EU flagship initiative on a Resource Efficient Europe (REE) has a key aim to increase certainty for investment and innovation. The achievement of this goal is envisaged through agreement on the long-term vision and the alignment of resource efficiency policies¹²⁷.

There are a number of challenges for the attainment of targets under the 2030 framework for climate and energy policies¹²⁸, not least the fact that the 2020 target of saving 20% of the EU's primary energy consumption is not legally binding for Member States. However following the adoption of the Energy Efficiency Directive (EED)¹²⁹ in 2012 there is now a comprehensive legislative framework at EU level. To drive progress on targets this needs to be fully implemented by Member States. The Commission's preliminary analysis suggests that with current policies the 2020 target will not be met. The implementation of measures in the Transport White Paper¹³⁰, further ecodesign measures, smart metering roll-out and smart grid deployment with the resulting demand response, is expected to contribute to closing the gap¹³¹.

The operating environment has changed significantly since the Framework was initially conceived in 2008/9 and the on-going economic crisis is expected to have an effect on the mobilisation of investment funds for both the public and private sectors¹³².

In June 2013 the proposal for a successor programme to the 6thEnvironment Action Programme (EAP) which expired in July 2012 was agreed¹³³.

Among the main benefits of the 7th EAP are:

- The limitation of landfilling to non-recyclable and non-recoverable waste by 2020, an important step towards a more fully-fledged resource management approach to waste;
- On climate and energy policy, recognition of the need for a legally binding framework beyond 2020 to enable Member States and industry to make the necessary investments in

 ¹²⁷ European Commission (2011), A resource-efficient Europe – Flagship initiative under the Europe 2020 Strategy, January, 2011.

¹²⁸ European Commission (2013), Green Paper - A 2030 Framework for Climate and Energy Policy, March, 2013.

¹²⁹ European Commission (2013), Energy Efficiency Directive (2012/27/EU).

¹³⁰ European Commission (2011), Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system.

 ¹³¹ European Commission (2013), Green Paper - A 2030 Framework for Climate and Energy Policy, March, 2013
 ¹³² Ibid.

¹³³ http://eu2013.ie/news/news-items/201306197theappr/ . The 7th EAP remains to be formally voted through by the Council and Parliament.

emissions reduction, energy efficiency and renewable energy, taking into account the indicative milestones set out in the Low Carbon Economy Roadmap to 2050;

- Agreement on the establishment of a more coherent policy and legislative framework for sustainable consumption and production; and
- The integration of environmental considerations including water protection and biodiversity conservation into land use planning decisions, with a view to making progress towards the objective of no net land take by 2050.

The objective to achieve "no net land take by 2050"¹³⁴ will act to mitigate the negative effects of soil sealing. "More than 1,000 km² are subject to *land take* every year for housing, industry, roads or recreational purposes. About half of this surface is actually *sealed*"¹³⁵ with consequences for soil degradation. The socio-economic impacts of climate change on European regions including the risk of flooding are illustrated in Climate Change Challenge for European regions¹³⁶. "The climate change index combines information on vulnerability to drought, population affected by river floods and exposed to coastal erosion, exposure to climate change of the agriculture, fisheries and tourism sector"¹³⁷. This index shows that Ireland's regions are currently at the lower end of the vulnerability scale.

Irish Policy Framework

National Climate Change Strategy

Under the Kyoto Protocol Ireland agreed to a target of limiting its greenhouse gas emissions to 13% above 1990 levels by the first commitment period 2008-2012 as part of its contribution to the overall EU target. Ireland ratified the Kyoto Protocol on the 31st May 2002, along with the EU and all other Member States, and is internationally legally bound to meet the challenging greenhouse gas (GHG) emissions reduction target. In March 2007 the Government launched Ireland's National Climate Change Strategy 2007-2012¹³⁸ which sets out the strategy to meet Ireland's Kyoto commitments by providing a framework for action to reduce Ireland's greenhouse gas emissions.

¹³⁴ European Commission (2011), Roadmap to a Resource Efficient Europe, September, 2011, p.15.

¹³⁵ Ibid. p.15.

 ¹³⁶ European Commission (2009), The Climate Change Challenge for European regions, March, 2009.
 ¹³⁷ Ibid, p. 23.

¹³⁸ Ireland's National Climate Change Strategy 2007-2012. Available at: http://goo.gl/Jc8Wd

Some of the key targets outlined in the strategy include:

- 15% of electricity to be generated from renewable sources from 2010 and 33% by 2020;
- Biomass to contribute up to 30% of energy inputs from at peat stations by 2015; and
- 33% energy savings across the public sector by 2020.

By 2013, Ireland has out-performed its 2007 National Climate Change Strategy forecast and is on-track to meet its commitment under the Kyoto Protocol. The achievement can primarily be attributed to the current economic recession and economic forecasts. However, to meet future targets, Ireland cannot rely on recession and needs to develop as a low carbon economy¹³⁹.

There continues to be a significant risk that Ireland will not meet its 2020 EU targets even under the most ambitious emission reduction scenario. Ireland has a projected cumulative distance to target of 7 - 24 Mtonnes for the period 2013-2020 with a breaching of its annual limits in 2015-2016 indicated. Strong projected growth in emissions from transport and agriculture are the key contributors to this trend.

Ireland does not have a definite policy direction on reducing greenhouse gas emissions post-2020. However, the recently published draft heads of the Climate Action and Low Carbon Development Bill 2013¹⁴⁰ aims to provide national policy to help Ireland transition to a low carbon, climate resilient and environmentally sustainable economy over the period to 2050.

The Government's vision is for Ireland to be carbon neutral by 2050. To achieve this goal five building blocks to the transition to carbon neutrality are identified—'clean electricity, energy efficiency, carbon neutral food and agriculture, sustainable transport and effective resource management'¹⁴¹. The Government acknowledges that significant investment is required over time to create the pre-conditions to achieve this ambitious target.

¹³⁹ Ireland's Greenhouse Gas Emission Projections, EPA, April, 2013. Available at: http://goo.gl/koERC

¹⁴⁰ Draft Heads of Bill available at: http://goo.gl/rXR7Z

¹⁴¹ National Economic and Social Council, (2012): Ireland and the Climate Change Challenge: Connecting 'How Much' with 'How To', December, 2012, p.85.

Trends

The impacts of climate change are already occurring in Ireland and are projected to intensify over the coming decades and must be factored into future planning and investment choices. The effects of enhanced GHG levels are most evident in the long-term global temperature record. Most recent studies show that the average ambient temperature in Ireland increased by 0.8°C over the period 1890–2007. There is also evidence of a trend towards more intense and more frequent rainfall. These trends are reflected in ecosystem changes, with changes in, or lengthening of, the growing season and increasing presence of warmer latitude flora and fauna in Ireland and its surrounding waters. Projected impacts of climate change in Ireland include:

- increasing average temperatures;
- more extreme weather conditions including rainfall events;
- an increased likelihood of river and coastal flooding;
- water shortages, particularly in the east of the country;
- changes in the types and distribution of species; and
- the possible extinction of vulnerable species.

A range of analyses of climate change impacts for Ireland have been developed by the EPA. These are based on climate modelling centred on Ireland and pan-European analyses. These analyses have been carried out in co-operation with other state agencies and funding bodies including Met Éireann, Office of Public Works and SEAI. The output from this work has included an analysis of potential impacts for Ireland, as summarised in the EPA's State of Knowledge Report¹⁴² which concluded:

- Mean annual surface air temperature has increased by approximately 0.8°C over the last 110 years. The number of annual frost days has decreased whilst the number of warm days has increased (see Figure 33);
- Average annual national rainfall has increased by approximately 60 mm or 5% in the period 1981 to 2010, compared to the 30-year period 1961 to 1990. However, clear changes in rainfall spatial patterns across the country cannot be determined with a high level of confidence (see Figure 34);

¹⁴² EPA (2012), The Status of Ireland's Climate.

- Current carbon dioxide (CO2) concentrations of more than 390 ppm as measured at Mace Head, Co. Galway are in line with observations from around the globe and are higher than at any time over the last 400 thousand years;
- Concentrations of other greenhouse gases including methane (CH4) and nitrous oxide (N2O) are approximately 140% and 20% respectively above pre-industrial values and concentrations continue to increase;
- No long-term trend in wind speed can be determined with confidence;
- Mean annual sea surface temperature, as measured at Malin Head, Co. Donegal, is now more than 1.0°C higher than the long-term average calculated for the period 1961–1990;
- Global surface ocean acidity has increased by over 30% since the Industrial Revolution.
 Observations in sub-surface and deep offshore waters around Ireland between 1991 and 2010 show significant increases in acidity;
- Historically, sea level has not been measured with the necessary accuracy to determine sea-level changes around Ireland. This represents a key gap in the Irish observation system. However, measurements from Newlyn, in southwest England, show a sea-level rise of 1.7 cm per decade since 1916. These measurements are considered to be representative of the situation in the south of Ireland;
- Since 2000, the occurrence of some potentially harmful ocean phytoplankton species during the winter months has increased;
- One of the major land-use changes across Ireland since 1990 has been the conversion of grassland and peatland to forest. This expansion of forest area has seen the amount of carbon stored or sequestered in forest increase by 40%;
- It is estimated that Ireland's soil carbon stock has decreased by 27 million tonnes between 1990 and 2000. This is mainly due to changes in the management of peatland, including drainage and peat extraction and to a lesser extent to changes in patterns of agricultural land use and urban development;
- Observations of the timing of bud-burst for a number of tree species at the phenological gardens indicate that the beginning of the growing season (BGS) is now occurring more than a week earlier than in the 1970s, leading to an extension of the growing season. Such changes have been linked to a rise in average spring air temperature; and
- Analysis of long-term river flows from over 40 measurement sites around the country shows a tendency for increasing annual mean flows. Moreover, seasonal analysis

indicates that summer mean flows are dominated by increasing trends while there is a tendency also for increases in winter mean flows.



Figure 33: Ireland's Mean Surface Air Temperature 1900-2011

EPA, The Status of Ireland's Climate 2012



Figure 34: Ireland's Annual Rainfall 1941-2010

Activities funded 2007-13

There has been no dedicated funding provided for climate change adaptation under the current ERDF co-financed Regional OPs. Some investment taken place in sustainable travel, which seeks to reduce carbon emissions from transport, is described in section 4.7.

Achievements of the schemes 2007-13

The Smarter Travel Area Initiatives achievements are considered under thematic objective 7 Promoting Sustainable Transport and Removing Bottlenecks in Key Network Infrastructures.

Relevant Evaluation Findings

The Smarter Travel Area Initiative was announced in February 2013 and therefore was not considered for the Mid-term evaluation.

Public Consultation

A number of the submissions received highlight the need to investment in actions directed towards climate change adaptation and risk prevention and a summary of these can be found in Annex 1A and 1B (the full submissions are also available at <u>www.bmwassembly.ie</u> and <u>www.seregassembly.ie</u>). Specifically it was recommended that the Regional Operational Programmes should make provision for investments in sustainable coastal development, coastal erosion defences and flood prevention. Conservation actions and resource development activities were also highlighted as potential priority areas whilst CLLD was put forward as a good mechanism for the delivery of water management schemes and sustainable coastal development.

4.6 Protecting the Environment and Promoting Resource Efficiency European Policy Framework

Europe 2020 has identified new policy drivers to boost growth and jobs and these are addressed inter alia by 7 flagship initiatives. One of these flagships is Resource Efficient Europe – this represents a long-term framework for actions across a range of policy areas (climate change, transport, agriculture, fisheries, energy, biodiversity, industry, raw materials and regional development). The ultimate aim of this flagship initiative is to increase certainty

for investment and innovation to ensure that all relevant policies take due account of the resource efficient agenda in a balanced manner¹⁴³.

EU environmental policy is guided by Environment Action Programmes (EAP). The 6th EAP expired in July 2012 and a successor programme¹⁴⁴ was agreed in June 2013 and will run until 2020. Some of the headline aims are outlined under section 5 of this chapter which deals with *Promoting Climate Change Adaptation, Risk Management and Prevention*.

The breadth and depth of Community *acquis* governing the ambit of the environment signals the importance ascribed by the European Commission to its protection. A subset of the *acquis* is briefly considered here:

- Waste Sector: The Waste Framework Directive 2008/98/EC sets out the waste hierarchy¹⁴⁵ that Member States are obliged to implement within their respective Waste Management Plans. The Directive also places an obligation on Member States to apply the Polluter Pays Principle;
- Water Sector: The Water Framework Directive 2000/60/EC has a number of objectives¹⁴⁶ and seeks to protect inland surface, ground, transitional and coastal waters. By 2009 management plans for each river basin district were produced covering the period 2009-2015 with a view to revision at 6 yearly intervals from 2015. The management plans aim to:
- Prevent deterioration, enhance and restore bodies of surface water, achieve good chemical and ecological status of such water by 2015 at the latest and to reduce pollution from discharges and emissions of hazardous substances;
- Protect, enhance and restore the status of all bodies of groundwater, prevent the pollution and deterioration of groundwater, and ensure a balance between groundwater abstraction and replenishment;
- Preserve protected areas¹⁴⁷.

 ¹⁴³ The EU2020 targets for sustainable growth include (i) Reduced greenhouse gas emissions by 20% compared to the base level in 1990 by 2020; (ii) An increased share of renewables in final energy consumption to 20%; and (iii) A move towards a 20% increase in energy efficiency.
 ¹⁴⁴ European Commission (2013): The 7th Environment Action Programme: 'Living well, within the limits of our planet',

¹⁴⁴ European Commission (2013): The 7th Environment Action Programme: 'Living well, within the limits of our planet', June, 2013.

¹⁴⁵ (a) prevention; (b) preparing for re-use; (c) recycling; (d) other recovery, e.g. energy recovery; and (e) disposal.

¹⁴⁶ Preventing and reducing pollution, promoting sustainable water usage, environmental protection, improving aquatic ecosystems and mitigating the effects of floods and droughts.

¹⁴⁷ http://europa.eu/legislation_summaries/environment/water_protection_management/l28002b_en.htm

Protecting, promoting and developing cultural heritage: The EU Council and Member States agreed a work-plan¹⁴⁸ which sets out the six priority areas for the cultural field under which specific activities will be pursued.

- Cultural diversity, intercultural dialogue and accessible and inclusive culture;
- Cultural and Creative Industries;
- Skills and mobility;
- Cultural heritage, including mobility of collections;
- Culture in External Relations; and
- Culture Statistics

Protecting biodiversity, soil protection and promoting ecosystem services including Natura 2000¹⁴⁹ and green infrastructures: Protection of biodiversity was one of the key objectives of the 6th Environment Action Programme. However, the final assessment of that programme concluded that "unsustainable trends still persist"¹⁵⁰ in terms of loss of biodiversity and degradation of ecosystems within the European Union. The Biodiversity Strategy for 2020 identifies six priority targets to halt further erosion of biodiversity namely:

- Conserving and restoring nature;
- Maintaining and enhancing ecosystems and their services;
- Ensuring the sustainability of agriculture and forestry;
- Ensuring sustainable use of fisheries resources;
- Combating invasive alien species; and
- Addressing the global biodiversity crisis.

In terms of Green Infrastructure the European Commission has adopted a strategy¹⁵¹, to promote the deployment of green infrastructure in the EU in urban and rural areas. The strategy recognises the need to work with and enhance our natural capital to achieve the Europe 2020 objectives.

¹⁴⁸ Conclusions of the Council and of the Representatives of the Governments of the Member States, meeting within the Council, on the Work Plan for Culture 2011-2014.

¹⁴⁹ Set up as a coherent European ecological network of special areas of conservation of natural habitats and of wild fauna and flora, OJ L 206, 22.7. 1992, p.7.

¹⁵⁰ European Commission (2013), The 7th Environment Action Programme: 'Living well, within the limits of our planet', June, 2013, p. 4.

¹⁵¹ European Commission (2013), Green Infrastructure (GI) — Enhancing Europe's Natural Capital, May, 2013.

Urban environment improvements, including regeneration of brown field sites and reduction of air pollution: The European Commission's target¹⁵² of no 'net land take' by 2050¹⁵³. positions the re-use and development of brownfields as a major building block in strategies to achieve this objective Air Pollution Directive 2008/50/EC154 sets out Member States responsibilities with respect to air quality. While a method to calculate the cost benefit derived from the implementation of this Directive has not been agreed the positive impact accruing from a reduction in acid rain and nutrient nitrogen inputs contributes to a higher degree of protection to the natural environment and measurable savings in terms of human health and mortality¹⁵⁵.

Irish Policy Framework

In October 2012 the Department of Environment, Community and Local Government published the Water Sector Reform Implementation Strategy¹⁵⁶ which announced the establishment of a national authority to manage investment and maintenance of the water infrastructure for all 34 city and county councils. The creation of Irish Water is in line with the Programme for Government and the new entity will be charged with the management of the State's water and sewerage networks. The Government foresees the "introduction of domestic charges in line with the requirements of the Programme of Financial Support for Ireland with the EU/IMF/ECB"¹⁵⁷.

The Waste Framework Directive sets out the management regime applicable to waste in the territory of the Community and is enshrined in Irish law by the Waste Management Act 1996 and the European Communities (Waste Directive) Regulations 2011¹⁵⁸. Ireland's waste

¹⁵² European Commission (2011), Roadmap to a Resource Efficient Europe, September, 2011.

¹⁵³ European Commission (2013): Science for Environment Policy. Thematic Issue: Brownfield Regeneration, May 2013:

p3. ¹⁵⁴ European Commission (2008), Directive2008/50/EC on ambient air quality and cleaner air for Europe.

¹⁵⁵ http://europa.eu/legislation_summaries/environment/air_pollution/l28159_en.htm

¹⁵⁶ Department of the Environment, Community and Local Government (2012), Water Sector Reform Implementation Strategy, October, 2012.

¹⁵⁷ Ibid, p.7.

¹⁵⁸ S.I. no 126 of 2011.

management policy¹⁵⁹ places an emphasis on a movement away from landfill and squarely builds the policy on the EU Waste hierarchy. The performance of the household waste collection market is identified as critical to the attainment of the policy objectives. The policy document details the targets set for Ireland and the timelines involved under the EU legislation.

The core goals in relation to culture articulated by the Department of Arts, Heritage and the Gaeltacht are "to enhance access to and to recognise the social and economic role of the arts, culture and film sectors in Ireland by promoting and encouraging artistic expression, cultural awareness and participation, through an appropriate policy, legislative and resource framework"¹⁶⁰. A number of supporting objectives are noted by the responsible department which seeks to give expression to the goals set out here.

While progress is cited by the Environment Protection Agency (EPA) in relation to the designation of protected areas in Ireland, the agency raises concern that a considerable level of threat remains. The threat for Ireland's biodiversity they contend arises from unsustainable activities. Ireland has a wide diversity of habitats including 16 priority habitats as designated under the EU Habitats Directive (92/43/EEC)¹⁶¹. The Wildlife Amendment Act 2000 gives statutory protection to Natural Heritage Areas (NHAs). Under planning legislation, Development Plans must include mandatory objectives for the conservation of the natural heritage and for the conservation of European sites and any other sites which may be prescribed. There are also discretionary powers to set objectives for the conservation of a variety of other elements of the natural heritage¹⁶².

The National Parks & Wildlife Service (NPWS) is responsible for the designation of conservation sites in Ireland. The NPWS works with farmers, other landowners and users and national and local authorities, trying to achieve the best balance between farming and land-

¹⁵⁹ Department of the Environment, Community and Local Government (2012), A resource Opportunity, Waste Management Policy in Ireland, July, 2012.

¹⁶⁰ http://www.ahg.gov.ie/en/Culture/

http://www.epa.ie/irelandsenvironment/nature/

¹⁶² The Planning and Development Act, 2000,.

http://www.npws.ie/legislationandconventions/irishlaw/theplanninganddevelopmentact2000/

use on the one hand, and requirements for conserving nature in these selected areas, on the other¹⁶³.

Ireland's air quality is generally considered to be good; this is assisted by a mild climate and Ireland's location on the Western fringes of Europe. The EPA is the competent authority with responsibility for ambient air quality monitoring. Air quality monitoring is undertaken by the EPA and local authorities via the national air quality monitoring network¹⁶⁴. Ambient air quality monitoring and assessment in Ireland is carried out in accordance with the requirements of Directive 2008/50/EC on ambient air quality and cleaner air for Europe, also known as the CAFE Directive. The CAFE Directive was transposed into national legislation by the Air Quality Standards Regulations 2011¹⁶⁵.

Urban Regeneration schemes of varying scale were completed in Ireland in recent years. Ballymun in Dublin and the Limerick Regeneration programme are just two examples of large scale initiatives reflecting a multi-disciplinary approach to incorporating the social and physical needs of the community in the design of the scheme¹⁶⁶.

The National Spatial Strategy 2002 - 2020 gives expression to urban development policy in Ireland. The Border, Midland & Western (BMW) and the Southern & Eastern (S&E) Regional Assemblies delivered ERDF grant aid totalling $\in 28$ million to fund Urban Regeneration and Sustainable Urban Transport projects in the National Spatial Strategy (NSS) designated Gateways and Hub Towns under their respective Regional Operational Programmes 2007-13¹⁶⁷. The Regional Programmes are co-financed by the European Regional Development Fund (ERDF). The schemes sought to fund projects¹⁶⁸ which complemented the investment strategies supporting the implementation of the NSS.

¹⁶³ http://www.npws.ie/protectedsites/

¹⁶⁴ http://www.environ.ie/en/Environment/Atmosphere/AirQuality/AirQualityStandardsMonitoring/

¹⁶⁵ http://www.environ.ie/en/Environment/Atmosphere/AirQuality/AirQualityStandardsMonitoring/

¹⁶⁶ Regeneration, National Building Agency.

¹⁶⁷http://www.bmwassembly.ie/gateways/about.html

http://www.seregassembly.ie/en/newsroom/details/erdf_gateway_scheme_projects

¹⁶⁸ Project types eligible for funding under the schemes: Urban infrastructure; Physical regeneration and renewal, including redevelopment of brown-field sites; Sustainable transport; Arts and Culture Facilities; Development of cultural and built heritage; Sustainable Energy Initiatives.

Trends

The Environmental Protection Agency's (EPA) four yearly state of the environment report¹⁶⁹, provides an evidence-based assessment of the current state of the environment in Ireland and the pressures being placed on it. It outlines the trends and changes in environmental quality as well as the socio-economic activities that are linked with these changes. Since the previous state of the environment assessment in 2008 there have been significant new policy and legislative advances in areas such as air and waste, and in the broader context of sustainable development.

The overall finding of the report is that Ireland's environment remains in a good condition, although there are a number of areas of concern, and Ireland faces a number of key challenges in the coming years. The recent period of economic recession has lowered pressure on the environment in areas such as waste generation and greenhouse gas (GHG) emissions. However, the overall challenge for Ireland is that as its economy and key sectors develop and recover, they do so in a sustainable way – decoupling economic growth from environmental pressures.

Water

In comparison with other EU Member States, Ireland has better than average water quality. The principal cause of water pollution in Ireland is nutrient enrichment resulting in the eutrophication of rivers, lakes and tidal waters from agricultural run-off and discharges from municipal waste water treatment plants. While there is evidence of an overall improvement in water quality, Ireland faces major challenges to achieve water quality targets set for 2015, 2021 and 2027 as required by the Water Framework Directive (WFD). A recent key development has been the publication of the River Basin Management Plans (RSMP), including the setting of objectives for water bodies and the selection of Programmes of Measures to meet the objectives of the WFD.

Some key statistics for water quality in Ireland are as follows:

¹⁶⁹ EPA (2012), Ireland's Environment 2012 – An Assessment.

 Ireland ranked fourth among EU Member States (after Cyprus, Malta and Greece) in terms of compliance with bathing water quality guide values in 2010 with 90% 'Good' water quality (see Figure 35)¹⁷⁰.



Figure 35: Ireland's Bathing Water Quality 2000-2012

Source: CSO, Environmental Indicators 2012

• 69% of river channel is classed as unpolluted in Ireland – achieving at least good ecological status. However, approximately 31% of monitored river channel length is polluted to some degree (See Table 12).

	Unpolluted	Slightly Polluted	Moderately Polluted	Seriously Polluted
2001-03	69%	18%	12%	1%
2004-06	71%	18%	10%	1%
2007-09	69%	21%	10%	0%

Table 12: Ireland's River Water Quality 2001-2009

Source: CSO, Environmental Indicators 2012

• 97 (46.6%) lakes were of high or good status with the majority, 39%, in the latter category.

¹⁷⁰ CSO & EPA (2012). Environmental Indicators Ireland.
- A total of 121 transitional (estuaries) and coastal water bodies were assessed for the period 2007–2009 for WFD ecological status classification. Of these 55 (46%) were classified as either high or good status with over 50% classed as moderate status and 3% assigned poor status.
- As shown in Table 13, in 2010, 99.8% of public drinking water supplies in Ireland and 95.9% of group water supplies complied with E. coli standards.

	Compliance of public water supplies with E. coli. Standard	Compliance of group water supplies with E. coli. Standard	Compliance of public water supplies with THM standard	Compliance of group water supplies with THM standard
2000	96.7%	70.8%	:	:
2001	97.2%	74.1%	:	:
2002	98.4%	80.9%	:	:
2003	98.7%	83.2%	:	:
2004	98.9%	85.5%	96.3%	99.2%
2005	98.9%	77.5%	96.2%	99.7%
2006	99.1%	82.3%	95.7%	98.8%
2007	99.5%	85.2%	97.3%	99%
2008	99.7%	89.6%	96.4%	99.4%
2009	99.7%	93.5%	87.4%	89.4%
2010	99.8%	95.9%	89.3%	85.5%

Table 13: Ireland's Drinking Water Quality 2000-2010

Source: CSO, Environmental Indicators 2012

• 93% of urban waste water in Ireland received secondary treatment in 2009 following a very significant ramp-up in investment (See Table 14)¹⁷¹.

¹⁷¹ EPA (2012), Focus on Urban Waste Water Discharges in Ireland.|

	No Treatment/ Preliminary Treatment	Primary Treatment	Secondary Treatment
2000-01	30%	41%	29%
2002-03	31%	2%	67%
2004-05	16%	2%	82%
2006-07	9%	1%	90%
2008-09	6%	1%	93%

Table 14: Ireland's Urban Waste Water by Treatment Type 2000-2010

Source: CSO, Environmental Indicators 2012

Nature and Biodiversity

Ireland's marine and terrestrial environment supports a wide variety of species and habitats, many of which are of international importance. As shown in Figure 36, progress has been made in the designation of EU-protected areas in Ireland, but several areas of national importance remain undesignated, and significant aspects of biodiversity in Ireland are under considerable threat from unsustainable activities.

Figure 36: EU & Ireland Protected Areas under the EU Birds & Habitat Directives 2010



Source: CSO, Environmental Indicators 2012

Ireland has international and legal obligations to protect biodiversity. These include a commitment to halt biodiversity loss by 2020. The majority of Ireland's habitats that are listed under the Habitats Directive are reported to be of poor or bad conservation status. Only 7% of listed habitats are considered to be in a favourable state (see Figure 37). Based on the bad conservation status of many important habitats and some species, considerable efforts and resources will be required to improve their status, both within and outside protected areas. This will require greater integration of biodiversity concerns in sectoral policy development and implementation, at local and national levels. Ireland's second National Biodiversity Plan (2011–2016) includes a programme of measures aimed at meeting Ireland's biodiversity obligations. The key pressures on Ireland's habitats and species are direct habitat damage such as peat cutting, wetland drainage/reclamation and infrastructural development; overgrazing and undergrazing; water pollution particularly from nutrients and silt; unsustainable exploitation such as over-fishing and peat extraction; invasive alien species; and recreational pressure. Indirect pressures such as population growth, limited awareness about biodiversity, and the fact that biodiversity's economic value is often not reflected in decision making are also threats to biodiversity. Climate change is likely to bring additional pressures on a number of species and habitats in Ireland¹⁷².



Figure 37: Ireland's Overall Conservation Status of Habitats 2012

Source: EPA, Ireland's Environment: An Assessment 2012

¹⁷² Ireland's Environment: An Assessment, EPA, 2012.

Land Use

Land use has been subject to ongoing change with demand for development purposes during the economic boom. By European standards, Ireland has experienced a relatively high rate of land use change since the early 1990s. The main source of national scale information on Land Use and Land Cover Change (LULC) in Ireland is the EEA/EPA Corine land cover data series, which delivered a 25 hectare scale land cover/land use map of Ireland in 1990, 2000 and 2006, with the next map expected in 2014. As shown in Figure 38, the main land cover type in Ireland is agricultural land, which accounts for two-thirds of the national landmass. Most of this is permanent grassland pastures. Peatlands and wetlands are the second most widespread land cover type, covering almost one-fifth of the country, while forested areas cover over one-tenth of the country. These figures show that despite rapid development in the past two decades, Ireland's landscape is still predominantly rural and agricultural. Artificial surfaces account for just 2% of the land surface, which is half the Europe-wide average of



Figure 38: Ireland's Land Usage by Type 2000-2009

Source: CSO, Environmental Indicators 2012

Agricultural land cover is far ahead of the European average of 42%, while the amount of land that is forested in Ireland is just one third of the European average of 35%. The area under forestry has increased from 7% to 11% of national land cover during this period,

primarily due to the planting of peatland and pasture lands with coniferous plantations. This was the second lowest proportion of forest cover in the EU¹⁷³.

Since 2000 the area under artificial surfaces increased by approximately 15% to 2% of national land cover¹⁷⁴. This mainly occurred on former agricultural lands on the periphery of existing urban areas, including the suburbanisation of villages close to larger towns and cities. Total house completions rose from 19,500 in 1990 to 93,400 in 2006 reflecting unprecedented demand in the property market. This market has since crashed and house completions fell to 10,500 in 2011. The National Housing Development Survey has been tracking the problems resulting in the collapse of the housing market, including vacant houses and unfinished housing estates with 230,000 vacant properties recorded in 2011¹⁷⁵. There was also widespread construction of single rural dwellings in the countryside. Between 1990 and 2010, approximately 140,000 bungalows were built. This represents 32% of the estimated 440,000 dwellings with independent waste water treatment systems.

Sustainable Resource Use, Consumption and Waste

Since 2008, there have been sharp decreases in Ireland in commercial and household waste volumes, in line with the downturn in consumption and economic growth. As illustrated in Figure 39, waste volumes associated with the construction sector have collapsed by 81% since 2007. Ireland had the fourth highest level of municipal waste per capita in 2010 at 620kgs compared to the EU27 average of 503kg per capita. Industrial waste (including hazardous wastes) volumes are stable, reflecting the relative stability of Ireland's manufacturing industry, the main contributor to this waste stream. Ireland continues to export nearly half of its hazardous waste for treatment/ disposal.

¹⁷³ EPA (2012), Ireland's Environment: An Assessment.

¹⁷⁴ EPA (2012), Ireland's Environment: An Assessment.

¹⁷⁵ Housing Agency & DoECLG (2012), The National Housing Development Survey: Summary Report.



Figure 39: Ireland's Municipal Waste Generated 2001-2010 ('000s tonnes)

Source: CSO, Environmental Indicators 2012

Ireland has achieved its EU waste recycling and recovery targets for waste packaging; for waste electronic and electrical equipment; and for household waste paper, metals, plastic and glass. Ireland has also achieved the first target for diversion of biodegradable waste from landfill as required under the EU Landfill Directive.

The waste collection sector has changed dramatically in the past four years, with the majority of local authorities exiting the domestic waste collection market. Moreover, as of 2012, virtually all households on a collection service are now offered at least a two-bin service (dry recyclables and residual), and 34% of serviced households are offered a three-bin collection (includes organics bin). Ireland's first merchant municipal waste incinerator commenced operation in 2011, and the use of waste derived fuels in industrial energy plants has grown significantly.

There has been a consistent reduction in the municipal waste disposal rate, the amount sent to landfill as proportion of the amount of waste managed. However, the volume of waste sent to landfill in Ireland still exceeds the EU average (see Figure 40). Recovery rates for municipal waste have been improving, reaching 47.2% in 2010 with the balance of 52.8% being landfilled (see Figure 41). In 2010, Ireland's recycling rate (excluding energy recovery) was

38%, which is close to the EU average of 42%. Almost 77% of the recyclable municipal wastes were exported for material recovery. Fifteen of Ireland's twenty-eight operational municipal landfills will run out of consented capacity in three years, and there is only 12 years' gross municipal landfill disposal capacity in the State¹⁷⁶.



Figure 40: Ireland's Municipal Waste Disposal Rate Landfill 2001-2010

Source: CSO, Environmental Indicators 2012

¹⁷⁶ EPA (2012), Ireland's Environment: An Assessment.



Figure 41: Ireland's Municipal Waste Recovery Rate 2001-2011

Source. El 11, ireana s Environment. 111 1155555ment 2

Air Quality

Air quality in Ireland is of a high standard across the country and is among the best in Europe, meeting all EU air quality standards in 2010. This is due largely to prevailing clean Atlantic air and a lack of large cities and heavy industry. However, in Dublin and Cork levels of nitrogen dioxide are close to the specified EU limit values for air quality in traffic-impacted areas. Over the past decade, levels of particulate matter have decreased in cities and large urban areas, arising principally from improvements in vehicle engine technology. This decrease is not seen in smaller towns, where domestic solid fuel emissions are more significant than traffic emissions¹⁷⁷.

Actions co-funded 2007-13

There has been a diverse range of investments related to this thematic objective, in particular under the Regional Operational Programmes 2007-13, including:

- Rural Water Programme (BMW only);
- Water Services Investment, including Water Conservation (BMW only);
- Natural and Built Heritage (BMW only);
- Waste Management (BMW only); and

¹⁷⁷ EPA (2012), Ireland's Environment: An Assessment.

• Urban Regeneration (both Regions).

Both Regional Operational Programmes included provision for a Rural Water Source Protection Programme and a Village Sewerage Scheme. These schemes were not co-financed in the S&E OP. The objective of these was to assess new cost effective ways of protecting water sources from surface pollution and providing wastewater collection and treatment systems for small rural villages and to test a range of innovative technologies for collecting and treating domestic wastewater.

The main objective of the Water Services Investment Programme was to prioritise investment for new water supply and wastewater infrastructure in the interests of protecting the environment and public health, meeting national and European standards for drinking water and wastewater treatment and supporting social and economic development. Two extensive Design Build Operate projects were funded in the BMW Region under the programme, in addition to a small number of water conservation measures in large towns across the region.

The Built Heritage intervention supports the conservation restoration and upgrading of a small number of natural and cultural heritage sites in designated urban and rural areas including villages. The Natural Heritage intervention supports the construction of visitor facilities at Clara Bog nature Reserve and Ballycroy National Park in order to contribute to a better understanding of the value of nature conservation generally through education and information.

The waste management measure provides co-funding for investment by local authorities in waste recovery and recycling infrastructure for municipal and other waste, to be developed in accordance with regional and local waste management plans in the BMW Region. This will reduce reliance on waste disposal and facilitate waste recovery and recycling, thereby enabling the region to achieve the ambitious target that 10% or less of waste is consigned to landfill.

The objective of the ERDF co-financed Gateways and Hubs Grants Scheme¹⁷⁸, managed by the Regional Assemblies, is to contribute to improvement in the development potential of the Gateways and Hubs through the enhancement of their economic, social and environmental conditions. Several of the projects assisted have comprised of urban streetscaping and enhancement of the public sphere. In addition, a small number of projects have been funded under the RAPID initiative for disadvantaged urban areas in the BMW Region.

Achievements of the schemes 2007-13

For various reasons there has been a delay in operationalising the rural water source protection and village sewerage schemes in both Regional OPs, whereas there has been substantial progress in completing the two Design-Build-Operate water supply projects in the BMW Region. Both National Park Visitor Centres are now open and operational, although the level of public investment in built heritage is lower than originally envisaged. Progress has been satisfactory in respect of waste management projects implemented by local authorities. It is envisaged that all urban regeneration projects co-financed under the ERDF Gateways and Hubs¹⁷⁹ Scheme, will be substantially completed by the end of 2013. Approximately €76m has been allocated to projects under these themes up to the end of 2012 in the BMW Region and €22m (€11m ERDF) in the S&E Region¹⁸⁰. Projects were delivered in the nine Gateways across both regions and in the five BMW Region Hub Towns under the Regional Programmes.

Relevant Evaluation Findings

The Mid-term Evaluation of the BMW Regional OP found that expenditure at the mid-term was well behind target with less than 24% within the priority overall. There had been no reported expenditure on the Water and Sewerage sub-themes at that time and these were expected to make up one third of the expenditure in this Priority. It was expected that expenditure would catch-up in the second half of the OP period. It found that the Gateways and Hubs Fund had only been launched in mid-2009 but since then, despite some practical implementation issues, overall progress had been steady.

¹⁷⁸ The scheme was delivered under the S&E ROP 2007-13 as the ERDF Gateways Grant Scheme; the designated Hubs were not included under the scheme in the S&E Region.

¹⁷⁹ Hubs co-financed in the BMW Region only

¹⁸⁰ ERDF Gateways Grant Scheme.

In the S&E Region the Mid-Term Evaluation found that expenditure in this area was very low. In fact apart from the ERDF Gateways Grant Scheme, which was progressing well, no progress had been made.

Public Consultation

A number of the submissions received highlight the need for investment in actions directed towards protecting the environment and promoting resource efficiency and a summary of these can be found in Annex 1A and 1B (the full submissions are also available at www.bmwassembly.ie and www.seregassembly.ie). Specifically it was recommended that the Regional Operational Programmes should make provision for investments to secure and protect Ireland's biodiversity in particular to control invasive species in line the proposed new Fisheries Act. CLLD was put forward as a good mechanism for the delivery of actions aimed at preservation and enhancement of biodiversity. Ireland's cultural and natural heritage also received attention in a number of the submissions with particular attention being placed on the need to research the effect of climate on historic buildings performance, research into traditional building materials (both of which could also fit with TO 1), actions for cultural tourism and a need to develop a strategy for the sustainable development of the landscape. There was also support for investments in water management and infrastructure, rehabilitation of contaminated sites, inland fisheries infrastructures and waste management measures and promotion of the green economy.

4.7 Promoting Sustainable Transport and Removing Bottlenecks in Key Network Infrastructures EU Policy Framework

The European Commission in their White Paper on a Single European Transport Area¹⁸¹ adopted a roadmap of forty concrete initiatives for the next decade to build a competitive transport system that will increase mobility, remove major barriers in key areas and fuel growth and employment. At the same time, the proposals aim to dramatically reduce Europe's dependence on imported oil and cut carbon emissions in transport by 60% by 2050.

By 2050, key goals will include:

• No more conventionally-fuelled cars in cities;

¹⁸¹ European Commission (2010), Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system. March 2011.

- 40% use of sustainable low carbon fuels in aviation; at least 40% cut in shipping emissions;
- A 50% shift of medium distance intercity passenger and freight journeys from road to rail and waterborne transport; and
- All of which will contribute to a 60% cut in transport emissions by the middle of the century

The Commission also set goals for a competitive and resource efficient transport system:

- A. The Developing and deploying new and sustainable fuels and propulsion systems:
- Halve the use of 'conventionally-fuelled' cars in urban transport by 2030; phase them out in cities by 2050; achieve essentially CO2-free city logistics in major urban centres by 2030; and
- Low-carbon sustainable fuels in aviation to reach 40% by 2050; also by 2050 reduce EU CO2 emissions from maritime bunker fuels by 40%.
- B. Optimising the performance of multimodal logistic chains, including by making greater use of more energy-efficient modes:
- 30% of road freight over 300 km should shift to other modes such as rail or waterborne transport by 2030, and more than 50% by 2050, facilitated by efficient and green freight corridors. To meet this goal will also require appropriate infrastructure to be developed;
- By 2050, complete a European high-speed rail network. Triple the length of the existing high-speed rail network by 2030 and maintain a dense railway network in all Member States. By 2050 the majority of medium-distance passenger transport should go by rail;
- A fully functional and EU-wide multimodal TEN-T 'core network' by 2030, with a high quality and capacity network by 2050 and a corresponding set of information services; and
- By 2050, connect all core network airports to the rail network, preferably high-speed; and
- Ensure that all core seaports are sufficiently connected to the rail freight and, where possible, inland waterway system.

- C. Increasing the efficiency of transport and of infrastructure use with information systems and market-based incentives
- Deployment of the modernised air traffic management infrastructure in Europe by 2020 and completion of the European Common Aviation Area. Deployment of equivalent land and waterborne transport management systems;
- By 2020, establish the framework for a European multimodal transport information, management and payment system; and
- Move towards full application of "user pays" and "polluter pays" principles and private sector engagement to eliminate distortions, including harmful subsidies, generate revenues and ensure financing for future transport investments.

Irish Policy Framework

Sustainable Transport

In 2009, the Irish Government published its Strategy for Sustainable Transport $2009-2020^{182}$, this sets out a set of measures to increase the number of people walking, cycling, and using public transport. A key objective of the Strategy is change the transport-mix in Ireland so that by 2020 car share of total commutes drop from 65% to 45%.

Key initiatives of the Smarter Travel Strategy:

- Future Government investment in public facilities to take account of the need to give priority to walking, cycling and public transport as primary means of access;
- A focus on catering for future population and employment growth predominantly in sustainable urban areas;
- Support for greater flexibility in work patterns and e-working, with the public sector acting as an exemplar;
- Development of a strategy for the freight sector aimed at reducing environmental impact while improving efficiency and competitiveness;
- Redesign of urban bus services to achieve optimum use of the existing fleet and additional resources as necessary;

¹⁸² Department of Transport (2009). Smart Travel: A Sustainable Transport Future – A New Transport Policy for Ireland 2009-2020.

- Scheduled bus services in significant centres of population, and for other areas, 7 day a week access to transport services;
- The delivery of a National Cycle Policy Framework;
- The development of a National Walking Policy with provision of safe pedestrian routes linked, where appropriate, with public transport services;
- Support for car-sharing initiatives;
- Delivery of integrated ticketing;
- Fast tracking of park and ride facilities;
- Engagement at international level to ensure use of low polluting fuels in maritime operations;
- Support for use of vehicles that do not rely on internal combustion engines (e.g. electric vehicles and hydrogen powered vehicles);
- 10% of car fleet to be electric by 2020;
- Efficient driving to become part of the driving test: and
- Establishment of demonstration sustainable travel towns.

A number of initiatives have been undertaken since the announcement of this Strategy including the publication of Ireland's First National Cycle Policy Framework¹⁸³ in 2009 which set out the following targets to be achieved by 2020:

- Move 160,000 people a day to work by bike; an increase of 125,000 people;
- Introduce cycle-friendly routes to schools, better bike parking facilities in schools and safe cycle skills in school classrooms;
- Reduce the volume of through traffic in the vicinity of schools and colleges;
- Invest in better, safer cycle routes around the country for commuters, leisure cyclists and visitors. (Improve existing cycle routes and introduce new routes to best international standards);
- Increase cycling's share of the total travel market, from 2% to 10%;
- Ensure integration of public transport and cycling (i.e. more trains, buses, etc. to carry bikes as standard);
- Invest in new, safe bike parking facilities in towns and cities around the country;

¹⁸³ Department of Transport (2009). Ireland's First – National Cycle Policy Framework.

- Introduce a new approach to the design of urban roads to better recognise the needs of cyclists and pedestrians;
- Retrofit major road junctions and roadways in key cities and towns to make them cyclefriendly; and
- Develop cycling demonstration towns showing best practice in cycle-friendly urban planning, design and engineering.

The Department of Transport Tourism and Sport provides financial support to local authorities and other agencies for the promotion of smarter travel, by developing infrastructure to make Smarter Travel more attractive and safer and by educating people on the potential for making Smarter Travel choices. Current funding programmes include:

- Smarter Travel Demonstration projects;
- Smarter Travel Areas Programme 2012-2016;
- National Cycle Network 2012-2016; and
- Active Travel Towns.

National Ports Policy

As an island nation ports have an important economic, social and environmental function. The stated core objective of the National Ports Policy is to facilitate a competitive and effective market for maritime transport services. Internationally the long-term trend in ports and shipping is toward increased consolidation of resources in order to achieve optimum efficiencies of scale. This has implications for vessel size, the depths of water required at ports and the type and scale of port hinterland transport connections. Ports differ greatly in size, in current capability and future potential. The structure in place since 1996 does not take into account these international trends and is no longer appropriate¹⁸⁴.

¹⁸⁴ Department of Transport, Tourism and Sport (2013) National Ports Policy

Removing Bottlenecks in Key Network Infrastructures

Under the Infrastructure and Capital Investment programme for 2012-2016 the Government remains committed to 'remove bottlenecks and pinch points' ¹⁸⁵ in public transport to 'provide better passenger information and provide for limited and targeted improvements¹⁸⁶.

Trends

Transport accounts for almost one fifth of total GHG emissions and is an emission source that will require major action if Ireland is to meet its 2020 emissions obligations. Sustainable transport is central to efforts to control GHG emissions, air pollution and environmental damage together with reducing fossil fuel dependency. Research on Irish transport and policy initiatives highlights the difficulty of moving to a more sustainable transport economy.

There has been very considerable investment in the Irish transport infrastructure over the past decade, particularly in the inter-urban motorway network and in commuter rail. Commuter numbers for both workers and students totalled 2.7 million in 2011, a 13.1 % rise when compared against the 2.39 million who travelled to work, school or college in 2002. Figure 42 shows that despite the economic downturn, the proportion of those travelling to work (and school or college) by private cars is still growing, while use of more sustainable travel modes is declining. The percentage of commuters using public transport (bus or train) declined in the face of increasing car use. While the number of persons using a bus, minibus or coach increased gradually between 1991 and 2006 from 87,377 to 114,956, this was followed by a sharp decline (20.3%) over the next five years to 91,676. The number of persons walking to work increased from 151,952 to 170,510 between 1981 and 2011 but the share of commuters walking fell from 17.6% to 10.5%, Between 2006 and 2011 there was a 9.6% jump in the number of persons cycling, rising from 36,306 to 39,803. However, close to 20,000 fewer persons cycled to work in 2011 compared with 1986, when the number of cyclists was at its peak. The share of commuters cycling to work was 2.4% at the last census, as opposed to 7.2% recorded in 1986¹⁸⁷.

¹⁸⁵ Department of Public Expenditure and Reform (2012), Infrastructure and Capital Investment programme for 2012-2016, p.19. ¹⁸⁶ Ibid p.19.

¹⁸⁷ CSO (2012), Profile 10: Door to Door.



Figure 42: Ireland, NUTS II & NUTS III Private Transport Rate for Travel to Work, School or College, 2006 & 2011

Reducing reliance on the private car is a difficult policy target, particularly in a low-density, dispersed population such as Ireland's. Integrating spatial planning and transport investment is one of the most effective means of controlling emissions from road transport and reducing reliance on car use. A significant legacy of Ireland's rapidly growing economy in recent years has, however, been urban sprawl and low-density development, which has 'locked in' unsustainable travel patterns. The governent's Smarter Travel Policy aims to reduce car based commuting down to 45% by 2020. As shown in Map 6, due to the very significant suburbanisation in the past decade around many towns and cities, Ireland faces a very significant challenge in reducing car based commuting and promoting more sustainable modes of transport.

The National Transportation Authority is progressing significant work on land use and transportation integration¹⁸⁸. One of the key constraints existing on the rail network is the limitations on train paths through Dublin city centre section, between Connolly and Grand Canal Dock stations. The Dublin City Centre Resignalling project will provide for significant capacity enhancement through this section by upgrading signalling and turn-back facilities to accommodate an additional 8 train paths per direction per hour (up from 12 at present to 20)

¹⁸⁸ See, for example, NTA (2013), Planning and Development of Large-Scale, Rail Focussed Areas in Dublin.

in the critical city centre area. It is a key project aimed at unlocking the existing major bottleneck in the city centre, which will have positive spin-off effects for DART, Commuter and Intercity passengers¹⁸⁹.

Map 7: Ireland's Percentage of Car Based Commuting 2011

¹⁸⁹ NTA (2013), Draft Integrated Implementation Plan 2013-2018.



Source: CSO, Census 2011

Switching the link to the level of vehicle taxation (annual road tax) to emissions instead of engine size in 2008 was an attempt to incentivise more sustainable transport choices. In the first year of the new emissions-based taxation system, average emissions of new cars fell by 13%, due to a significant switch to diesel cars, and estimated total emissions declined by 5.9 kt CO2. In 2011, 90% of new private vehicles licensed were in emission bands A and B, which have a lower level of emissions. This was a significant policy success and the consumer trend since then is towards emissions-efficient cars. The re-adjustment of tax band rates in Budget 2012 continues the incentive towards more emissions-efficient cars¹⁹⁰.

Investment in large-scale public transport projects has seen a sharp fall in funding as a result of the economic recession. Government policy is now focused on a wide range of small scale projects such as improving the existing network, cycling and pedestrianisation projects and the Smarter Travel Areas programme. In rural areas, over 1.3 million journeys were made in 2012 on routes serviced by the Rural Transport Programme (RTP). The total cost of operating

¹⁹⁰ EPA (2012). Ireland's Environment: An Assessment.

the scheme in 2012 was €16.3 million and the Government has recently announced a major rationalisation of the scheme to reduce cost and improve efficiency¹⁹¹.

Actions co-funded 2007-13

Under the 2007-13 Regional Operational Programmes, the following investments have taken place:

- Public Transport;
- Key Linking Roads; and
- Sustainable Transport.

The public transport investments in the BMW Region over the 2007-13 period are aimed at increasing public transport usage overall, reducing journey times by removing speed restrictions, improving accessibility and safety and enhancing commuter services via the provision of new railcars serving stations in the BMW Region.

The key Linking Routes theme has supported the completion of two key routes in the BMW Region, namely the N52 Tullamore Bypass which comprises of 14km on the National Secondary Route (N52) linking Dundalk to Nenagh and the completion of the M6 Athlone to Ballinasloe segment of the Dublin to Galway motorway. Under sustainable transport a comprehensive cycle lane network has been installed in Mullingar and a multi-use transport corridor (including bus and cycle lanes) has been developed along the Seamus Quirke/Bishop O'Donnell Road in Galway City.

In the S&E OP sustainable transport investment has taken place in Limerick through the Smarter Travel Demonstration Area Project being delivered by the newly amalgamated Limerick City and County Councils in partnership with the University of Limerick (UL). The project provides the opportunity to assess Smarter Travel measures across a range of communities in a city context. The proposal is focussed on four hubs – City Centre, Corbally, Castletroy and Regeneration Hub.

¹⁹¹ NTA (2012). Strengthening the Connections in Rural Ireland- Plans for Restructuring the Rural Transport Programme.

Achievements of the schemes 2007-13

Approximately €250m has been invested in transport projects under the BMW Regional OP up to December 2012, addressing key deficits in public transport and national road infrastructure. Several projects including key linking routes, the rail network works at Portarlington and the purchase of railcars have been completed. Investment has seen the provision of 24 new railcars (representing 100% of the OP final target) serving destinations in the BMW Region and an increased annual capacity on railcars, per passenger journey of 61,152, this represents 80% of the final target set for this scheme. In addition, some transport projects were selected by Gateways and Hubs authorities for funding under the Gateways and Hubs Scheme, including the Seamus Quirke/Bishop O'Donnell Road in Galway, Cavan Inner Relief Road and Mullingar Cycle Network.

Funding is provided for the development of Smarter Travel initiatives including cycle lanes and cycle ways, pedestrianisation projects, signage/information provision and traffic calming across the country together with the extension of bike sharing schemes to some of the regional cities. The Government is proceeding with Smarter Travel Demonstration Areas in a reduced but structured manner, identifying and supporting key components that can effect maximum modal change. "Smarter Travel Areas" was established to deliver outstanding and innovative examples of sustainable travel in urban and rural areas. Pilot projects are rolling out in Limerick City, Dungarvan, Co. Waterford and Westport, Co. Mayo sharing funding of €23 million over a 5-year period to transform into Smarter Travel Areas. In the S&E Regional OP, the Limerick Smarter Travel Area Project was allocated ⊕m in 2012 with €0.36m expended to-date. Expenditure is anticipated to pick up in 2013.

Smarter travel measures can have a significant impact on improving local air quality and making a contribution to the global battle of climate change. This will be achieved through reducing the number of car trips made and the distance travelled on individual trips. Fewer cars driving shorter distances on the road means fewer carbon emissions. In addition congestion, which causes great amounts of carbon emissions, will reduce. Air quality is not only affected by carbon emissions but also other pollutants such as nitrous oxide and particulates.¹⁹²

¹⁹² Limerick Smarter Travel Stage 2 Submission.

Relevant Evaluation Findings

The Mid-Term Evaluation of the BMW Regional OP found that in terms of expenditure, output and results, the transport measures had performed well. Two of the three themes, Key Linking Routes and Public Transport had already or were likely to meet or exceed expenditure, output and result expectations. Based on the evaluator's assessment, it was likely that the measures would exceed their overall allocation.

Public Consultation

A number of the submissions received highlight the need for actions directed towards to investment in local and regional transport infrastructures and a summary of these can be found in Annex 1A and 1B (the full submissions are also available at <u>www.bmwassembly.ie</u> and <u>www.seregassembly.ie</u>). This in needed to strengthen the accessibility and attractiveness of key towns as locations for inward investment, strategic road links, road and rail infrastructure sustainable urban transport, and a western arc including upgraded road and rail infrastructure. A further submission highlighted the promotion of investment in cycling infrastructure. A submission was also received highlighting the case for the Athenry-Claremorris rail link should be re-opened for rail freight with a possibility to accommodate passenger later on.

4.8 Promoting Employment and Labour Mobility EU Policy Framework

Europe 2020 is the European Union's ten-year growth and jobs strategy that was launched in 2010. It is about overcoming the crisis from which our economies are now gradually recovering and addressing the shortcomings of our growth model and creating the conditions for a smart, sustainable and inclusive growth.

Five headline targets have been set for the EU to achieve by the end of 2020. These cover employment; research and development; climate/energy; education; social inclusion and poverty reduction.

The objectives of the strategy are also supported by seven 'flagship initiatives' providing a framework through which the EU and national authorities mutually reinforce their efforts in areas supporting the Europe 2020 priorities such as innovation, the digital economy, employment, youth, industrial policy, poverty, and resource efficiency.

They key ESF-relevant flagship initiatives at EU level are-

- Youth on the Move
- An Agenda for new Skills and Jobs
- European Platform against Poverty and Social Exclusion

The key employment element of EU2020 that is relevant for the European Social Fund in this regard is that 75% of the 20-64 year-olds be employed.

Irish Policy Framework

The key priorities and challenges for Ireland have been set out in the National Reform Programme 2011. Principal among the targets set in that primary national strategy, framed in the context of achieving the EU2020 objectives, are targets that are central to the ESF mission and objectives. These are-

Target 1- Employment Ireland's Headline Target: To raise to 69-71% the employment rate for women and men aged 20-64, including through the greater participation of young people, older workers and low-skilled workers, and the better integration of legal migrants, and to review the target level of ambition in 2014, in the context of a proposed mid-term review of the Europe 2020 Strategy.

The 2011 NRP highlighted five bottlenecks in the Irish labour market. These are-

- 1. Weak labour market demand, particularly in domestic services
- 2. Long-term and structural elements of unemployment

3. Access to opportunities for upskilling and reskilling, especially sectors that have been most affected by the impact of the recession

4. The challenge of targeting cost-effective activation programmes to those most at risk of losing contact with the labour market and drifting into long-term unemployment, and of increasing labour market participation of those cohorts with lower than average participation rates, including lone parents and people on illness/disability payments, and to reintegrate into the labour market the group of women who have interrupted their careers for child rearing;

5. Developing a more effective and streamlined response to the needs of the unemployed and removing disincentives to participation in training, education and employment opportunities

The ESF has a significant role to play in supporting and enhancing the delivery of measures to support this NRP target.

In order to promote sustainable and quality jobs, the education, training and upskilling systems must provide targeted, labour market relevant, portable and recognised skills and qualifications to the workforce. In particular, the programmes and measures delivering these skills and qualifications must target the unemployed with a strong focus on the long-term unemployed, youth unemployment and re-integration of groups facing exclusion from the labour market such as women, migrants, ex-offenders and travellers. The investment priority aimed at providing access to employment for jobseekers and inactive people, including the long-term unemployed and people far from the labour market also through local employment initiatives and supporting labour mobility is very relevant for Ireland. The sustainable integration of young people into the labour market, in particular those not in employment, education or training and those at risk of social exclusion or from marginalised communities is also at the centre of our challenges. The enhancement of equality between men and women in access to employment and career progression and the principles of promoting equal pay for equal work should also feature as key objectives through the ESF in Ireland. Relevant supports for promoting employment opportunities in the area of self-employment can also contribute to the achievement of our labour market outcomes in addressing the needs identified.

The ESF Operational Programme should include measures to assist in delivering on the investment priorities set out above. They could include measures across the spectrum of training, education and work experience, as well as promotion activities and awareness raising among employers and providers of opportunities. A continued emphasis on activation schemes and innovative approaches to employment-focused measures would enhance the contribution that the ESF can make to effective solutions for the unemployed and disadvantaged groups. Support from the ESF for some mainstream skills or education programmes that are directly relevant to getting people back to jobs would also be a constructive way to deliver on this thematic objective in Ireland.

This Needs Analysis identifies the continued increase in the creation of employment opportunities and the need to raise employment levels across the population as the central part of the recovery in the Irish labour market. Only this can bring us towards achieving the NRP employment targets. The sectoral nature and skills profile of those new jobs must be matched by the training, education and upskilling offers from the systems that are producing the people to fill them. Employment opportunities must reach all age groups but particularly our young people and those aged up to 34. There also needs to be a greater focus on getting women back to work and more women attached to the labour market. The areas where identified skills shortages exist must be targeted by relevant education, training and work experience programmes, including labour market activation programmes. Evidence of growth in self -employment and entrepreneurship must also be supported through relevant upskilling and re-skilling opportunities for those seeking to follow that path. The BMW region is lagging slightly behind in the jobs recovery and needs a strong investment boost supported by enhanced labour market programme choice and access opportunities.

Trends

Some labour market indicators for 2012 point towards improvements in the Irish labour market: tentative declines in the unemployment rate and an increase in employment. However, challenges continue to exist with further contractions of the labour force and participation and persistently high unemployment rates for certain segments of the labour market (e.g. persons previously employed in construction, younger age cohorts and persons with low education attainment).

The unemployment rate as of December 2013 stood at 12.4% and the current trends indicate some stabilisation in the labour market albeit that unemployment remains exceptionally high (see Figure 44). The number of employees in Q1 2013 was 1,527,300, up 4,300 (+0.3%) over the year. The number of self-employed persons increased by 12,500 or +4.3% to 303,400. Part-time underemployment increased over the year, up 17,000 or +12.3% to 155,900. Part-time underemployment represents 34.3% of total part-time employment having been 28.7% two years earlier. The unemployment rate for 15-24 year olds (youth unemployment rate) decreased from 29.7% to 26.7% over the year to Q1 2013 .

There are currently 7.5m young people aged 15-24 in the EU neither in employment, education nor training (NEET). According to Eurofound, Ireland has the third highest proportion of NEETs in the EU27, at 22%. It has noted that the majority of profiled Irish NEETs were as predominantly unemployed males with some work experience but young women are beginning to feature more prominently in this group and their status is not improving to the same extent as their male counterparts. Approximately 40% of the NEETS population are considered discouraged workers as they do not believe that work is available. Approximately 10% of Irish NEETs have a tertiary degree.

4.9 Promoting Social Inclusion and Combating Poverty

EU Policy Framework

As stated in 4.8 above, Europe 2020 is the European Union's ten-year growth and jobs strategy that was launched in 2010. It is about overcoming the crisis from which our economies are now gradually recovering and addressing the shortcomings of our growth model and creating the conditions for a smart, sustainable and inclusive growth.

Five headline targets have been set for the EU to achieve by the end of 2020. These cover employment; research and development; climate/energy; education; *social inclusion and poverty reduction*.

The objectives of the strategy are also supported by seven 'flagship initiatives' providing a framework through which the EU and national authorities mutually reinforce their efforts in areas supporting the Europe 2020 priorities such as innovation, the digital economy, employment, youth, industrial policy, poverty, and resource efficiency.

They key ESF-relevant flagship initiatives at EU level are-

- Youth on the Move
- An Agenda for new Skills and Jobs
- European Platform against Poverty and Social Exclusion

The for fighting poverty and social exclusion that have been set for achievement by 2020 is that there should be at least 20 million fewer people in or at risk of poverty and social exclusion

Irish Policy Framework

Ireland's active inclusion strategy is set out in the National Action Plan for Social Inclusion, which has a key policy component for activation and inclusive labour markets. An example of the challenge faced is that of the prevalence of jobless households. Recent research has highlighted the high proportion of the population in jobless households and the attendant social and economic disadvantages. The population in jobless households has risen from 15% in 2005 to 24% in 2011. They comprise adults who are furthest from the labour market with a strong pattern of educational and social class disadvantages. The high proportion of the population in jobless households the current recession, though one which has been greatly exacerbated by the rise in unemployment. The problem not only reflects the high proportion of the dult population who are not economically active but also the greater likelihood that jobless adults live with other jobless adults. It also indicates the high proportion of children living in jobless households. Household joblessness has intensified with the onset of the economic recession and the rise in unemployment. Furthermore, Ireland has almost two and a half times the rate of household joblessness as the EU (10 per cent).

Active labour market policies are key to addressing the employment needs and capacities of jobless households in an inclusive labour market. A Programme for Government priority for 2013 was to make sure that economic recovery does not bypass jobless households. It is an imperative to lift those in jobless households out of welfare dependency and to ensure that joblessness does not become an inter-generational phenomenon. The provision of targeted places on education, training and activation programmes, including work experience, for the long-term unemployed and those in jobless households is central to the progression of anti-poverty and social inclusion objectives for Ireland. The Pathways to Work and Action Plan

for Jobs approaches enshrine this principle in labour market policy and should support the reduction of the numbers affected by both of these circumstances.

In a society where unemployment and detachment from the labour market are at severe levels, the promotion of measures that seek to tackle social exclusion, poverty and discrimination are essential in achieving the ESF objectives. For Ireland, the investment priority of active inclusion, including with a view to promoting equal opportunities and active participation, and improving employability is central to this challenge. The Needs Analysis has identified low employment rates, low participation rates, high unemployment, long-term unemployment and youth unemployment and jobless households as significant factors that must be addressed. Within those factors, all affected groups need to be supported by the ESF, but those groups facing the biggest barriers to inclusion must be included. The investment priority that seeks to support the integration of marginalised communities and the investment priority that supports combating of discrimination and promotes equal opportunities also merit attention in the Irish ESF programme.

The Operational Programme should seek to support measures that have active inclusion as a focus. Measures that target those from jobless households, the long-term unemployed, women returners, migrants and ex-offenders are particularly relevant. The overarching objective of getting people back to work as quickly and directly as possible must be paramount in funding decisions. Measures more targeted at tackling poverty and discrimination where an employability focus is central are particular priorities in this thematic area for the time being. This focus will be kept under review as the Programme proceeds and any adjustment in focus to emphasise more the social inclusion aspects may be considered when the economy improves significantly.

Trends

The at-risk-of-poverty indicator identifies the proportion of individuals considered to be at risk of experiencing poverty based on their level of current income and household composition, with an equivalised income at least 60% below the national median income. According to the 2011 survey, the at- risk-of-poverty rate increased to 16.0% from 14.7% in 2010. Almost one quarter (24.5%) of the population now experience two or more types of enforced deprivation, up from 22.6% in 2010. The consistent poverty rate was 6.9% in 2011,

not a statistically significant change on the 2010 figure of 6.3%. However, the data does show that consistent poverty is trending away from the 4% interim target in 2016. Figures 47 to 49 below detail the change in rates across Ireland since 2006; in general rates witnessed a continual increase in the period post 2008. Figure 50 also provides a regional breakdown of the relative deprivation rate from the Pobal HP Deprivation Index at a NUTS III regional level; in all cases the BMW Region has consistently higher relative deprivation scores rather than its regional counterpart.

Between 2010 and 2011 the groups that showed a statistically significant change in their atrisk-of-poverty were people living in accommodation that was rented at below the market rate or was rent free (36.4%) and those living in households where there was no one at work (33.2%). Other groups specifically at risk included males (14.3% in 2010 to 16.3% in 2011); those aged 18-64 (14.2% in 2010 to 15.9% in 2011); students (22.7% in 2010 to 31.4% in 2011) and those with highest level of educational attainment of higher secondary (14.4% in 2010 to 18.9% in 2011). Geographically, those living in the Border, Midland, and Western (BMW) region (13.8% in 2010 to 20.4% in 2011) had a higher risk.

In 2011, almost one quarter (24.5%) of the population experienced two or more types of enforced deprivation. This compares with 22.6% in 2010 and an eight year low of 11.8% in 2007. An analysis by socio-demographic characteristics showed that those living in households with one adult and one or more children had the highest deprivation rate in 2011 at 56.0%. Those living in accommodation that was rented at below the market rate or rent free (52.0%) and those describing their Principal Economic Status as unemployed (42.4%) also had high levels of deprivation in 2011. Persons living in the Southern and Eastern Region also experience a statistically significant change in their deprivation rates (20.9% in 2010 to 23.7% in 2011). Actions co-funded 2007-13

Under the Human Capital Investment Operational Programme 2007 – 2013, funding was allocated for the Equality for Women Measure (EWM) which was designed to foster gender equality with a particular focus on women's engagement in the labour market and their engagement as entrepreneurs.

The economic downturn limited the scope of the Measure and its principal activities were targeted at actions to increase women's employability with a particular focus on women from disadvantaged communities. A range of small projects under the heading "Strand 1",

(delivered in short cycles, over periods of up to four years) provided developmental training including confidence building for significant numbers of women to help them to attach or reattach to the labour market or to progress to mainstreaming education and training opportunities

A further Strand range of initiatives focused on women's capacity as entrepreneurs. This Strand of the Measure encompassed three types of action. Community groups were funded to provide developmental training for budding and early stage entrepreneurs.

Two further initiatives were the annual National Women's Enterprise Day which is a networking and development event organised by the City and County Enterprise Boards annually and attracting over 250 participants each year.

Finally and following a public call for project proposals to foster female entrepresurship in 2007, the very successful "Going for Growth" project has delivered mentoring from some of Ireland's most successful female entrepreneurs (on a pro bono basis) to women entrepreneurs who have the capacity to grow their businesses in terms of employment and/or exports. This training and development initiative offers participants a unique learning environment with a peer-led approach, based on the shared experiences of both the lead entrepreneur and other participants facing common challenges.

In the period to end 2012, over 8,900 women had undertaken training under Strand 1 of the Measure and of these over 2,400 were still in employment or mainstream education a year after they had completed their EWM training. A significant number of the participants were inactive in the labour market before they began the programme.

In the period to end 2012, over 2,000 women had participated in the community-based entrepreneurship initiatives. About 20 % moved to early stage entrepreneurial activity by the end of 2012. National Women's Enterprise Day has taken place annually for five years and is again over-subscribed in 2013. Participants always rate the event very highly – over 68 % rating the event in its totality as "excellent" in 2012. It also rated highly as an opportunity for networking.

Relevant Evaluation Findings

The EWM received positive comment during the Mid-Term Evaluation and the Department of Justice and Equality is currently undertaking an in depth evaluation/

Delivery of the Measure was challenging because of the restriction in budgets, brought on by economic uncertainty and the activity should be mainstreamed in a Department with a more specific labour market focus in the future.

The current evaluation is likely to show that there is an ongoing need to provide selfdevelopmental training for women who have been detached from the labour market to provide them with the confidence to return. Such training is also likely to be of benefit to women recipients of social welfare benefits who are being encouraged to seek employment and training opportunities. However, it is also likely to suggest that the provision of such training should be mainstreamed and delivered as an element of wider labour market activation initiatives to ensure a closer linkage between these clients and other labour market activation measures in the future.

Public Consultation

While no public consultation on the matter of women's economic engagement has taken place, a number of participants at the Irish Presidency Conference on "Women's Economic Engagement and the Europe 2020 Agenda held in April 2013 commented that there are no opportunities for women who are detached from the labour market to avail of State provided occupational training and reskilling, such as is provided for unemployed of both sexes and for those on the live register.

4.10 Investing in Education, Skills and Lifelong Learning by Developing Education and Training Infrastructure 'EU Policy framework' EU2020 The importance of education for EU growth and prosperity has been increasingly recognized by EU policy makers. Education and Training 2020, the strategic framework for European cooperation in education and training builds on its predecessor, the Education and Training 2010 work programme. It provides common strategic objectives for Member States as well as common working methods with priority areas for each periodic work cycle. Education has increasingly revealed itself, in recent years, as key to Europe's success. As such, education constitutes a core plank of the Europe 2020 strategy.

Ireland has and continues to support the highlighting of education as key to future prosperity, working alongside other Member States to further develop education and training policy and best practice at EU level under Education and Training 2020. Ireland has also engaged fully with education and training developments under the Europe 2020 Strategy, adopting challenging national targets based on the Europe 2020 education targets for higher education attainment and reducing early school leaving. As is the nature of EU cooperation in education and training, many of the areas of priority at EU level reflect areas where reform is ongoing and of high priority. The EU2020 strategy sets out a two-part education target for 2020: that the share of early school leavers should be under 10% and at least over 40% of 30-34 year olds should have a tertiary degree.

A strategic framework for European cooperation in education and training (ET 2020)

These conclusions provide for a **strategic framework** for European cooperation in education and training up until 2020.

The main aim of the framework is to support Member States in further developing their educational and training systems. These systems should better provide the means for all citizens to realise their potentials, as well as ensure sustainable economic prosperity and employability. The framework has four strategic objectives:

- making lifelong learning and mobility a reality
- improving the quality and efficiency of education and training
- promoting equity, social cohesion and active citizenship
- enhancing creativity and innovation, including entrepreneurship, at all levels of education and training

The framework also focuses on implementation of European cooperation in education and training from a lifelong learning perspective, whereby the open method of coordination (OMC) is used more effectively and synergies are developed between the different sectors. The importance of education for EU growth and prosperity has been increasingly recognized by EU policy makers. Education and Training 2020, the strategic framework for European cooperation in education and training builds on its predecessor, the Education and Training 2010 work programme. It provides common strategic objectives for Member States as well as common working methods with priority areas for each periodic work cycle. Education has increasingly revealed itself, in recent years, as key to Europe's success. As such, education constitutes a core plank of the Europe 2020 strategy.

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'Irish policy framework'

Our economic recovery is highly dependent on a skilled labour force. Having the right skills and talent base will be a key driver of recovery in our economy and labour market. A welleducated, highly-skilled labour force will enable us to compete in international markets, to attract foreign direct investment, to grow the number of better quality and better paid jobs, and to develop the knowledge economy.

Aligning our education and training system to equip people with the skills and competencies required by enterprise is essential. Ensuring that those going through our education and training system are benefitting from up-to date curriculum, accredited work placements and that as well as being equipped with technical skills for their occupation they have the necessary employability skills required to progress to a job is vital.

Education and Training provision in 2013

To complement the Government's Action Plan for Jobs and the Pathways to Work policy initiatives including INTREO, the Irish Government will provide continued investment in over 430,000 part-time and full-time places across the further and higher education and training sectors. The long-term unemployed have been targeted as a specific priority along with young unemployed individuals.

Currently, across the range of education and training programmes for which data is available it is estimated that some 18% of places are made available to the long-term unemployed. In 2013 of the 51,000 planned places available to the long-term unemployed across the range of programmes some 24% of the places on these programmes will be available to the long-term unemployed. These programmes will also make provision for people who are unemployed for less than a year and help equip them for employment and prevent them becoming long-term unemployed

Included in this significant investment is the introduction and development, through the assistance of various stakeholders, of new targeted programmes designed to provide interventions to tackle unemployment, particularly youth unemployment, and the skills shortages in particular elements of the economy.

The Government recently launched the "Skills Plus" brand which brings together some of the range of enterprise-focused reskilling initiatives that have been established. The "Skills Plus" suite of initiatives includes The Springboard Programme; programmes run by Skillnets; the Momentum Programme; and, the ICT skills conversion initiative, which was introduced as part of the ICT Action Plan.

The joint industry Government ICT Action Plan published in 2012 represents a whole of education response to address key shortage of ICT skills by building the domestic supply of high quality ICT graduates. Progress in meeting key targets in the Plan is ahead of schedule with a doubling of core level 8 graduate output now expected to be achieved by 2015 instead of Action Plan target date of 2018. Implementation of curricular reform at primary and second level is also increasing the mathematical proficiency of students enrolling on STEM programmes at third level.

The Expert Group on Future Skills Needs, funded by the DES plays a key role in advising on future enterprise skills needs and emerging gaps. As well as providing a valuable input to education policy and the development of course curricula by individual institutions, EGFSN research also provides the basis for the selection of programmes for new targeted reskilling

interventions introduced in the higher education sector since 2011 in order to respond to the skills needs of enterprise and support jobseekers into employment:

As part of the joint Government-Industry ICT Action Plan, almost 1,500 places have been made available since 2012 on intensive honours degree level ICT skills conversion programmes. The programmes, which are available to graduate jobseekers, deliver two intensive academic semesters in participating higher education institutions and a work placement with a collaborating company.

The Springboard programme strategically targets funding of free part time higher education courses for unemployed people in areas of identified skills needs such as ICT, Pharmachem and International Financial Services. More than 10,000 places have been provided under the two rounds of the programme that issued in 2011 and 2012. An additional 6,000 places are currently being rolled out under the third phase of the programme which was launched in June 2013. Programmes that are selected for Springboard funding must be in area of identified enterprise skills needs based on Expert Group on Future Skills Needs research and industry input.

These complement other initiatives such as JobBridge and have all been established to equip the unemployed with relevant skills.

In addition, the establishment in 2013 of SOLAS, the new Further Education and Training Authority will facilitate a coherent integrated strategic national response across the further education and training sectors and will ensure a greater focus on the evolving skill requirements of the unemployed and of industry.

Higher Education

The 'National Strategy for Higher Education to 2030', launched in 2011 provides the policy framework for the development and modernisation of the Irish higher education system. The recommendations of the Strategy aim to increase the quality and flexibility of the system to ensure that it is responsive to the needs of an increasingly diverse cohort of students.

In May 2013 the Minister for Education and Skills announced a major re-organisation of the higher education system and a new framework for system governance. The changes will create a more dynamic, responsive, diverse and high quality higher education sector.

The National Strategy recommended that funding of the higher education system should be closely related to the delivery of performance outcomes that are aligned to national priorities and key objectives for the higher education system. Government's national priorities, key system objectives and key performance indicators across the range of all higher education activity for 2014-16 have now been clearly outlined to the HEA and to the higher education institutions. The HEA will report on the performance of the system as a whole to the Department on annual basis. A new process of strategic dialogue to agree performance compacts aligned with performance funding with the higher education institutions is now being rolled out as part of the overall framework

One of the core objectives under the new Performance Framework for the higher education system is meeting Ireland's human capital needs across the spectrum of skills areas through both core funding and specifically targeted initiatives. The HEA will report annually to the Minister on the performance of the system against a range of KPIs, including employer satisfaction with graduates and the level of engagement with institutions.

The Irish Government is also committed to reviewing the Irish Apprenticeship training model, with a view to providing an updated model of training that delivers the necessary skilled workforce to service the needs of a rapidly changing economy.

As regards the EU 2020 targets, the percentage of early school leavers in Ireland fell from 11.4% in 2010 to 10.6% in 2011.4 This represents positive progress towards achievement of Ireland's 8% target. The latest Eurostat data show that Ireland's tertiary attainment rate for 30-34 year olds was 49.7% in 2011. The rate for 2012 is currently estimated at 50.9%. Ireland has the highest rate for this indicator of all EU27 countries since 2009. In the tertiary attainment rate for 25-34 year olds indicator presented by OECD, Ireland ranks 1st in EU27 and 4th in OECD. This increase is due to the high participation rates for school leavers that have been growing steadily over the last decade, and the growing participation of adults in higher education.

The policy framework aimed at addressing the EU 2020 targets is multi-stranded and covers a wide range of areas.

A number of measures have been put in place to support achievement of the **early school leaving target**, including:

• Implementation of the national action plan, "Delivering Equality of Opportunity in Schools" (DEIS).

DEIS focuses on addressing the educational needs of children and young people from disadvantaged communities, from pre-school through second-level education. 860 primary and second-level schools are participating in DEIS. All of these schools are eligible for a
range of additional supports to assist them in working to improve attendance, retention and educational outcomes for their students.

Evaluations:

There is clear evidence that the DEIS programme is having a positive effect on tackling educational disadvantage. Separate studies by the Educational Research Centre and the Department's Inspectorate, published in January 2012, show that improvement is taking place in DEIS schools, both at individual and school level, in learning achievements and attendance levels of pupils.

Retention:

The latest Report on Retention Rates in second-level schools presents the retention rates of pupils who entered the first year of the Junior Cycle in the years from 2005 to 2006 and completed second level schooling no later than 2012.

The report shows that:

- the percentage of students sitting the terminal Leaving Cert examination has risen by more than 6% to 90.2% in 8 years.

- the average Leaving Certificate retention rate in DEIS schools increased by almost 7 percentage points from 73.2% to 80.1% in the same period.

• Integration of educational welfare services:

The National Educational Welfare Board (NEWB), a statutory body under the aegis of the Department of Children and Youth Affairs, is developing a new Integrated Model of Service Delivery called 'One Child, One Team, One Plan' which involves the Home School Community Liaison Scheme (HSCL) and the School Completion Programme (SCP) which are key components of the DEIS programme as well as the Education Welfare Service and schools. This new service model is designed to facilitate a standardisation of service delivery across the country whilst also taking into consideration the need for flexibility given the unique nature of difficulties presenting in individual children's lives.

A consultation process around 'One Child, One Team, One Plan', undertaken by the Board with staff, schools, trade unions, management representative bodies and parent representative bodies, concluded at the end of November 2012. Both the draft practice model and related schools guidance document are publicly available on www.newb.ie.

The Board envisages that the model will be finalised shortly with implementation to commence this year.

• National Strategy to improve literacy and numeracy among children and young people.

The Literacy and Numeracy Strategy will continue to be rolled out in 2013 at a cost of €6.5 million. This investment was protected in Budget 2013.

The Strategy was launched in July 2011. It responds to areas of weakness identified in national studies and sets ambitious targets covering early childhood, primary and secondary education. All primary and post-primary schools are participating in the implementation of the strategy, and are required to set targets for the improvement of literacy and numeracy skills. Children who do not learn to read, write and communicate effectively are more likely to leave school early and, hence, the strategy will support achievement of the national early school leaving target.

Significant progress has been made since the launch of the Strategy. The time spent on literacy and numeracy at primary level has increased and the revision of the English and Irish curricula is being prioritised in Junior Cycle Reform (see below). Major changes are being made to initial teacher training and literacy and numeracy units are now in place in the National Teacher Induction Programme. School self-evaluation is being rolled out and new requirements have been introduced on standardised testing, including the return of aggregate data to the Department of Education and Skills. A national programme of professional development for primary and second level teachers is underway.

Reform Junior Cycle of Secondary Education

The Minister for Education and Skills published the Framework for Junior Cycle Reform in October 2012, which will see students rather than examinations at the centre of the new approach to assessment. The new Framework amounts to a radical shake-up of the three year junior cycle programme for young people from age 12 - 15/16 years.

National research of the current Junior Cycle has highlighted that some students are:

- Not progressing in first year
- Disengaging in second year
- Not developing their particular skills and interests.

The new Junior Cycle will place the needs of students at the core of teaching and improve the quality of their learning experiences and outcomes. It will also contribute to tackling the problem of early school leaving. The new approach should enable all students to achieve their full potential and be properly challenged in their learning, thereby raising educational standards. To achieve this, assessment must become a key part of teaching and learning

across the three years of junior cycle, and provide high quality feedback to students and parents. The opportunities for such approaches to assessment are even greater in situations where assessment is no longer high-stakes.

The terminal Junior Certificate Examinations will be replaced with a school-based model of assessment with an emphasis on the quality of students' learning experience. This new form of assessment will be introduced on a phased basis over 8 years. All subjects will be recast, beginning with English, which will be the first subject to be introduced to students entering post-primary education in 2014.

This increase in **tertiary attainment levels** is due to the high participation rates for school leavers - rates that have been growing steadily over the last decade, and the growing participation of adults in higher education. Combined full- and part-time enrolments in publicly funded higher education institutions rose by 1.6% between the 2010/11 and 2011/12 academic years. Combined full- and part-time graduate numbers increased by 3% between 2010 and 2011. Part-time mature enrolments increased by over 1,000 (or 3.5%) while the number of full-time mature new entrants declined by some 500. This is not surprising, as part-time provision is often more suitable to the needs of mature new entrants and, as the range and availability of part-time courses increases (such as the part- time labour market relevant programmes under the Springboard Initiative), they may opt for these in preference to full-time courses.

Since the onset of recession, there has been a notable rise in the participation of males in higher education. Undergraduate new entrant gender trends show that the number of male new entrants continues to grow at a faster rate than female, from 2007/08 to 2011/12 there has been a 22.6% increase in male new entrants and just a 5.9% increase in female new entrants over the same period. Males now comprise 50.2% of new entrants compared to 46.6% in 2007/08.

The *National Strategy for Higher Education to 2030*, published in early January 2011, provides a framework for the development of the higher education sector for the next twenty years. An Implementation Oversight Group, established in February 2011, is supervising the implementation of the Strategy, which is taking place in partnership with the sector and other stakeholders. Progress to date and priority areas for 2013 are being regularly updated on www.education.ie.

Engagement with enterprise is one of the core pillars of the National Strategy and a range of recommendations to ensure the system continues to respond to enterprise needs is being implemented. This includes structured employer surveys, increased work placement

opportunities, staff mobility into enterprise and a renewed focus on generic skills. The Higher Education Authority (HEA) has also published guidelines for the establishment of higher education institutional clusters at a regional level to support enterprise development and employment needs.

The first pilot national survey of employers, which was completed in December 2012, showed that over 75% of companies were confident that graduates have the right workplace and transferable skills and relevant subject or discipline knowledge.

The Department of Education and Skills has also introduced two new competitive funding streams at higher education level that address specific skills needs of industry, support jobseekers into employment and help increase the skills profile of the labour force.

The Springboard programme strategically targets funding of free part time higher education courses for unemployed people in areas of identified skills needs, such as ICT, Pharmachem and International Financial Services. More than 10,000 places have been provided under the two rounds of the programme to date. A new call for proposals, which was issued at the end of February, is expected to provide for an additional 5,000 places in 2013. A first stage evaluation report, published in February 2012¹⁹³, showed that 70% of participants were male and 20% had previously been employed in construction. A second stage evaluation report has recently been completed and it shows that 30% of participants were back in work within 6 weeks of completing a Springboard course and that 40% were back in work within 6 months of completion.

The joint Government-Industry ICT Action Plan¹⁹⁴ has been developed as a direct response to identified ICT skills shortages and contains a comprehensive range of short medium and long-term measures to build the domestic supply of ICT graduates. As part of the Plan, in February 2013 more than 760 new places were made available on the second phase of ICT graduate conversion courses, designed and delivered in partnership with industry. This is in addition to the more than 700 places that were provided in 2012. 77% of participants on the 2012 programmes were male and 25% had been previously employed in the construction sector.

In addition, the Minister for Education and Skills recently announced a package of measures to improve the transition between second level and higher education, entitled '*Supporting a*

¹⁹³ www.hea.ie/en/node/1463

¹⁹⁴Joint Government – Industry *ICT* Action Plan: Meeting the High Level ICT Skills Needs of Enterprise in Ireland:www.education.ie/en/Publications/Policy-Reports/ICT-Action-Plan-Meeting-the-high-level-skills-needs-ofenterprise-in-Ireland.pdf

Better Transition from Second Level to Higher Education: Key Directions and Next Steps'. This initiative will, among other things, contribute to achieving improvements in retention and completion rates both at second level and in higher education. It is envisaged that the full plans and timing with regard to the key measures will be available by the end of 2013 Under Ireland's presidency of the EU in education & training, the Irish presidency drove reform of the ET 2020 OMC process, to better link ET 2020 to EU 2020, and to better target ET 2020 efforts toward challenges facing member state education systems.

Trends

The link between education and employment is demonstrated in **Figure 51** below, where 45% of working age adults in employment in Quarter 3 of 2011 had a third level qualification. In general, females were better educated than males in April 2011. One third of females aged 15 and over had a third level qualification, compared with only 27 % of males. Just over 36 % of males were not educated to a higher level than lower secondary, whereas only 31 % of females had a similar level of education¹⁹⁵.

Figure 51: Ireland's Percentage of Working Age Adults in Employment by Level of Highest Qualification (Aged 15-64) - Quarter 4 2011

¹⁹⁵ CSO (2012), Profile 3 – At Work.



Source: Forfás & SMLEU (FÁS) analysis of CSO data

Figure 52 shows that unemployment in the fourth quarter of 2011 was highest among those with a lower secondary level qualification or less across the three age groups, particularly those under 25 years. Those with a third level qualification or above have a lower rate of unemployment across all age groups, reducing as age advances. Among women, labour force participation rates increase with level of education. For women educated to primary level, just over one quarter were participating in the labour force either at work or unemployed. In contrast, over half of women educated to secondary level were in the labour force. Labour force participation was over 75 % for women with third level qualifications.

Figure 52: Ireland's Unemployment Rate by Education Attainment & Age (Qtr. 4, 2011)





The percentage of Irish early school leavers fell from 11.4% in 2010 to 10.6% in 2011^{196} and was approximately 3% lower than the EU27 national average. This is less than 2% above the Europe 2020 target (see Figure 53). The percentage of students sitting the terminal Leaving Certificate examination has risen by more than 6% to 90.2% in the past 8 years.



Figure 53: Ireland's Early School Leavers' Rates 2011 (NUTS I)

Source: Eurostat, School enrolment and early leavers from education and training

The percentage of unemployed early school leavers in 2011 was more than twice the proportion of those classed as "other". Figure 54 also shows a marked increase in the

¹⁹⁶ Government of Ireland (2013), Ireland's National Reform Programme – 2013 Update.

percentage of unemployed early school leavers between 2008 and 2011. This, in part, reflects the collapse of the construction sector which had a high in-take of unskilled workers.



Figure 54: Ireland's Early School Leavers & Others Aged 18-24 classified by ILO Employment Status (%)

Source: Eurostat, Education statistics at regional level Source: CSO, Census 2011

Figure 55 shows that Ireland's tertiary attainment rate for 30-34 year olds is strong at 49.7% in 2011, one of the highest in the EU^{197} . This is just over 10% off the 2020 target. Ireland has the highest rate for tertiary attainment rate for 30-34 year olds of all EU27 countries and ranks 4th in OECD. High participation rates for school-leavers and the growing participation of adults in higher education are responsible for the increase. This increase is due to the high participation rates for school leavers that have been growing steadily over the last decade, and the growing participation of adults in higher education. Combined full- and part-time enrolments in publicly funded higher education institutions rose by 1.6% between the 2010/11 and 2011/12 academic years. Combined full- and part-time graduate numbers increased by 3% between 2010 and 2011. Part-time mature enrolments increased by over 1,000 (or 3.5%) while the number of full-time mature new entrants declined by some 500.

¹⁹⁷ http://www.eurireland.ie/news/irish-higher-education-participation-an-eu-leader.685.html



Figure 55: Ireland's Proportion of the Population Aged 30-34 with a Tertiary Degree 2011

Since the onset of recession, there has been a notable rise in the participation of males in higher education. Undergraduate new entrant gender trends show that the number of male new entrants continues to grow at a faster rate than female, from 2007/08 to 2011/12 there has been a 22.6% increase in male new entrants and just a 5.9% increase in female new entrants over the same period. Males now comprise 50.2% of new entrants compared to 46.6% in 2007/08.

Ireland has a higher proportion of graduates in Mathematics, Science and Technology (MST) in comparison with the EU27 average. In 2010, the number of graduates per 1000 population aged 20-29 in MST was 20.1. This compares with a European average of 12.5 graduates. In recent years the number of MST graduates has fallen from a peak of 24.8 in 2005.

Survey work undertaken by Accenture¹⁹⁸ suggests that Ireland has skills gaps in certain areas. With an unemployment rate of 14% there is an excess of people who are qualified to work in industries that currently offer limited job opportunities and are unlikely to offer many opportunities in the short-to-medium term e.g. construction. However at the same time, Irish

Source: CSO, Census 2011

 $^{^{198}} http://www.accenture.com/SiteCollectionDocuments/Local_Ireland/PDF/Accenture-Closing-the-Skills-Gap-in-Ireland.pdf$

companies are experiencing notable talent shortages in the country's growth sectors, particularly for higher-level, specialised roles¹⁹⁹.

The research recently undertaken by Accenture showed that across multiple sectors (including science, technology, engineering and high-tech) employers are struggling to find the right talent; for instance, 43% are struggling to obtain technology skills, and 41% still have open mathematical and engineering positions. These findings are consistent with research published in the National Skills Bulletin in 2012. Forfás found that difficult-to-fill vacancies persist in the Irish labour market. Moreover, they are primarily confined to specialised posts in the information and communications sector and high-tech manufacturing (mostly bio-pharma and more traditional manufacturing segments such as agriculture).

Employers are also concerned about future skills gaps, suggesting that innovation, technology and R&D will be even more important for their business in the next three years than they are now. Despite 43% of employers identifying R&D as a vital skill, only 8% say they have this skill in their workforce. When asked to identify the types of technical skills needed for the future. employers ranked following highest: technology the areas (56%), business/management (55%) and R&D (43%). When respondents were asked to identify the key aptitudes required for the future they ranked the following highest: leadership (57%); people management/teamwork (51%), and innovation and entrepreneurship (50%). 20% of employers cited foreign languages as a key aptitude required for the future. Ireland has a low level of students learning a foreign language due to the fact that it is not compulsory either in lower or upper secondary education²⁰⁰

As much as 71% of the employers surveyed confirmed that they have a dedicated budget for staff training and development. However almost half of the employees interviewed stated that their company does not have, or they are not aware of, a learning and development agenda. 76% of employees believe that training is essential to career development, yet 28% stated that they received no training in the past year. Only 33% said they received up to a week of training in the current year.

¹⁹⁹ CEC (2013), Commission Staff Working Document: Digital Agenda Scoreboard 2013, p.86.

²⁰⁰ Eurostat (2012), Key Data on Teaching Languages at School in Europe.

Findings from the research also suggest that employers are not treating their learning agenda as a strategic priority and are likely missing an opportunity to build and deliver training and development initiatives that could help satisfy their future skills needs.

Human Capital Investment Operational Programme (2007-2013)

The Undergraduate Skills Programme's objective is to enhance the quality of labour supply through continued investment in education and training. The measure meets the recurrent costs of the additional third level places being provided to meet the skills shortages as identified by the various reports of the Expert Group on Future Skills Needs (EGFSN) and the joint education/industry Task Force on the Supply of Technicians. The Measure therefore is particularly targeted at increasing the supply of graduates in the Information and Communications Technology area (ICT), Engineering and the Chemical and Biological Sciences area.

The number of participants on the identified ESF funded Undergraduate Skills Programme continue to increase, following the global downturn in the ICT industry in the early 2000s. Following on from a review of courses considered eligible to be included in the Undergraduate Skills Programme, the total number of "additional" student numbers enabled by ESF skills funding reached c. 3,700 in 2011/12 over baseline levels in the university sector, with an estimated increase of 6,800 in the Institute of Technology sector. These increases compare favourably with the HEA sector in general.

The Expert Group on Future Skills Needs (EGFSN) has continued to identify that the demand for information and communications technologies (ICT) skills in Ireland is exceeding the supply of such skills.

The HEA, working with the Department of Education and Skills and the Expert Group on Future Skills Needs has sought new ways to take advantage of opportunities and address challenges through an ICT Skills Action Plan. In 2011 and 2012 the Department and HEA launched an 'ICT Skills Programme' to supported the delivery in partnership with industry of up to 2,000 places on intensive one-year graduate conversion courses in ICT by higher education providers around the country.

The ESF-funded Undergraduate Skills Programme has played and continues to play a crucial role in attempting to meet the skills shortages identified particularly in the ICT area and the Chemical and Biological Sciences area. The technology sector in Ireland is thriving (e.g., Google, Facebook and Twitter have their European HQ in Dublin). There is a growing multinational technology presence in Ireland and a vibrant indigenous software sector. Highly skilled individuals are needed to maintain Ireland's competitive advantage and to meet the demands of the rapidly demanding sector. It is essential that Ireland continues to produce quality skilled graduates needed for the technology sector.

It is widely accepted that ever increasing ICT skills numbers, underpinned by ESF support, will be crucial in driving employment growth opportunities in Ireland where the right quality, quantity and diversity of skills are essential to attract and embed the broad range of industries which fit under the ICT umbrella. The support of ESF funding in this critical area has been very beneficial in that it has facilitated funding to be targeted at a specific group of students (ICT) where a crucial skills gap have been, and continue to be, identified.

Overall enrolments on programmes continue to improve and it is considered that the supply of good quality ICT graduates will be a crucially important factor to the improvement of the Irish economy. The ESF funded Undergraduate Skills Programme will continue to play a vital role in addressing some of the remaining challenges in particular, the ongoing attraction and retention of students on these programmes. Various new approaches and initiatives have been undertaken to improve the attraction and retention of students and it is hoped that the success of these initiatives will be evermore evident from 2012 on.

A Mid-Term Evaluation of the Human Capital Investment Operational Programme 2007-2013 carried out by Fitzpatrick Associates noted the following: -

Regarding impact, there is a widespread national consensus that third-level education generally, and the relevant courses in particular are key to both Ireland's short to medium-term recovery and its long-term prosperity. This has been emphasised in successive reports, most recently that of the Higher Education Strategy Group of January 2011 (the Hunt Report). It is also consistent with relatively low unemployment rates among graduates of the designated courses. The latter was 11% of the 2009 cohort as measured in 2010.

In addition, an expenditure review of the predecessor programme was undertaken by the Department of Education and Science and published in 2007. This related to the Programme as a whole, including the ESF co-financed elements. This report was positive in relation to the rationale, efficiency and effectiveness of the Programme, and of its impact. In relation to the latter, it cited survey findings that the electronic hardware sector and the foreign-owned part of the software sector rely heavily on expectations as to the future supply of graduates in relevant disciplines created by the Programme, when making investment decisions, and it concluded that there was an evident link between the Programme activities and the buoyancy of the economy at that time. Notwithstanding the dramatic changes to Ireland's economic fortunes that have occurred in the intervening period, it is still the consensus view of analysts close to the sector that a focus on continued provision of critical technical skills is essential in the current economic climate, and cite evidence that companies in key high technology sectors still report recruitment difficulties even in the current climate, inter alia because parts of the high technology sectors have continued to be buoyant export-led sectors in contrast to much of the remainder of the domestic economy. http://www.esf.ie/en/publications_evaluation.aspx

Progress towards the National Skills Strategy Targets

The key proposals in the *National Skills Strategy*²⁰¹ for 2020 are that:

- 48 % of the labour force should have qualifications at National Framework of Qualifications (NFQ) levels 6-10 – i.e. from higher/advanced certificate to PhD level;
- 45 % should have qualifications at NFQ levels 4 and 5 Awards equivalent to higher secondary level education; and
- The remaining 7 % are likely to have qualifications at NFQ levels 1 to 3 (equivalent or below Junior Certificate) while aiming to make the transition to higher levels of educational attainment.

²⁰¹ http://www.egfsn.ie/media/egfsn070306b_national_skils_strategy.pdf



The percentage of those in the labour force with Higher Education qualifications (NFQ Levels 6-10) has increased from 33% in Q2 2005 to 42% in Q3 20122. Specifically, there are approximately 245,000 more people in the labour force in Q3 2012 with Higher Education Level qualifications than there were in Q2 2005. The prospects for meeting the target of 48% of the labour force possessing a Higher Education Level qualification by 2020 set out in the National Skills Strategy would appear to be good based on current trends.

In relation to Levels 4 & 5 (Higher Secondary including Leaving Certificate), the percentage rate in Q3 2012 remains at 40%, the same level as in Q2 2005, there remains a challenge in closing the gap with the National Skills Strategy target at these levels. In absolute terms, the number of those within the labour force with Higher Secondary education has increased by around 48,000 since Q2 2005.

This is the net effect of:

 improvements in progression and retention rates: The percentage rate for early school leavers has declined from 13% in 2006 to 9% in 2011.

- the percentage of the population aged 20-24 with at least Higher Secondary or equivalent level education increased from 86% in 2005 to 89% by 2011, compared to the 2020 target of 94%.
- retention at Leaving Cert for the latest available cohort of entrants (2005-2006 entry cohort) has also risen from 81.3% (in 1996) to 90% in 2012, compared to a 2020 target of 90%.

The following table summarises progress in each of the headline National Skills Strategy targets.

Progress towards achieving the National Skills Strategy targets				
NSS Target	National Skills Strategy Baseline	Current Position	Progr ess	Data source
• 48 % of Labour Force at levels 6-10	33 %	42 %	+9 %	CSO QNHS Q3 2012
• 45 % of Labour Force at levels 4-5	40 %	40 %	0%	CSO QNHS Q3 2012
• 7 % will be at levels 1-3	27 %	18%	+9 %	CSO QNHS Q3 2012
 94% of 20-24 population should have at least NFQ Levels 4/5 	86%	89%	+3%	CSO Q2 2011, Module on Educational Attainment
• The retention rate at Leaving Certificate should reach 90 % by 2020.	81.3%	90 %	+8.7 %	Department of Education
• The progression rate to Third Level should increase to 72%	55%	69%	+14%	Higher Education Authority (HEA)

Education

Early School Leavers

As shown in the table below, 9% of all 18-24 year-olds had attained, at most, lower secondary education qualifications in quarter 4 2012. This is the lowest share of early school leavers observed over the period quarter 4 2008 - quarter 4 2012.

Males were more likely than females to be early school leavers. In quarter 4 2012, 10% of males in the relevant age cohort were early school leavers compared to 7% for their female counterparts. Nonetheless, the gender gap has narrowed over the period quarter 4 2008 to quarter 4 2012: while the share of male early school leavers was near double that of females in quarter 4 2008, by quarter 4 2011, the gap had been reduced to just three percentage points.

Early School Leavers as a Percentage of 18-24 Year-Olds by Gender, Quarter 4 2008-Quarter 4 2012

	Q4 2008	Q4 2009	Q4 2010	Q4 2011	Q4 2012
Male Early School Leavers	15%	16%	13%	12%	10%
Female Early School Leavers	8%	9%	9%	9%	7%
Total Early School Leavers	11%	12%	11%	11%	9%

Source: SLMRU (FAS) Analysis of CSO (QNHS) data

The share of early school leavers across the EU 27 countries in 2011 was, on average, 13.5%. Ireland, with an early school leaver rate of 10.6%, compares favourably internationally, ahead of countries such as the United Kingdom (15%), France (12%) and Germany (11.5%). Nonetheless, eleven countries have early school leaver rates that are lower than Ireland's, with some (i.e. Slovenia, Czech Republic, and Slovakia) having an early school leaver rate less than half that observed for Ireland.

Higher Education

The *Monitoring Ireland's Skills Supply 2013²⁰²* report highlights the following key points in relation to Higher Education:

CAO Acceptances: there were 46,300 CAO acceptances (NFQ 6-8) in 2012, a 1% increase on 2011; between 2011 and 2012, acceptances for level 6 courses declined by 5%, the number of acceptances at level 7 declined by 1% while level 8 acceptances increased by approximately 2%

²⁰² http://www.egfsn.ie/media/05072013-Monitoring_Ireland's_Skills_Supply_2013-Publication.pdf

- Graduate Output: there were 41,400 graduates at levels 6-8 in 2011, an increase of 3% on 2010; output increased across all levels, with a 10% increase at level 6 and increases of 3% and 2% at levels 7 and 8 respectively
- **Outlook:** output at level 8 is expected to continue to increase in the short to medium term, albeit at a slow pace while output at levels 6 and 7 will likely remain relatively unchanged; major fluctuations in overall output are not anticipated in the medium term although varying trends are emerging across disciplines
- Engineering: output has been increasing since 2009 and is likely to continue to do so in to the medium term due to increases in CAO acceptances and enrolments
- **Construction:** this is the first year that a decline in output has occurred as the impact of the downward trend in the construction sector takes a belated effect; it is expected that the downward trend is due to continue in the medium term due to the continued decline in CAO acceptances and enrolments
- Computing: output continues to show significant growth with a 25% increase between 2010 and 2011; strong growth in CAO acceptances and enrolments suggest a continuation of this trend in the medium term
- Science: graduate output in this subject has remained relatively unchanged in recent years; enrolment and CAO acceptance data suggests signs of growth in the short term albeit at a low level
- With **graduation rates** of 22% (higher certificate/ordinary bachelor degree level) and 47% (honours bachelor degree level), Ireland ranks well above the OECD and EU 21 averages in terms of graduate output at undergraduate level.

Training

Apprenticeships

A new apprenticeship model is required to provide career and training opportunities for those not proceeding to third level.

A range of occupation specific and industry endorsed apprenticeship/traineeships are required beyond the traditional craft occupations to better reflect the range of roles and occupations in the economy. The range of occupations covered by the apprenticeship/traineeship should be widened out to encompass other means of developing training programmes with employers' involvement, like the traineeships model especially in services occupations (e.g. retail, hospitality, catering, healthcare, legal secretary) or other skilled trades not included within the current apprenticeship framework e.g. formal operative level traineeships (2yrs in Germany) and machinists (in parts of the US). This would lead to the new model embracing a number of other occupations. This would better reflect the current and future skills required in the labour market and the range of roles operating in the country. It would be in line with most other European countries. This could also help to increase the number of women who might participate. The focus should be on providing a wide range of apprenticeships to meet the needs of the economy and equip individuals for current or future job opportunities.

Areas of Identified Employment Demand

Although skills shortages continue to be primarily confined to niche skill areas and in most instances remain of low magnitude, the *National Skills Bulletin 2013*²⁰³ highlights the persistence of skills shortages in the areas of ICT, science, engineering, sales, marketing, business, finance and healthcare. Identified skills shortages include:

- ICT (software developers (web, cloud, mobile, database, games, data analytics, customer relations), project managers, user support, network security, testing and troubleshooting)
- Engineering (tool design, polymer technology, process engineering, QC, validation, mechanical, electrical and electronic, chemical, food)
- Science (R&D, science + business, science + sales, lab technicians)
- Business (purchasing, marketing, sales, business analysis/statistics)
- Finance (risk, regulatory compliance, accounting (solvency, financial management, multilingual technicians), fraud, credit control)
- Health (non-consultant hospital doctors, nurses (cardio, intensive care, geriatric, oncology, theatre))
- Sales (tech. sale, multilingual customer support, online sales and marketing)
- Craft (tool making, CNC machining)
- Transport (international supply chain management)
- Clerical (multilingual accounts, debt collection)

²⁰³ http://www.egfsn.ie/media/15072013-National_Skills_Bulletin_2013-Publication.pdf

Upskilling / Reskilling Jobseekers from Sectors Not Envisaged to Return to Previous Employment Levels

There is a strong element of structural unemployment where sectors such as construction and wholesale/retail are unlikely to recover to the levels on employment previously experienced and hence those laid off from these sectors will need to reskill/upskill to progress to employment in other sectors of the economy to fill on-going replacement demand (e.g. as people retire).

While expansion demand is low, progressing to employment is difficult as these jobseekers are competing with new graduates and trainees to the labour market. In particular, for those that have been out of work for a significant period of time guidance is essential regarding education/training and skills acquired to date and the most appropriate interventions to assist individuals progress to employment.

Recent Labour Market Initiatives

A significant number of education, training and work placement initiatives have been put in place for jobseekers to ensure that they are given the skills and competencies to work in areas of current and future skills demand.

Labour market activation initiatives, such as Springboard, the ICT Conversion Programme, Momentum and JobBridge, are providing opportunities for individuals to upskill or reskill in areas of identified skills needs. Continuous upskilling of our labour force to equip people with the skills and competencies required by employers, both now and for the future, is essential.

NFQ Level 8 ICT conversion Programme²⁰⁴

This programme has the involvement of employers in design, selection, delivery and the work placement of the jobseekers.

In a response to specific skills shortages for high-level ICT skills identified by the EGFSN research Addressing High-Level ICT Skills Recruitment Needs: Research Findings²⁰⁵, a joint

204 https://www.ictskills.ie/

²⁰⁵ <u>http://www.skillsireland.ie/publication/egfsnSearch.jsp?ft=/publications/2012/title,9406,en.php</u>

Government–Industry ICT Action Plan aimed at building the supply of high-level ICT graduates was launched. One of the key measures in the Plan is the roll-out, from March 2012, of more than 700 places on intensive NFQ level 8 higher diploma ICT skills conversion programmes by higher education providers in partnership with industry. Participants engage in a 9 month work placement as an integral part of the programme. Due to very positive initial evaluation and strong industry endorsement a second phase of the conversion programmes is being rolled out in 2013.

Springboard²⁰⁶

Springboard is a multi-annual fund which provides free part-time higher education courses to assist the unemployed and previously self-employed to upskill or reskill in areas of current and future skills need. There are currently 6,000 places on over 200 courses nationwide on offer.

In order to ensure that training programmes under Springboard are aligned with enterprise skills needs a guidance document was produced which provided detailed information on areas of current and future skills demand identified by the Expert Group on Future Skills Needs. The courses are in areas such as information and communications technology (ICT), manufacturing, international financial services, sales, and business start-up skills.

Momentum²⁰⁷

MOMENTUM will fund the provision of free education and training projects to allow 6,500 jobseekers (who are unemployed for 12 months or more) to gain skills and to access work opportunities in identified growing sectors.

Theme 1: Occupations in:	Information Communications Technology,
	Digital Media, Gaming,
	Telecommunications.
Theme 2: Occupations in:	Transportation, Distribution and Logistics,

²⁰⁶ http://www.springboardcourses.ie

²⁰⁷ http://www.momentumskills.ie/

	Sales and Marketing
Theme 3: Occupations in:	Health Care and Social Services,
	Manufacturing - Process Technicians,
	Natural Resources Energy Conservation,
	Food Processing and Food and Beverage
	Services
Theme 4 is	dedicated to under 25s and will provide a
	solid foundation for them to gain
	employment and/or continue in further
	education and training that will progress
	them into employment.

JobBridge²⁰⁸

JobBridge is the National Internship Scheme that provides work experience placements for interns for a 6 or 9 month period. The aim of the National Internship Scheme is to assist in breaking the cycle where jobseekers are unable to get a job without experience, either as new entrants to the labour market after education or training or as unemployed workers wishing to learn new skills. The Scheme will also give people a real opportunity to gain valuable experience to bridge the gap between study and the beginning of their working lives. The Scheme provides for up to 8,500 work experience placements in the private, public, voluntary & community sectors.

In general, the ESF Thematic Objectives are well suited to accommodate investment that will tackle the needs identified for the Irish labour market recovery.

4.11 Institutional Capacity

The final investment priority specified in the draft ERDF Regulation is support for enhancing institutional capacity. This is expressed, as follows: -

"enhancing institutional capacity and an efficient public administration by strengthening of institutional capacity and the efficiency of public administrations and public services related

²⁰⁸ http://www.jobbridge.ie/

to implementation of the ERDF, and in support of actions in institutional capacity and in the efficiency of public administration supported by the ESF".

The Commission Services' position paper on Ireland acknowledges that Ireland has a long experience of managing Structural and Cohesion Funds and that the capacity of the managing authorities is quite good. It states that there is a case for simplifying the cascade system.

The Commission Services' view on the priorities for CSF funds in Ireland does not include any proposals for inclusion of actions under thematic objective 11.

Current Situation

ERDF Managing Authorities

The ERDF Managing Authorities have 13 years' experience of managing Regional Operational Programmes, including the multi-fund Regional OPs 2000-06. These programmes have achieved a high level of delivery and fund absorption rates have been sufficient to fully draw down available EU funds.

Under the current programmes, ERDF technical assistance funding has been used to develop an IT system to meet the requirements of the regulation in terms of project level data, expenditure declarations and accounting for corrections and adjustments. Technical Assistance funding has also been used to cover the cost of providing training and guidance to intermediary and beneficiary bodies in relation to eligibility, public procurement, information and publicity, expenditure declarations and verification, maintenance of an adequate audit trail and applicable EU and national regulations. This is backed up by the provision of access to all relevant guidelines and regulations on the Managing Authorities' web-sites.

A workshop was also held with equality bodies and representatives of Departments and Agencies to improve the quality of activities in support of equality principles. The staff of the Managing Authorities has participated in EU and national level seminars and workshops in order to remain fully briefed on relevant structural funds management requirements.

Proposals have been drafted by the ERDF Managing Authorities to simplify the current cascade structure with regard to management verifications, which are carried out mostly by

the staff of Departmental intermediary bodies. The cascade structure has given rise to some administrative delays (as noted in the Commission position paper), inconsistencies in sampling methods and documentation of verifications and a heavy administrative burden on the bodies concerned. These proposals are currently under consideration by the Department of Public Expenditure and Reform. If such a revised arrangement were to be implemented, it would reduce the requirement for building administrative capacity within intermediate bodies to undertake extensive and effective management verifications.

As referred to in section 2.16, the Irish Government has published proposals for reform and strengthening of regional administration in Ireland, involving a reconfiguration of the 8 Regional Authorities and 2 Regional Assemblies into 3 Regional Assemblies with enhanced functions, underpinned by new legislation. It is not proposed that the new (third) Assembly when established, will take on managing authority functions for the 2014-2020 period and the existing NUTS territories remain in place for EU structural funds purposes. The potential exists to transfer knowledge and expertise to the new Assembly over the programming period and also to support the development of an Integrated Territorial Investment, as outlined in section 2.10, should the option of an ITI be progressed.

The Mid-Term Evaluations of the Regional OPs did not highlight any issues with regard to institutional capacity for the 2007-13 programmes and acknowledged that the management and monitoring arrangements were working well for the programmes and no difficulties were evident or were highlighted to the evaluators as being problematic.

(b) ESF Managing Authority

The ESF Managing Authority has considerable experience of managing ESF Operational Programmes, including EQUAL and EHRD OPs 2000-06. These programmes have achieved a high level of delivery and fund absorption rates have been sufficient to fully draw down available EU funds. Under the current programmes, ESF Technical Assistance involves monitoring the operational and financial progress of projects, advising them on the development of their activities, assisting projects to overcome obstacles to progress, preparing reports for the Department, disseminating information on the ESF Human Capital Investment Operational Programme 2007-2013, organising Programme Monitoring Committee meetings, informing and advising the Programme Monitoring Committee and the European Commission on the progress of the Operational Programme, etc. ESF technical

assistance also funds the operation (salaries and costs of the auditors who audit the Programme) of the ESF Audit Authority

The Mid-Term Evaluation of the ESF OP did not highlight any issues with regard to institutional capacity for the 2007-13 programmes and acknowledged that the management and monitoring arrangements were working well for the Programme and no difficulties were evident or were highlighted to the evaluators as being problematic. However, changes in management verification procedures and enhanced auditing requirements proposed by the EU will present significant challenges for the ESF Managing Authority in the upcoming Operational Programme period.

4.12 Integrated Urban Development

EU Policy Framework

The strategic aim of the urban dimension of cohesion policy for the 2014-2020 period is to reinforce the role of urban actions in support of territorial cohesion and Europe 2020 objectives, through an enhancement of the integrated approach and a renewed focus on sustainable urban development. One of the aims of the European Regional Development Fund (ERDF) is to support sustainable urban development through integrated strategies that tackle the economic, environmental, climate and social challenges of urban areas, including functional urban areas, taking account of the need to promote urban-rural linkages.

Integrated urban development policies are therefore proposed to have a significant role in delivering the Territorial Agenda (TA2020)²⁰⁹ and the Europe 2020 strategy. Since the ratification of the Lisbon Treaty, territorial cohesion has become a core pillar of EU cohesion policy. According to the key conclusion of the Fifth Report on Economic, Social and Territorial Cohesion²¹⁰, urban areas are recognised as engines of growth and hubs for creativity and innovation. Accordingly, urban areas add value and act as centres contributing to the development of their wider regions and rural hinterlands, and contribute to the polycentric and balanced territorial development of the EU. As noted by the Barca Report, this integrated approach to urban development is in accordance with a *place-based policy* approach aimed at tackling persistent under-utilisation of potential and reducing persistent social exclusion in specific places through external interventions and multilevel

²⁰⁹ CEC (2011), Territorial Agenda of the European Union 2020: Towards an Inclusive, Smart and Sustainable Europe of Diverse Regions.

^{210 C}EC (2010), Investing in Europe's Future: Fifth Report on Economic, Social and Territorial Cohesion.

governance²¹¹. Furthermore, urban problems, whether related to environmental degradation or to social exclusion, also call for a specific response and for direct involvement of the level of government concerned. Accordingly, TA2020 calls for an ambitious urban agenda to be developed as outlined in the Leipzig Charter on Sustainable European Cities, and the Marseille and the Toledo Declarations on Urban Development.

The overall direction or EU policy is therefore to strengthen the urban dimension in Cohesion Policy and to establish greater coordination between territorial and urban issues, to ensure that the two policies cross-fertilise and can support the implementation of the objectives in a mutual way. Member States are encouraged to integrate the principles of territorial cohesion into their own national sectoral and integrated development policies and spatial planning mechanisms. Financial resources should be identified more clearly to address urban issues and clearly identified in the programming documents. Sustainable urban development may be undertaken either through integrated territorial or through a specific Operational Programme, or a specific priority axis with an Operational Programme. An integrated strategy for urban development is cited in the Common Strategic Framework²¹² as one example of an Integrated Territorial Investment (ITI) which provides for inter-municipal cooperation in specific territories to ensure that investments are undertaken in a complementary manner.

At least 5% of the ERDF resources allocated at national level under the Investment for growth and jobs goal shall be allocated to integrated actions for sustainable urban development where cities, sub-regional or local bodies responsible for implementing sustainable urban strategies shall be responsible for tasks relating at least to the selection of operations. The indicative amount to be dedicated shall be set out in the Operational Programmes concerned. Taking into account its specific territorial situation, each Member State is required to establish in its Partnership Agreement the principles for the selection of urban areas where integrated actions for sustainable urban development are to be implemented and an indicative allocation for these actions at national level. The relevant Managing Authorities may decide, in consultation with the urban authority, the scope of tasks concerning the management of integrated actions for sustainable urban development which urban authorities shall undertake.

²¹¹ Barca, F. (2009), An Agenda For A Reformed Cohesion Policy: A place-based approach to meeting European Union challenges and expectations.

²¹² CEC (2012), Commission Staff Working Document: Elements for a Common Strategic Framework 2014 to 2020.

In addition, the Commission proposes to establish an Urban Development Platform comprising 300 cities throughout Europe, which will stimulate a more policy-oriented dialogue on urban development between the cities at European level and the Commission. This is intended as a mechanism for making the contribution of cities under cohesion policy to the Europe 2020 Strategy more visible, facilitating integrated and innovative actions for sustainable urban development and capitalising on the results.

Irish Policy Framework

The National Spatial Strategy (NSS)²¹³ was published in 2002 with the aim to achieve a better balance of social, economic and physical development across Ireland, supported by more effective planning (see Map 11). The original aim of the NSS was to provide a spatial framework to support the two National Development Plans (NDPs, those of 2000-2006 and 2007-2013). The NSS was heavily influenced by the European Spatial Development Perspective (ESDP)²¹⁴. In order to drive balanced development in the regions, the NSS proposed that urban centres of sufficient scale and critical mass will be built up through a polycentric network of nine 'Gateways' and nine 'Hubs'. In summary, the key objectives of the NSS are to:

- Sustain economic and employment growth;
- Improve competitiveness;
- Foster balanced regional development;
- Improve quality of life for all; and
- Maintain and enhance quality and diversity of natural environment and cultural heritage.

The NSS also seeks to support an all-island collaborative approach to strategic spatial planning particularly in the development of the Dublin/Belfast corridor and Letterkenny/ Derry/Londonderry area in the northwest. The development of the Gateways and Hubs was supported by some successful integrated urban regeneration schemes, most notably the Dublin Docklands. In order to support the implementation of the NSS, in 2008 the Government announced the established three-year €300 Gateway Innovation Fund (GIF) as a mechanism to bring about better co-ordination in Gateway development, supporting distinctive and innovative projects in Gateway areas and to drive the growth of critical mass

²¹³ DoECLG (2002), National Spatial Strategy for Ireland 2002 – 2020.

²¹⁴ CEC (1999), European Spatial Development Perspective (ESDP) - Towards Balanced and Sustainable Development of the Territory of the European Union.

in key urban centres. However, with the onset of the economic recession, the implementation of the GIF was deferred. Separately the two Regional Assemblies introduced grant schemes to utilise the European Regional Development Fund (ERDF) advances to the Regional Operational Programmes 2007-2013 to fund a number of Gateways and Hubs projects. These schemes funded Gateways and Hubs projects in the BMW Region providing €17 million in grant aid and Gateway projects in the S&E Region with over €11 million in grant aid. The combined investment under both schemes across the two regions is over €50.5 million²¹⁵. The Transport 21 programme²¹⁶, which ran between 2005 and 2010, has resulted in significant improvements in terms of infrastructural connectivity especially between Dublin and the other designated Gateways and Hubs, as well as within the Gateways and Hubs themselves.

Map 11: National Spatial Strategy 2002-2020 Gateways & Hubs Map

 ²¹⁵ Southern & Eastern Regional Assembly & Border, Midland & Western Regional Assembly (2013), Gateways & Hubs Development Index 2012 - A Review of Socio-Economic Performance: Summary Report.
 ²¹⁶ http://www.transport.ie/viewitem.asp?id=7048&lang=ENG&loc=1850.



Source: DOECLG, National Spatial Strategy 2002

In 2010 the Government report 'Implementing the National Spatial Strategy: Update & Outlook' found that implementation of the NSS to date had been sub-optimal²¹⁷. This, together with a significant need for reorientation of the planning system as a result of the economic crisis, prompted a very considerable shift in national planning policy towards a greater regionalisation of spatial planning powers overseen by much stronger central government control to ensure national coordination. New Regional Planning Guidelines at NUTS III level were published in 2010 to act as key intermediaries between national level planning and local planning. Through new planning legislation, each local authority development towards a hierarchical approach to settlement planning focussed on creating critical mass in key urban settlements. The updated Government policy in 2010 explicitly acknowledges that major cities and urban areas have the capacity, potential and critical mass to be principal drivers of national economic development and enhancing quality

²¹⁷ DoECLG (2010), Implementing the National Spatial Strategy: Update & Outlook - Harnessing Potential, Delivering Competitiveness, Achieving Sustainability.

of life. Accordingly, sustainable settlement patterns must be promoted and investment (particularly capital investment in infrastructure) must be coordinated to facilitate their development. As part of this process the Government has stressed a much greater emphasis on evidence-informed decision making and the role of new monitoring arrangements – particularly at the regional scale.

The recently unveiled local and regional government reform measures, contained within the reform programme 'Putting People First: Action Programme for Effective Local Government', is intended as a comprehensive mechanism for the reform of Local Government in Ireland²¹⁸. Local and Regional bodies are involved in the development and implementation of policies and the provision of funds which are designed to give effect to the strategic goals of the NSS. The establishment of three Regional Assemblies, as well as the amalgamation of a number of Local Authorities, as set out in 'Putting People First', will have an important impact in relation to the delivery of services and funding, and the creation of policies in support of urban centres. The three new Regional Assemblies will assume all of the responsibilities previously held by the eight Regional Authorities within the context of the NSS. This means that these assemblies will now be responsible for the delivery and administration of regional spatial and economic strategies, including the continued management of EU Regional Operational Programmes, all of which will be influential in the future development of urban centres.

The Department of Environment, Community and Local Government (DoECLG) also recently announced their intention to undertake a full review of the NSS to be completed by the end of 2014 or early 2015. The outcome of this review will have an important bearing on the future development of Ireland's urban centres and will have implications which will inform Ireland's approach to regional policy

Trends

²¹⁸ DoECLG (2012), Putting People First: Action Programme for Effective Local Government.

In the decade leading up to the economic downturn in 2008, Ireland experienced the most considerable expansion in economic and physical development in its history. In the ten years between January 1996 and December 2005 an unparalleled, 553,267 housing units were built, with a total stock of 1.733m units in 2005²¹⁹. In 2009, the two Regional Assemblies published the Gateway Development Index and this was followed by the publication of the Gateways and Hubs Development Index 2012 in May 2013. The Index measured the performance of both Gateways and Hubs across a range of economic, social and environmental metrics. This detailed analysis demonstrated that the implementation by Government of NSS policy has facilitated significant investment in public infrastructure, such as transport, better housing, ICT, improved water services and waste infrastructure that have helped to create the conditions for long-term economic progress in the Gateways and Hubs. Some key trends for each Gateway and Hub Town are provided in section 5.4.

However, the data also revealed that in the case of most of the Gateways and Hubs, the populations of the adjoining hinterlands grew at a far faster pace than that of the urban cores of the Gateways (see Map 12). In many cases the differential growth in the hinterland was over double that of the urban centre in smaller towns, villages and rural areas within a 50 - 80 km commuting range of major cities and towns have experienced significant population growth. In many cases, the rapid development of these smaller settlements preceded the necessary infrastructure and services. Low-density, car-dependent, green-field development has meant that development has become more dispersed and fragmented geographically, with greater distances between where people live and work. The overall percentage of people who use sustainable transportation modes, such as walking, cycling or public transport to get to and from work has declined. As a consequence, environmental damage has increased, fossil fuel dependency has increased and greenhouse gas emissions from the transport sector are increasing more rapidly than in other sectors of the economy.

²¹⁹ Kitchin et al (2010) A Haunted Landscape: Housing and Ghost Estates in Post-Celtic Tiger Ireland.



Map 12: Ireland's Gateways & Hubs Functional Areas 2011

Source: BMW and S&E Regional Assemblies, Gateways and Hubs Development Index 2013

Following the economic downturn in 2008, many urban centres have experienced increased vacancy, particularly in town centres due to a proliferation of competition from out-of-town retailers which has had adverse impacts on the vitality of nearby city and town centres²²⁰. In many urban centres there is also a significant legacy of oversupply of vacant and incomplete dwellings²²¹. Despite the commitment to balanced regional development, the larger Gateways of Dublin, Cork and Galway continue to dominate and in some peripheral regions population is declining (see Map 13). Ireland's weak urban structure outside of these major cities and cultural attitudes towards urban development, present significant challenges to the future achievement of integrated urban development.

²²⁰ DoECLG (2012), Retail Planning Guidelines for Planning Authorities

²²¹ Housing Agency & DoECLG (2012), Resolving Unfinished Housing Developments Progress Report on Actions to Address Unfinished Housing Developments

Map 13: Ireland's Population Change 1991 - 2011



Source: AIRO, Analysis of Census Data

Lessons from the 2007-13 programmes

In 2009 the Regional Assemblies established an ERDF co-financed Gateways (and Hubs) Grants Scheme, managed directly by the Regional Assemblies. The objective of the scheme was to contribute to an improvement in the overall development potential of the Gateways and Hubs through the enhancement of their economic, social and environmental conditions. Capital grant assistance under the scheme has been made available to 11 NSS Gateways (and 5 Hub Towns in the BMW Region) for projects which fell within the scope of Article 8 of the

ERDF Regulation 1080/2006, and were consistent with the overall integrated development strategy for the Gateway/Hub.

The projects approved included integrate investments in the areas of:

- Urban regeneration and enhancement of the physical environment
- Public Arts infrastructure
- Sustainable transport
- Energy efficiency

In addition the Regional Assemblies undertook to measure the impact of ERDF and national investment in the designated gateways over the lifetime of the programme, using a development index to capture a broad suite of key domains and indicators. The first index was published in 2009 and the second index, which was published in 2013 also included the designated hubs.

Relevant Evaluation Findings

The ERDF Gateways and Hubs Scheme was introduced in 2009 and implemented had only just commenced when the mid-term evaluations of the 2007-13 Regional Operational Programmes were undertaken. The evaluations were broadly favourable towards the schemes, notwithstanding the early stage of implementation.

The performance of the individual gateways (and hubs) has been evaluated in 2009 and 2012 using the Gateways and Hubs Development Index. Some of the main findings are set out in section 5.4 of this Needs Analysis.

Public Consultation

A number of the submissions received highlight the need for investment in the urban growth centres in both regions (the full submissions are also available at <u>www.bmwassembly.ie</u> and <u>www.seregassembly.ie</u>). The submissions recommend integrated investment to enable the designated growth centres to become more attractive to inward investment, and to promote investment in the gateways, including the linked gateways. There are also proposals to strengthen connectivity between the gateways and with their rural hinterlands. Sustainable transport such as cycle lanes in urban centres, is also promoted.

Chapter 5: Territorial Analysis

This chapter examines provides a comprehensive analysis of the both the BMW and S&E Region. Section 5.1 and 5.2 provides a SWOT analysis of each region in the context of the each thematic objective while section 5.3 examine the sub-territorial imbalance across the constituent NUTS III regions contain with both region. Section 5.4 concludes with an overview of developmental needs and balance to be addressed.

5.1 SWOT Analysis for the Border, Midland and Western Region

5.1.1 Strengthening research, technological development and innovation

Strengths – BMW Region		
The BMW Region is performing strongly in six technology based clusters: medical devices, process chemical and materials, computer and communication hardware, biopharmaceuticals, software and diversified communication services. This strength, however, is not uniformly spread throughout the region but is centred in a small number of areas.	Existence of Technology-transfer/ Commercialisation Managers within HEIs and a network of established Incubation Centres to support high potential, technology-based start-up enterprises	
Increasing level of R and D activity in HEIs in Ireland over the last 10 years with the percentage of HERD in the BMW increasing though still lagging behind the S and E Region.	Relatively high number of science-related PhD degrees as a proportion of all PhDs	
Existence of some other specialised research institutes e.g. Marine Institute, Teagasc Rural Economy Research Centre, Georgia Tech	Increased percentage of GDP spent on research at a national level	
Existence of specialised research funding bodies such as SFI and IRC	Strong linkages developing between IoTs in this region and Universities in the Southern and Eastern Region and emerging Connaught /Ulster Alliance between GMIT, ITS and LKIT	
At a national level there are high levels of participation in Higher Education relative to EU average and targets	Collaborative arrangements existing between NUIG, UCC and UL and between NUIG and UL	

Weaknesses - BMW Region		
BMW Region traditionally a rural economy with reliance upon 'primary' sectors, historically has demonstrated low-added value outputs evidenced by a productivity gap between output and number employed in the labour force. Capacity to absorb and generate R&D remains a key challenge for the development of the region.	Only one university within this Region and relatively low numbers of patents arising from R and D activity	
Relatively low levels of researchers and advanced graduates within this region relative to national figures	Level of joint venture R and D activities amongst firms is low	
Increase percentage of GDP spent on research may be more due to declining GDP rather than increasing R and D expenditure	R and D partnerships between HEIs and businesses reported as being low and difficult to put in place	
Relatively low rate of conversion of R and D to commercial application	Relatively low level of expenditure on BERD as expenditure per head in this region is low relative to the national average	
Lack of a well-developed philanthropic sector in Ireland	Limited Incubation space available, especially in AIT, Athlone, serving the Midlands region	

Opportunities - BMW Region	
Opportunities exist to focus upon emerging technological sectors and how these can be supported to enhance the economic development of the BMW Region	Increased focus on research priorities identified in the research prioritisation exercise, in which the BMW Region has several strengths e.g., medical technologies, marine science etc.
Higher Education Strategy developments leading to enhanced co-operation and HEI critical mass	Management of research funding to increase co-operation between enterprises and research bodies in order to increase applied research, technology transfer and commercialisation opportunities
Increasing co-operation between HEIs, including those in the Southern and Eastern Region thereby creating greater scale and research opportunities	Increased use of EI-funded research opportunities within this region
Increasing specialisation of research focus	Greater use of existing R&D supports and
scale and research opportunities Increasing specialisation of research focus	

Opportunities - BMW Region	
within HEIs and investment in specialised research facilities	incentives by firms in the BMW Region

Threats - BMW Region			
Expenditure on R&D being compromised by existing economic difficulties	Increasing competition from other EU countries for EU research and development funding		
R & D activity not transferring to commercialisation or other forms of application	Competition from Southern and Eastern Region for research funding and personnel and decline in relative position		
Lack of employment opportunities and poor employment conditions encouraging highly qualified researchers to leave the country			

5.1.2 Enhancing access to, use and quality of ICT

Strengths - BMW Region		
Existing Metropolitan Areas Networks in main cities and towns	Government strategy for next generation broadband development adopted	
Connection of households to internet higher than EU average and lack of connectivity due to lack of felt need rather than lack of access. There are, however, significant Sub-Regional variations in this connectivity.	Relatively high use of e-commerce by Irish enterprises	
More competition in the provision of broadband services nationally though this is not necessarily reflected in all Sub- Regions	Successful auction of spectrum rights to facilitate roll-out of 4G broadband	
Commitment of the Government to the development of key areas of ICT enterprise e.g. cloud computing	Relatively high use of e-Government services by individuals and enterprises	
Mobile broadband penetration high by EU standards but not spread evenly across all Sub-Regions and areas	High-speed fixed-line Broadband penetration above EU average and increasing at a relatively high rate though this may not apply equally to all Sub- Regions	
Strengths - BMW Region		
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Increased availability and take-up of programmes of training and education in computer technology		

Weaknesses - BMW Region	
Levels of household internet usage lower than in the Southern and Eastern Region	Overall fixed broadband penetration less than the EU average and rate of increase in penetration also less than EU average
Some parts of the country outside the major cities and towns do not have available broadband service with adequate upload and download speeds at reasonable cost. Coverage slightly less than EU best performers.	Fixed broadband line speeds low by EU standards and availability of only one service provider in many rural areas, especially in the BMW Region
Lack of clear mapping of current broadband availability	Nationally levels of computer skills slightly below EU average
Very poor NGA access relative to EU-27 and particularly bad in rural areas	Difficulty in recruiting ICT professionals one of the highest in EU

Opportunities - BMW Region	
Further Development of projects to introduce children to computing at a young age e.g. Coder Dojo	Use of ICT analytics to facilitate better business decisions
Use of EI supports to develop innovating approaches to the use of ICT technologies	Use of ICT to assist with agricultural production given the high reliance upon the sector in the BMW Region
Up-skilling of enterprise staff in the area of ICT use	Further roll-out of next generation broadband to areas not currently served
Reduction of regulation costs by the further expansion of e-Government	Enhancement of access to broadband for individuals and enterprises
Opportunities exist to further exploit the potential of Project Kelvin (a submarine and terrestrial cable deployment directly connecting the BMW Region to North America)	Improving the balance of provision across all Sub-Regions

Threats - BMW Region	
High cost of rollout of universal next generation broadband in particular to rural areas with dispersed settlement patterns - which are predominant in the BMW Region	Broadband usage and penetration could continue to lag behind Southern and Eastern Region. Emergence of 'digital divide' geographically, socially and in terms of enterprise types if next generation broadband services not rolled-out universally
Lack of recognition by enterprises of the benefits of ICT	Failure to address the Sub-Regional variations adding to the digital divide issue
Ireland staying behind the most advanced nations in terms of ICT infrastructure	Excessive cost in the use of ICT
Reduction in competition in the ICT market through amalgamation and takeovers	Lack of sufficient numbers of ICT personnel to fill vacancies
Failure to resolve the last mile connectivity issues	High levels of fraud being suffered by Irish online retailers
Insufficient population to make universal next generation broadband deployment commercially attractive especially in rural areas	

5.1.3 Enhancing the competitiveness of SMEs

Strengths - BMW Region	
Broad range of types of SMEs in the BMW Region which are well dispersed within the Region and which have a major role in the regional and national economy. Considerable variation between Sub-Regions, however, with the number of SMEs per head of population in the Midland Region being particularly low.	Lower labour costs in the BMW Region although this may vary between Sub- Regions
Improved infrastructure including transport infrastructure which facilitates access to markets	Relatively high levels of venture capital investment nationally
Relatively well-educated work-force with a wide range of skills	Existence of a variety of schemes and supports for enterprise establishment and management

Weaknesses - BMW Region	
Over reliance upon the construction and primary sectors have augmented the inherent weaknesses in the economy which are now a major challenge to overcome	Failure to replace the large number of SMEs in the construction and services sectors that collapsed
Low percentage of national venture capital invested in BMW projects and these are concentrated in one area	Number of SMEs per head of population in the region slightly below the national average
Low percentage of HPSUs and Competitive Start Fund Enterprises within the Region	Low and declining level of early-stage entrepreneurs in Ireland
National data suggests that there is a low level of training undertaken by SME management with particular reference to owner/managers and poorly targeted training provision	Relatively low levels of innovation amongst Irish SMEs
Infrastructure limitations especially broadband in certain areas of the country	High levels of enterprise closures in recent years
Small number of SMEs that transfer to HPSU status at a national level	Difficulties in accessing finance for SMEs in recent years
Poor language skills education which is needed to facilitate access to foreign markets	National data suggests that levels of female and youth entrepreneurship are well below international averages
Challenges of regulatory system to SME expansion	Cost of accessing emerging markets for individual firms
Costs of regulation and of key infrastructural services	Access to credit remains a key barrier to development in the post 'Celtic Tiger' era
Considerable variation between Sub- Regions with respect to average disposable income and GVA contribution	

Opportunities - BMW Region	
Scale and potential of emerging markets	Potential of tourism sector in a lower-cost environment
Opportunities for creation of marketing networks for SMEs	Potential of agri-food sector, green economy and blue(marine) economy sectors

Opportunities - BMW Region	
Capacity to acquire new skills by the workforce through the various schemes that are in place	Potential roll-out of enhanced services to SMEs following the establishment of Local Enterprise Offices in each Local Authority
Availability of a number of pathways to accessing the R & D and innovation skills of HEIs	Potential of entrepreneurship development amongst younger people and females
Opportunity for greater linkage between HEIs and other training providers and enterprises to improve the congruence between the skills of graduates and the needs of enterprises	Opportunity to address the Sub-Regional variations through targeted measures for geographic areas with particular characteristics
The creation of downstream SMEs in association with clusters of larger enterprises	Potential of new financial instruments targeted at supporting SMEs
Potential exists for the further development of the social enterprise sector in the Region	

Threats - BMW Region	
Continued lower level of SME performance than in Southern and Eastern Region and continuing Sub-Regional disparities	High level of outward migration of skilled and qualified individuals ('brain drain') to both the S&E Region and abroad
Competition from goods and services in emerging markets	Cost of infrastructure and services in Ireland
Fluctuations in the value of the Euro	Difficulty in accessing employees with the necessary skills
Continued depressed domestic market	Difficulty of accessing foreign markets
Poor service infrastructure n some key areas such as broadband	Failure to innovate and change
Overhanging weakness of SMEs arising from economic downturn	Lack of confidence in SMEs amongst the financial sector
Lack of innovation and change response	Protracted difficulty in accessing finance for SMEs
Continued Sub-Regional disparities in	

Threats - BMW Region	
disposable income and contribution to GVA	

5.1.4 Supporting the shift towards a low carbon economy in all sectors

Strengths - BMW Region	
Substantial natural renewable energy resources with better wind energy potential than the Southern and Eastern Region. Certain Sub-Regions have more potential in these areas than others	Focus on reducing carbon footprint in agricultural production
Energy inter-connectors with Great Britain and Northern Ireland	Adoption by the Government of Our Sustainable Future policy on sustainable development
Significant increase in recycling of waste	Electric Ireland commitment to installation of electric vehicle charging points
Well-developed all-island energy grid managed by single entity	Rapid increase in use of renewable energy
Tax system that supports low-emission vehicles	Decline in use of energy by transport and industry though this is likely to be associated with declining economic activity
Extensive grasslands act as a potential carbon sink	Availability of REFIT support for RE nationally
Existence of focused Sustainable Energy Authority	Relatively low energy intensity of Irish enterprises
Existence of national retrofit schemes	

Weaknesses - BMW Region	
Current reliance on gas for electricity production	Dispersed population with consequential high transport costs, less viable public transport and particularly high levels of private transport use in the BMW Region. There are some Sub-Regional variations in this though they are relatively small
Challenges posed by the percentage of GHG emissions that arise from transport	Difficulty in getting access to energy grid for renewable energy developments

Weaknesses - BMW Region	
and agriculture and that fall outside the ETS trading system	
GHG emissions one of the highest in Europe	Under-developed system for electrically- powered vehicles
Relatively low level of afforestation which can act as a carbon sink	Poor quality broadband in certain areas militating against on-line service delivery
Relatively poorly developed public transport infrastructure	No Climate Change Act has been passed in Ireland
Very high reliance on fossil fuel imports especially in the transport sector	Continued over-reliance on peat-fired energy plants

Opportunities - BMW Region	
Development of renewable energy strategy on a regional basis using a variety of renewable energy sources including biomass, wind, water and wave, in which the BMW Region is well endowed	Increase in afforestation which will increase carbon sequestration and biomass energy supply
Reduction in the use of energy in manufacturing processes	Further improvement in waste recycling
Deep retrofitting of buildings to increase energy efficiency and reduce energy use	Introduction of pay as you go schemes for building retro-fitting
Reduction in the use of energy in agriculture	Introduction of innovative schemes for transport sharing
Introduction of Life Cycle Analysis model for energy and carbon use	Introduction of SUMPS in urban areas and Travel Planning models in urban and rural areas
Development of carbon sinks	Expansion and development of system of charge-points for electric cars
Increased uptake of retrofitting in domestic (including social housing) and commercial contexts	Use of financial engineering instruments to fund renewable energy projects on a revolving basis

Threats - BMW Region	
Lack of resources to invest in low carbon technologies	Low perceived returns on bio-mass production
Continued high reliance on imported fossil fuels	Lack of bio-mass supply chains giving rise to low take-up of this technology
Lack of public commitment to reduction in energy use	Slow implementation of electric vehicle charging grid throughout the country and slow take-up of electrically powered cars
Unwillingness of public to change land- use and transportation patterns	Public resistance to wind energy deployment and laying of additional overhead cables in certain areas

5.1.5 Promoting climate change adaptation, risk prevention and management

Strengths - BMW Region	
Climate change responses incorporated into legislation and Government guidelines with respect to a number of matters including, for example, flood risk management	Consolidation of water supply management under a single body
Improving levels of building insulation	Increasing afforestation acting as a carbon sink
Improving levels of energy efficiency in new building design	

Weaknesses - BMW Region	
Water supply capacity and quality not resilient to extremes of weather	Existing developments not adequately protected against extreme flood events
Waste water treatment plants require upgrades in capacity and nature of treatment	Agriculture vulnerable to significant changes in weather patterns and climate change
Construction standards of many roads not resistant to extreme weather conditions	No Climate Change Act in place as of yet

Opportunities - BMW Region	
Continue to enhance the energy efficiency of buildings	Enhance construction standards of new roads/road improvements
Continue to incorporate climate change awareness into new building design	Increase water storage capacities and reduce wastage
Continued reduction in GHG emissions	

Threats - BMW Region	
Continuing overall weakness of economy will limit availability of resources for infrastructure improvement	Adaptation of existing developments will not be possible
Extremes of weather and environmental change will be greater than anticipated	Sub-regional variations in the take-up of energy-efficiency schemes

5.1.6 Protecting the environment and promoting resource efficiency

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Strengths - BMW Region	
On-going improvements to water and waste-water infrastructure	Air quality is amongst the best in Europe
Water quality generally reasonable	Challenging targets for reduction in energy use and renewable energy generation
Water charges and metering underway has the potential to reduce water demand and also address issue such as leakages and unaccounted for water (UFW)	Increasing focus on efficient use of energy in production contexts
Transfer of water management to a single body	Sustainable transport systems being supported
Increased use of recycling and reduction in waste	Land-use still predominantly natural with only small increases in artificial cover
Requirement that planning and land-use policies have regard to GHGs and investment in public transport infrastructure	

Weaknesses - BMW Region	
Improvements in water quality required even if overall situation is moderate. Specific areas are deteriorating and need attention	Planning, social and environmental barriers to provision of wind energy
Certain areas will come under pressure with regard to waste water treatment and are at or close to maximum with regard to treatment capacity which may limit the development potential or cause threat to the receiving environment	Underdeveloped system for charging electric cars
Ireland's Natura 2000 sites generally of 'Poor' or 'Bad' status	Capacity of construction sector to build energy efficient buildings to NZEB standards
Challenges to the application of EU Directives with regard to Natura 2000 sites	Lack of the sufficiently deep retro-fitting of houses that is required to achieve energy targets
Challenges to meeting GHG targets	Lack of capacity in waste infrastructure to accommodate the disposal of waste in accordance with legislative requirements and without shipping abroad

Opportunities - BMW Region	
Expansion of charging system for electrically powered cars	Use of renewable forms of energy in public sector vehicles
Additional development of all forms of renewable energy	Provision of electricity inter-connector to France
Deep retro-fitting of dwellings to achieve necessary energy savings	Use of SUDS approach to water management in urban areas
Development of NZEB forms of construction as more of a norm	Use of financial instruments to support revenue-generating resource efficiency projects

Threats - BMW Region	
Continuing economic difficulties reducing needed investment	Slow take-up of electric vehicles
Resistance to the development of	Slow take-up or reversal of projects using

Threats - BMW Region	
renewable energy projects of sufficient scale and slowing of investment in these projects	renewable forms of fuel in public sector vehicles
Lack of take-up of opportunities to improve energy efficiencies of existing building	Resistance to the infrastructure needed to export renewable energies to the continent
Decline in the use of public transport in rural areas	Supply of water not meeting needs and waste-water treatment facilities in certain locations being inadequate to meet development needs and environmental requirements

5.1.7 Promoting sustainable transport and removing bottlenecks in key network

infrastructures

Strengths - BMW Region	
Improved national roads infrastructure with removal of bottlenecks in many places though this does not apply evenly to all Sub-Regions	Gradual introduction of sustainable transport systems such as bike schemes, bus lanes and cycle lanes though the provision of these varies from place to place
Improvements to rail infrastructure and services and additional infrastructure such as the Western Rail Corridor	Development of LUTS models in all major city areas
Recent legislation requires that planning policy has regard to the provision of public transport	Gradual introduction of real-time public transport information on line and on location
Recent consolidation of rural transport and introduction of new rural transport facilities	Increase in private bus provision with particular strength in BMW Region

Weaknesses - BMW Region	
Lack of any strong system for the provision of integrated transport services in areas outside the GDA	Little public support for the making of the decisions necessary for the introduction of a strong system of land-use management linked to sustainable transport
Cycle schemes not widespread as of yet and there is inconsistency in the quality of the provision of cycle lanes	Certain bottlenecks in infrastructure remain particularly on secondary roads e.g., Claregalway

Weaknesses - BMW Region	
The Sustainable Urban Mobility Planning (SUMP) approach has not been adopted in Ireland	Use of public transport as a percentage of all traffic has been decreasing and the use of the private car increasing
Little engagement in personal mobility planning or similar	Pavement quality is poor in certain locations
Inter-regional and cross-radial connectivity poor in the BMW Region	Several important national routes in the BMW Region are not of dual carriageway standard

Opportunities - BMW Region	
Increased use of public transport through enhanced service provision i.e. reduced cost and increased speed in particular in relation to rail	Increased use of sustainable forms of transport and increased personal mobility planning
Removal of transport bottlenecks through continuous road improvements and a phased programme of development of inter-regional and cross-radial connectivity	Adoption of SUMP model of transport planning in major urban centres
Enhance integration of services through the use of Local Transport Authorities	Provision of long-distance greenways
Provision of integrated ticketing in areas outside of Dublin	

Threats - BMW Region	
Continuing economic difficulties limiting capacity to invest in public transport	Failure to take the policy decisions necessary to facilitated sustainable traffic management and transport
Declining use of public transport in rural areas	Unrealistic public expectations of public transport levels of service
Deterioration of the road system due to lack of investment in maintenance in recent years	Declining use of public transport leading to a vicious cycle of decline
Failure to integrate public and private transport systems into sustainable networks	Failure to increase use of public transport despite enhanced service provision i.e. reduced cost and increased speed in

Threats - BMW Region	
	particular in relation to rail

5.1.8 Promoting employment & supporting labour mobility

Strengths - BMW Region		
Many programmes for up-skilling of those who are unemployed	Specific programmes in place to assist the long-term unemployed	
Many supports for those wishing to start their own enterprises	Specific programmes in place to support employment amongst particular parts of the community	
Significant numbers of work-experience programmes available to those wishing to start on the employment ladder	High levels of participation in Higher education relative to EU average and targets	
Weaknesses - BMW Region		
High levels of unemployment, NEETS, youth unemployment and long-term unemployment. Levels higher than in the Southern and Eastern Region. Some of these are more pronounced in particular Sub-Regions with unemployment levels and changes in those levels over time varying considerably between Sub- Regions.	Difficulties faced by some enterprises which are being supported by state schemes in accessing co-funding and/or bridging finance	
Low number of available jobs relative to those seeking them	New enterprise creation below EU average	
Language competency of Irish third-level students one of the lowest in Europe	Lack of regular structured engagement between employers and education providers	
Low willingness of a significant number of enterprises to take on staff with little experience unless they are incentivised to do so	High levels of emigration particularly from BMW Region	

Opportunities - BMW Region	
New employment opportunities through enterprise development	Greater engagement between training and education providers and employers

Opportunities - BMW Region	
Enhance training of those seeking employment and create closer linkages between employers and those seeking employees	Greater opportunities for career coaching approaches to facilitate return to work by the long-term unemployed
Enhanced work experience for those seeking employment	Development of opportunity through social enterprises for some who are long-term unemployed
Targeted support programmes for specific parts of the community and particular Sub-Regions	

Threats - BMW Region	
Continuing demand-deficiency in the jobs market	Recruitment of foreign workers by employers in circumstances in which the necessary skills are not readily available within the indigenous workforce
Lack of availability of medium-skill jobs which are required by certain segments of the labour market	Unwillingness of those seeking employment to commit to the length and intensity of training or education required to avail of job opportunities
Continuing difficulty for those who are long-term unemployed in being motivated to take up employment	Reluctance on the part of employers to provide employment to certain parts of the workforce
Continuing Sub-Regional differences in unemployment rates	

5.1.9 Promoting social inclusion & combating poverty

Strengths - BMW Region	
Range of labour market activation schemes in place and operating	Well-established system of Life Long Learning in place at all levels
Social welfare system that seeks to protect people from falling into poverty	Free health care available to those without the resources to provide for themselves
Well established systems of legislation promoting equality and elimination of discrimination	Specific agencies in place to address issues of specific marginalised groups

Strengths - BMW Region		
System of education support available to those without the personal resources to access education at all levels	Housing supports available to those in need	
Weaknesses - BMW Region		
Though supports are available to those seeking post leaving certificate education the level of supports is not sufficient to enable all to avail of them	While above the EU average the Irish index for gender equality is still low	
Insufficient engagement between employers and training and education providers to make sure that training and education provision is meeting the needs of employers	Declining level of attainment at second level in comparison with other countries	
Those in danger of falling into poverty above the EU average in 2010 and increasing over time. This risk is greater in the BMW Region.	Rising levels of prejudice against immigrants in Ireland	
Significant proportion of the Irish population experiencing more than one form of deprivation	Migrants suffering relative deprivation in terms of employment, language skills and childhood poverty	
Levels of deprivation in the BMW Region considerably higher than in the Southern and Eastern Region.	Significant Sub-Regional differences in levels of deprivation and in the changes in those levels over time	
Dependency Ratios of younger and older people somewhat higher in BMW Region with considerable differences between Sub-Regions and smaller-scale areas indicating the emergence of longer-term issues		

Opportunities - BMW Region	
More precise targeting of schemes at those in greatest need both by target group and geographic area	Continuing to address inequalities in all areas particularly by responding to external indices and assessments
More engagement between providers of training and education and employers	

Threats - BMW Region	
Declining educational attainment of Irish population at second level	Cost of childcare inhibiting participation in the workforce
Continuing low levels of demand from employers and more of the workforce ending up in long-term unemployment	Exclusion in practice of certain sectors of the population from employment
Continuation of emigration of the most educated and innovative members of the population	Increasing levels of racial prejudice and anti-immigration sentiment
Increased risk of those facing major debt of descending into poverty even where they are in employment	Continuation of Sub-Regional differences in measures of deprivation

5.1.10 Investing in education, skills & lifelong learning

Strengths - BMW Region	
Reducing levels of early school leavers which is now less than the EU average	High levels of provision and participation in re-skilling programmes for the unemployed
Improving performance at second-level examinations in terms of participation and achievement	Large range of life-long learning opportunities
High levels of participation in Higher education relative to EU average and targets	System of supports in place to assist all in participating in further and higher education
Reducing gaps in participation between different sectors of society	Early childhood education becoming more available for all
Graduates in Mathematics, Science and Technology higher than the EU average	Reorganisation of VECs to ETBs with a broader integrating role
Increasing rate of participation by males in Higher Education since economic downturn	High percentage of employers have a training budget

Weaknesses - BMW Region	
Comparatively dis-improving standards of attainment at secondary levels	Barriers for certain marginalised groups in accessing further and higher education exist though the situation is improving
Increasing teacher/pupil ratios	Lifelong Learning Participation Rates low

Weaknesses - BMW Region	
	by EU standards
Reduction in supports for mature students wishing to attend higher education postgraduate studies	On-going skill shortages being experienced by employers in specific areas
Cap on number of places for those wishing to attend further education	Relatively low levels of training experienced by employees
Early school-leaver rates higher in BMW Region	

Opportunities - BMW Region	
Development of new programmes of training and education targeted at particular groups	Increased collaboration between providers of training and education
Increased collaboration between employers and providers of training and education	Increased co-ordination of provision of training and education through the emerging changes in the structures of training and education
Development of more on-line and blended learning programmes	

Threats - BMW Region	
Continued economic difficulties reducing the resources available from the state for training and education	Employees being recruited outside Ireland rather than being trained and up-skilled internally
Continued economic difficulties reducing training budgets of private sector organisations	Training and education programmes not meeting the needs of employers

5.1.11 Enhancing Institutional Capacity

Strengths - BMW Region	
Established, experienced Managing Authorities in place	High level of programme delivery and funds absorption achieved to date
Several Implementing Departments and Agencies have decades of experience in	Effective systems in place for provision of training and guidance to intermediary bodies

Strengths - BMW Region	
implementing EU co-funded programmes	

Weaknesses - BMW Region	
Budgetary restrictions reducing staffing levels across the Irish public service, with loss of experienced staff members in Departments and Agencies	On-going organisational reforms, mergers and closures of public agencies reduce administrative capacity
Complex multi-level financial management cascade structure	

Opportunities - BMW Region	
Potential administrative efficiencies through simplification of the Irish financial management cascade structure	Transfer of expertise from existing to new bodies
Continued use of technical assistance funding to provide training and guidance to public bodies	Increased efficiencies through the enhancement of the use of new technologies
Increased opportunity for stakeholder engagement through proposed reforms	The proposed new regional structures will provide an opportunity to address regional development needs through envisaged Regional Spatial and Economic Strategies

Threats - BMW Region	
Complex and evolving nature of EU programming requirements require continued training and guidance	Further restrictions in public expenditure may impact on capacity to effectively administer EU programmes
Introduction of administrative innovations and new funding priorities for the 2014- 2020 period may give rise to new training needs	
Significant reform of local and regional administration may pose new challenges	

5.1.12 Integrated Strategies for Sustainable Urban Development

Strengths - BMW Region	
Existing systems of planning and land-use with a statutory basis and a broad remit. Clear planning hierarchy from NSS through Regional, County and Local Area Plans	Increasing co-ordination and national and regional level with mandatory legal requirements for pursuing sustainable development
Strong system of representative local government	Emerging statutory systems and processes that require that the work of various actors in the field of sustainable urban development be integrated
Transport Authority with significant powers in the Greater Dublin Area	

Weaknesses - BMW Region	
Continuing fragmented responsibilities for programmes and actions required to achieve integrated sustainable urban development	Generally small urban areas which make it difficult to efficiently provide the resources required for sustainable urban development
Lack of support for the controls and restrictions necessary to achieve integrated urban development	Lack of Local Transport Authorities with effective powers other than in the Greater Dublin Area
Limited and weakly integrated urban public transport systems other than in the GDA	Lack of commitment to SUMP models

Opportunities - BMW Region	
Realignment of Local Government to	Realignment of Regional Government to give
create integrated City Regions at some key	a more direct opportunity for the use of
locations	ERDF funds
Changing functions of Local Government	Increasing recognition of the important role
to include a greater role in social and	of the private sector in the integrated
economic development	development of city areas
Redevelopment of Regional planning policies to give a greater statutory recognition of their social and economic roles	Increasing role of higher education institutions in the regeneration of city areas

Opportunities - BMW Region	
Leveraging funds from the private sector and EU sources such as the ERDF, EIB, JASPER and JESSICA to pursue integrated developments in urban areas	Implementation of LUTS recommendations
Establishment of Social and Economic Committees to give a statutory basis to a multi-stream approach to addressing key issues	Reinforcement of spatial planning principles following planned review of the National Spatial Strategy (NSS)

Threats - BMW Region	
Continued economic downturn leading to inability to invest in needed infrastructure	Lack of political will to make the decisions that are needed to develop sustainable urban areas
Challenges to Local Authorities in taking on new role	Lack of a public will to support higher density urban spaces
Unwillingness of bodies that are organised on a national basis to respond to specific local needs in a creative way	Legal challenges to the acquisition of properties required for key developments

5.2 SWOT Analysis for the Southern and Eastern Region

5.2.1 Strengthening research, technological development and innovation

Strengths – S&E Region	
Existence of a number of research-active HEIs with national levels of research expenditure now close to EU and OECD averages	Existence of Technology-transfer/ Commercialisation Managers within HEIs and a network of established Incubation Centres to support high potential, technology- based start-up enterprises
Existence of some other specialised research institutes	Relatively high number of science-related PhD degrees as a proportion of all PhDs
Access to R and D through Enterprise Ireland schemes	Irish drawdown of FP7 funding exceeded target with higher relative levels of participation in Southern and Eastern Region
Emerging partnerships between HEIs leading to greater critical mass in R and D	Strong linkages developing between IoTs and Universities within Ireland

Strengths – S&E Region	
Increasing levels of BERD which are now above EU 27 average	Emerging clusters of HEIs at different locations throughout the region
Existence of specialised research funding bodies such as SFI and IRC	Increasing level of R and D activity in HEIs in Ireland over the last 10 years
At a national level there are high levels of participation in Higher Education relative to EU average and targets	Ireland around EU average on a number of R and D measures
Southern and Eastern Region has preponderance of Universities some of which are in the top 200 in the world though these are not spread equally throughout the Sub-Regions	Preponderance of researchers and advanced graduates in the Southern and Eastern Region
Levels of BERD above the national average	

Weaknesses - S&E Region	
Increase percentage of GDP spent on research may be more due to declining GDP rather than increasing R and D expenditure	Relatively low numbers of patents arising from R and D activity
Relatively small rate of conversion of R and D to commercial application	Level of joint venture R and D activities amongst firms is low
Lack of a well-developed philanthropic sector in Ireland	R and D partnerships between HEIs and businesses reported as being low and difficult to put in place
Low level of expenditure on BERD relative to OECD average	

Opportunities - S&E Region	
Higher Education Strategy developments leading to enhanced co-operation and HEI critical mass	Management of research funding to increase co-operation between enterprises and research bodies in order to increase commercialisation opportunities
Increasing co-operation between HEIs, thereby creating greater scale and research opportunities	Increased use of EI-funded research opportunities

Opportunities - S&E Region	
Increasing specialisation of research focus within HEIs and investment in specialised research facilities	Collaboration between universities in this region and abroad
The leveraging of enterprise clusters to create enterprise/research partnerships between research Institutes and enterprises	Increased focus on research priorities identified in the research prioritisation exercise, in which the region has several strengths which are well distributed

Threats - S&E Region	
Expenditure on R and D being	Increasing competition from other EU
compromised by existing economic	countries for EU research and development
difficulties	funding
R and D activity not transferring to	Lack of employment opportunities and poor
commercialisation or other forms of	employment conditions encouraging highly
application	qualified researchers to leave the country

5.2.2. Enhancing access to, use and quality of ICT

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Strengths - S&E Region	
Metropolitan Areas Networks in main cities and towns	Government strategy for broadband development adopted
Connection of households to internet higher than EU average and lack of connectivity due to lack of felt need rather than lack of access. There are, however, significant Sub-Regional variations in this connectivity.	Relatively high use of e-commerce by Irish enterprises
More competition in the provision of broadband services	Successful auction of spectrum rights to facilitate roll-out of 4G broadband
Commitment of the Government to the development of key areas of ICT enterprise e.g. cloud computing	Relatively high use of e-Government services by individuals and enterprises
Development of projects to introduce children to computing at a young age e.g. Coder Dojo	High-speed fixed-line Broadband penetration above EU average and increasing at a relatively high rate though this may not apply equally to all Sub-Regions
Increased availability and take-up of	Mobile broadband penetration high by EU

Strengths - S&E Region	
programmes of training and education in computer technology	standards but not spread evenly across all Sub-Regions and areas
Levels of household internet usage higher than the national average	

Weaknesses - S&E Region	
Difficulty in recruiting ICT professionals one of the highest in EU	Overall fixed broadband penetration less than the EU average and rate of increase in penetration also less than EU average
Some parts of the country outside the major cities and towns do not have available a broadband service with adequate upload and download speeds at reasonable cost. Coverage slightly less than EU best performers.	Fixed broadband line speeds low by EU standards and availability of only one service provider in many rural areas
Lack of clear mapping of current broadband availability	Levels of computer skills slightly below EU average
Very poor NGA access relative to EU-27 and particularly bad in rural areas	No 4G broadband exists within the Southern and Eastern Region

Opportunities - S&E Region	
Increased use of ICT by industries	Use of ICT analytics to facilitate better business decisions
Use of EI supports to develop innovating approaches to the use of such technologies	Use of ICT to assist with agricultural production given this sector's importance in certain Sub-Regions in particular
Up-skilling of enterprise staff in the area of ICT use	Introduction of next generation broadband
Reduction of regulation costs by the further expansion of e-Government	Enhancement of access to broadband of individuals and enterprises
Improving the balance of provision across all Sub-Regions	

Threats - S&E Region	
Lack of recognition particularly by SME enterprises of the benefits of ICT	Emergence of 'digital divide' geographically, socially and in terms of enterprise types
Ireland staying behind the most advanced nations in terms of ICT infrastructure	Excessive cost in the use of ICT both in terms of infrastructure access and on-going connectivity costs
Reduction in competition in the ICT market through amalgamation and takeovers	Lack of sufficient numbers of ICT personnel to fill vacancies
Failure to resolve the last mile connectivity issues	High levels of fraud being suffered by Irish online retailers
Insufficient population to make universal next generation broadband deployment commercially attractive especially in rural areas	High cost of rollout of universal next generation broadband in particular to Sub- Regions with rural areas of dispersed settlement patterns

5.2.3 Enhancing the competitiveness of SMEs

Strengths - S&E Region	
Broad range of types of SMEs in the S&E Region which are well dispersed within the Region and which have a major role in the regional and national economy. Considerable variation between Sub- Regions, however.	Falling labour costs since the high point of 2008 within Ireland though this may vary between Sub-Regions
Improved infrastructure including transport infrastructure which facilitates access to markets	Relatively high levels of venture capital investment nationally
Relatively well-educated work-force with a wide range of skills	Existence of a variety of schemes and supports for enterprise establishment and management
Relatively high percentage of national venture capital invested in Southern and Eastern projects though these are concentrated in a small number of geographic areas	Number of SMEs per head of population in the region above the national average though not evenly spread between Sub-Regions
Higher percentage of HPSUs and Competitive Start Fund Enterprises within the Region	The existence of clusters of specific enterprise types in particular geographic areas

Weaknesses - S&E Region	
National data suggests that there is a low level of training undertaken by SME management with particular reference to owner/managers and poorly targeted training provision	Low impact of innovation on turnover
Infrastructure limitations especially broadband in certain areas of the country	Low and declining level of early-stage entrepreneurs in Ireland
Small number of SMEs that transfer to HPSU status at a national level	High levels of enterprise closures in recent years
Poor language skills education which is needed to facilitate access to foreign markets	Difficulties in accessing finance for SMEs in recent years
Challenges of regulatory system to SME expansion	Levels of female and youth entrepreneurship well below international averages
Costs of regulation and of key infrastructural services	Cost of accessing emerging markets for individual firms
Relatively low levels of innovation amongst Irish SMEs	Number of and type of SMEs finding difficulty in accessing credit
Failure to replace the large number of SMEs in the construction and services sectors that collapsed	Considerable variation between Sub-Regions with respect to average disposable income and GVA contribution
Over reliance upon the construction and primary sectors have augmented the inherent weaknesses in the economy which are now a major challenge to overcome	

Opportunities - S&E Region	
Scale and potential of emerging markets	Potential of tourism sector in a lower-cost environment
Opportunities for creation of marketing networks for SMEs	Potential of agri-food sector
Capacity to acquire new skills	Potential of technology and financial services sectors

Opportunities - S&E Region		
Availability of a number of pathways to accessing the R and D and innovation skills of HEIs	Potential of entrepreneurship development amongst younger people and females	
Potential of new financial instruments targeted at supporting SMEs	Potential of blue and green economies	
Opportunity for greater linkage between HEIs and other training providers and enterprises to improve the congruence between the skills of graduates and the needs of enterprises	The creation of downstream SMEs in association with clusters of larger enterprises	
Opportunity to address the Sub-Regional variations through targeted measures for geographic areas with particular characteristics	Potential exists for the further development of the social enterprise sector in the Region	
Threats - S&E Region		
Competition from goods and services in emerging markets	Cost of infrastructure and services in Ireland	
Fluctuations in the value of the Euro	Difficulty in accessing employees with the necessary skills	
Continued depressed domestic market	Difficulty of accessing foreign markets	

Continued depressed domestic market	Difficulty of accessing foreign markets
Poor service infrastructure in some key areas such as broadband	Failure to innovate and change
Overhanging weakness of SMEs arising from economic downturn	Lack of confidence in SMEs amongst the financial sector
Protracted difficulty in accessing finance for SMEs	Continued Sub-Regional disparities in disposable income and contribution to GVA

5.2.4. Supporting the shift towards a low carbon economy in all sectors

Strengths - S&E Region	
Substantial natural renewable energy resources though somewhat less wind energy potential than the BMW Region and more potential in certain Sub-Regions than in others	Focus on reducing carbon footprint in agricultural production

Strengths - S&E Region	
Energy inter-connectors with Great Britain and Northern Ireland	Adoption by the Government of Our Sustainable Future policy on sustainable development
Significant increase in recycling of waste	Electric Ireland commitment to installation of electric vehicle charging points
Well-developed all-island energy grid managed by single entity	Rapid increase in use of renewable energy
Tax system that supports low-emission vehicles	Decline in use of energy by transport and industry though this is likely to be associated with declining economic activity
Extensive grasslands act as a potential carbon sink	Availability of REFIT support for RE
Existence of focused Sustainable Energy Authority	Relatively low energy intensity of Irish enterprises
Existence of national retrofit schemes	

Weaknesses - S&E Region	
Current reliance on gas for electricity production	Dispersed population with consequential high transport costs, less viable public transport and though somewhat lower levels of private transport use than in the BMW Region. There are some Sub-Regional variations in this though they are relatively small other than in the Dublin Region
Challenges posed by the percentage of GHG emissions that arise from transport and agriculture and that fall outside the ETS trading system	Difficulty in getting access to energy grid for renewable energy developments
GHG emissions one of the highest in Europe	Under-developed system for electrically- powered vehicles
Relatively low level of afforestation which can act as a carbon sink	Poor quality broadband in certain areas militating against on-line service delivery
Relatively poorly developed public transport infrastructure particularly in certain Sub-Regions	No Climate Change Act yet adopted

Weaknesses - S&E Region	
Very high reliance on fossil fuel imports especially in the transport sector	Continued over-reliance on peat-fired energy plants

Opportunities - S&E Region	
Development of renewable energy strategy on a regional basis using a variety of renewable energy sources including biomass, wind, water and wave	Increase in afforestation which will increase carbon sequestration and biomass energy supply
Reduction in the use of energy in manufacturing processes	Further improvement in waste recycling
Deep retrofitting of buildings to increase energy efficiency and reduce energy use	Introduction of pay as you go schemes for building retro-fitting
Reduction in the use of energy in agriculture	Introduction of innovative schemes for transport sharing
Introduction of Life Cycle Analysis model for energy and carbon use	Introduction of SUMPS in urban areas and Travel Planning models in urban and rural areas
Development of carbon sinks	Expansion and development of system of charge-points for electric cars
Increased uptake of retrofitting in domestic (including social housing) and commercial contexts	Use of financial instruments to fund renewable energy projects on a revolving basis

Threats - S&E Region	
Lack of resources to invest in low carbon technologies	Low perceived returns on bio-mass production
Continued high reliance on imported fossil fuels	Lack of bio-mass supply chains giving rise to low take-up of this technology
Lack of public commitment to reduction in energy use	Slow implementation of electric vehicle charging grid throughout the country and slow take-up of electrically powered cars
Unwillingness of public to change land-use and transportation patterns	Public resistance to wind energy deployment and laying of additional overhead cables in certain areas

5.2.5 Promoting climate change adaptation, risk prevention and management

Strengths - S&E Region	
Climate change responses incorporated into legislation and Government guidelines with respect to a number of matters including, for example, flood risk management	Consolidation of water supply management under a single body
Improving levels of building insulation	Increasing afforestation acting as a carbon sink
Improving levels of energy efficiency in new building design	

Weaknesses - S&E Region	
Water supply capacity and quality not resilient to extremes of weather	Existing developments not adequately protected against extreme flood events
Waste water treatment plants require upgrades in capacity and nature of treatment	Agriculture vulnerable to significant changes in weather patterns and climate change
Construction standards of many roads not resistant to extreme weather conditions	No Climate Change Act in place as of yet

Opportunities - S&E Region	
Continue to enhance the energy efficiency of buildings	Enhance construction standards of new roads/road improvements
Continue to incorporate climate change awareness into new building design	Increase water storage capacities and reduce wastage
Continued reduction in GHG emissions	

Threats - S&E Region	
Continuing overall weakness of economy will limit availability of resources for infrastructure improvement	Adaptation of existing developments will not be possible
Extremes of weather and environmental change will be greater than anticipated	Sub-regional variations in the take-up of energy-efficiency schemes

5.2.6 Protecting the environment and promoting resource efficiency

Strengths - S&E Region	
On-going improvements to water and waste-water infrastructure	Air quality is amongst the best in Europe
Water quality generally reasonable	Challenging targets for reduction in energy use and renewable energy generation
Water charges and metering underway has the potential to reduce water demand and also address issue such as leakages and unaccounted for water (UFW)	Increasing focus on efficient use of energy in production contexts
Transfer of water management to a single body	Sustainable transport systems being supported
Increased use of recycling and reduction in waste	Land-use still predominantly natural with only small increases in artificial cover
Requirement that planning and land-use policies have regard to GHGs and investment in public transport infrastructure	

Weaknesses - S&E Region	
Improvements in water quality required even if overall situation is moderate. Specific areas are deteriorating and need attention	Planning, social and environmental barriers to provision of wind energy
Certain areas will come under pressure with regard to waste water treatment and are at or close to maximum with regard to treatment capacity which may limit the development potential or cause threat to the receiving environment	Underdeveloped system for charging electric cars
Ireland's Natura 2000 sites generally of 'Poor' or 'Bad' status	Capacity of construction sector to build energy efficient buildings to NZEB standards
Challenges to the application of EU Directives with regard to Natura 2000 sites	Lack of the sufficiently deep retro-fitting of houses that is required to achieve energy targets
Challenges to meeting GHG targets	Lack of capacity in waste infrastructure to

Weaknesses - S&E Region	
	accommodate the disposal of waste in accordance with legislative requirements and without shipping abroad

Opportunities - S&E Region	
Expansion of charging system for electrically powered cars	Use of renewable forms of energy in public sector vehicles
Additional development of all forms of renewable energy	Provision of electricity inter-connector to France
Deep retro-fitting of dwellings to achieve necessary energy savings	Use of SUDS approach to water management in urban areas
Development of NZEB forms of construction as more of a norm	Use of financial instruments to support revenue-generating resource efficiency projects

Threats - S&E Region	
Continuing economic difficulties reducing needed investment	Slow take-up of electric vehicles
Resistance to the development of renewable energy projects of sufficient scale and slowing of investment in these projects	Slow take-up or reversal of projects using renewable forms of fuel in public sector vehicles
Lack of take-up of opportunities to improve energy efficiencies of existing building	Resistance to the infrastructure needed to export renewable energies to the continent
Decline in the use of public transport in rural areas	Supply of water not meeting needs and waste-water treatment facilities in certain locations being inadequate to meet development needs and environmental requirements

5.2.7 Promoting sustainable transport and removing bottlenecks in key network

infrastructures

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Strengths - S&E Region	
Improved national roads infrastructure	Plans for additional public transport services

Strengths - S&E Region	
with removal of bottlenecks in many places though this does not apply evenly to all Sub-Regions	in the Dublin area
Improvements to rail infrastructure and services	Gradual introduction of sustainable transport systems such as bike schemes, bus lanes and cycle lanes though the provision of these varies from place to place
NTA responsible for integrated transport in the Greater Dublin Area	Development of LUTS models in all major city areas
Recent legislation requires that planning policy has regard to the provision of public transport	Gradual introduction of real-time public transport information on line and on location
Recent consolidation of rural transport and introduction of new rural transport facilities	Provision of integrated public transport ticketing in Dublin
Increase in private bus provision	

Weaknesses - S&E Region	
Lack of any strong system for the provision of integrated transport services in areas outside the GDA	Little public support for the making of the decisions necessary for the introduction of a strong system of land-use management linked to sustainable transport
Cycle schemes not widespread as of yet and there is inconsistency in the quality of the provision of cycle lanes	Certain bottlenecks in infrastructure remain particularly on secondary roads
The Sustainable Urban Mobility Planning (SUMP) approach has not been adopted in Ireland	Use of public transport as a percentage of all traffic has been decreasing and the use of the private car increasing
Little engagement in personal mobility planning or similar	Pavement quality is poor in certain locations
Inter-regional and cross-radial connectivity poor in certain Sub-Regions	Several important national routes in certain Sub- Regions are not of dual carriageway standard

Opportunities - S&E Region	
Increased use of public transport through enhanced service provision i.e. reduced cost and increased speed in particular in relation to rail	Increased use of sustainable forms of transport and increased personal mobility planning
Removal of transport bottlenecks through continuous road improvements and a phased programme of development of inter-regional and cross-radial connectivity	Adoption of SUMP model of transport planning in major urban centres
Enhance integration of services through the use of Local Transport Authorities	Provision of long-distance greenways
Provision of integrated ticketing in areas outside of Dublin	

Threats - S&E Region	
Continuing economic difficulties limiting capacity to invest in public transport	Failure to take the policy decisions necessary to facilitated sustainable traffic management and transport
Declining use of public transport in rural areas	Unrealistic public expectations of public transport levels of service
Deterioration of the road system due to lack of investment in maintenance in recent years	Failure to increase use of public transport despite enhanced service provision i.e. reduced cost and increased speed in particular in relation to rail
Failure to integrate public and private transport systems into sustainable networks	

5.2.8 Promoting employment & supporting labour mobility

Strengths - S&E Region	
Many programmes for up-skilling of those who are unemployed	Specific programmes in place to assist the long-term unemployed
Many supports for those wishing to start their own enterprises	Specific programmes in place to support employment amongst particular parts of the community

Strengths - S&E Region	
Significant numbers of work-experience programmes available to those wishing to start on the employment ladder	High levels of participation in Higher education relative to EU average and targets

Weaknesses - S&E Region

High levels of unemployment, NEETS, youth unemployment and long-term unemployment. Levels lower than in the BMW Region. Some of these are more pronounced in particular Sub-Regions with unemployment levels and changes in those levels over time varying considerably between Sub-Regions.	Difficulties faced by some enterprises which are being supported by state schemes in accessing co-funding and/or bridging finance
Low number of available jobs relative to those seeking them	New enterprise creation below EU average
Language competency of Irish third-level students one of the lowest in Europe	Lack of regular structured engagement between employers and education providers
Low willingness of a significant number of enterprises to take on staff with little experience unless they are incentivised to do so	High levels of emigration although lower than those in the BMW Region

Opportunities - S&E Region	
New employment opportunities through enterprise development	Greater engagement between training and education providers and employers
Enhance training of those seeking employment and create closer linkages between employers and those seeking employees	Greater opportunities for career coaching approaches to facilitate return to work by the long-term unemployed
Enhanced work experience for those seeking employment	Development of opportunity through social enterprises for some who are long-term unemployed
Targeted support programmes for specific parts of the community and particular Sub-Regions	

Threats - S&E Region	
Continuing demand-deficiency in the jobs market	Recruitment of foreign workers by employers in circumstances in which the necessary skills are not readily available within the indigenous workforce
Lack of availability of medium-skill jobs which are required by certain segments of the labour market	Unwillingness of those seeking employment to commit to the length and intensity of training or education required to avail of job opportunities
Continuing difficulty for those who are long-term unemployed in being motivated to take up employment	Reluctance on the part of employers to provide employment to certain parts of the workforce
Continuing Sub-Regional differences in unemployment rates	

5.2.9 Promoting social inclusion & combating poverty

Strengths - S&E Region	
Range of labour market activation schemes in place and operating	Well-established system of Life Long Learning in place at all levels
Social welfare system that seeks to protect people from falling into poverty	Free health care available to those without the resources to provide for themselves
Well established systems of legislation promoting equality and elimination of discrimination	Specific agencies in place to address issues of specific marginalised groups
System of education support available to those without the personal resources to access education at all levels	Housing supports available to those in need
Levels of deprivation in the Southern and Eastern Region lower than in BMW Region though many areas of deprivation still exist in this region	

Weaknesses - S&E Region	
Though supports are available to those seeking post leaving certificate education the level of supports is not sufficient to enable all to avail of them	While above the EU average the Irish index for gender equality is still low

Weaknesses - S&E Region	
Insufficient engagement between employers and training and education providers to make sure that training and education provision is meeting the needs of employers	Declining level of attainment at second level in comparison with other countries
Those in danger of falling into poverty above the EU average in 2010 and increasing over time. This risk is greater in the BMW Region.	Rising levels of prejudice against immigrants in Ireland
Significant proportion of the Irish population experiencing more than one form of deprivation	Migrants suffering relative deprivation in terms of employment, language skills and childhood poverty
Considerable differences between Sub- Regions and smaller scale areas in terms of unemployment, deprivation, and risk of falling into poverty and the changes in these measures over time	

Opportunities - S&E Region		
More precise targeting of schemes at those in greatest need both by target group and geographic area	Continuing to address inequalities in all areas particularly by responding to external indices and assessments	
More engagement between providers of training and education and employers		

Threats - S&E Region		
Declining educational attainment of Irish population at second level	Cost of childcare inhibiting participation in the workforce	
Continuing low levels of demand from employers and more of the workforce ending up in long-term unemployment	Exclusion in practice of certain sectors of the population from employment	
Continuation of emigration of the most educated and innovative members of the population	Increasing levels of racial prejudice and anti- immigration sentiment	
Increased risk of those facing major debt of descending into poverty even where they are in employment	Continuation of Sub-Regional differences in measures of deprivation	

Strengths - S&E Region	
Reducing levels of early school leavers which is now less than the EU average	High levels of provision and participation in re-skilling programmes for the unemployed
Improving performance at second-level examinations in terms of participation and achievement	Large range of life-long learning opportunities
High levels of participation in Higher education relative to EU average and targets	System of supports in place to assist all in participating in further and higher education
Reducing gaps in participation between different sectors of society	Early childhood education becoming more available for all
Graduates in Mathematics, Science and Technology higher than the EU average	Reorganisation of VECs to ETBs with a broader integrating role
Increasing rate of participation by males in Higher Education since economic downturn	High percentage of employers have a training budget
Early school-leaver rates lower than in BMW Region	

Weaknesses - S&E Region	
Comparatively dis-improving standards of attainment at secondary levels	Barriers for certain marginalised groups in accessing further and higher education exist though the situation is improving
Increasing teacher/pupil ratios	Lifelong Learning Participation Rates low by EU standards
Reduction in supports for mature students wishing to attend higher education postgraduate studies	On-going skill shortages being experienced by employers in specific areas
Cap on number of places for those wishing to attend further education	Relatively low levels of training experienced by employees

Opportunities - S&E Region	
Development of new programmes of training and education targeted at particular	Increased collaboration between providers of training and education
Opportunities - S&E Region	
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groups	
Increased collaboration between employers and providers of training and education	Increased co-ordination of provision of training and education through the emerging changes in the structures of training and education
Development of more on-line and blended learning programmes	

Threats - S&E Region	
Continued economic difficulties reducing the resources available from the state for training and education	Employees being recruited outside Ireland rather than being trained and up-skilled internally
Continued economic difficulties reducing training budgets of private sector organisations	Training and education programmes not meeting the needs of employers

5.2.11 Enhancing Institutional Capacity

Strengths - S&E Region		
Established, experienced Managing Authorities in place	High level of programme delivery and funds absorption achieved to date	
Several Implementing Departments and Agencies have decades of experience in implementing EU co-funded programmes	Effective systems in place for provision of training and guidance to intermediary bodies	
Weaknesses - S&E Region		
Budgetary restrictions reducing staffing levels across the Irish public service, with loss of experienced staff members in Departments and Agencies	On-going organisational reforms, mergers and closures of public agencies reduce administrative capacity	
Complex multi-level financial management cascade structure		

Opportunities - S&E Region	
Potential administrative efficiencies through simplification of the Irish financial	Transfer of expertise from existing to new bodies

Opportunities - S&E Region	
management cascade structure	
Continued use of technical assistance funding to provide training and guidance to public bodies	Increased efficiencies through the enhancement of the use of new technologies
Increased opportunity for stakeholder engagement through proposed reforms	The proposed new regional structures will provide an opportunity to address regional development needs through envisaged Regional Spatial and Economic Strategies

Threats - S&E Region	
Complex and evolving nature of EU programming requirements require continued training and guidance	Further restrictions in public expenditure may impact on capacity to effectively administer EU programmes
Introduction of administrative innovations and new funding priorities for the 2014- 2020 period may give rise to new training needs	
Significant reform of local and regional administration may pose new challenges	

5.2.12 Integrated Strategies for Sustainable Urban Development

Strengths - S&E Region	
Existing systems of planning and land-use with a statutory basis and a broad remit. Clear planning hierarchy from NSS through Regional, County and Local Area Plans	Increasing co-ordination and national and regional level with mandatory legal requirements for pursuing sustainable development
Strong system of representative local government	Emerging statutory systems and processes that require that the work of various actors in the field of sustainable urban development be integrated
Transport Authority with significant powers in the Greater Dublin Area	

Weaknesses - S&E Region	
Continuing fragmented responsibilities for programmes and actions required to achieve integrated sustainable urban development	Generally small urban areas which make it difficult to efficiently provide the resources required for sustainable urban development
Lack of support for the controls and restrictions necessary to achieve integrated urban development	Lack of Local Transport Authorities with effective powers other than in the Greater Dublin Area
Limited and weakly integrated urban public transport systems other than in the GDA	Lack of commitment to SUMP models

Opportunities - S&E Region	
Realignment of Local Government to create integrated City Regions at some key locations	Realignment of Regional Government to give a more direct opportunity for the use of ERDF funds
Changing functions of Local Government to include a greater role in social and economic development	Increasing recognition of the important role of the private sector in the integrated development of city areas
Redevelopment of Regional planning policies to give a greater statutory recognition of their social and economic roles	Increasing role of higher education institutions in the regeneration of city areas
Leveraging funds from the private sector and EU sources such as the ERDF, EIB, JASPER and JESSICA to pursue integrated developments in urban areas	Implementation of LUTS recommendations
Establishment of Social and Economic Committees to give a statutory basis to a multi-stream approach to addressing key issues	Reinforcement of spatial planning principles following planned review of the National Spatial Strategy (NSS)

Threats - S&E Region	
Continued economic downturn leading to inability to invest in needed infrastructure	Lack of political will to make the decisions that are needed to develop sustainable urban areas
Challenges to Local Authorities in taking on new role	Lack of a public will to support higher density urban spaces

Threats - S&E Region	
Unwillingness of bodies that are organised on a national basis to respond to specific local needs in a creative way	Legal challenges to the acquisition of properties required for key developments

5.3 Sub-Territorial Disadvantages

This section reviews the sub-territorial disadvantages of all NUTS III level regions in Ireland which are sub-regions of the NUTS II Regions.

The factors examined are as follows (see Annex 3):

- Levels of Unemployment 2013
- Difference in Unemployment between 2003 and 2013
- Disposable Income/Person
- Change in Disposable Income/Person 2007-2010
- Ratio of GVA contribution to percentage of those at work
- Percentage population change 2006-2011
- Youth Dependency
- Older Age Dependency
- Pobal Deprivation Index
- Changes in Deprivation Index
- Percentage of houses connected to the Internet 2012

The relevance of some of these measures is self-evident. The ratio of the GVA contribution to the percent of those at work is a proxy measure for the wealth creation capacity of the Sub-Region as it gives an indication of the relative return to occupations within the Sub-Region and suggests the level of surplus that may be available. Connection to the Internet is taken as a proxy for the capacity to access information and services on-line which can reduce the deprivation caused by remoteness.

5.3.1 BMW Region

Border Region

The Border Sub-Region indicates a high level of relative deprivation on a number of key measures. It has the worst Pobal Deprivation Index of all of the Sub-Regions though it

performs less poorly in terms of the trend in the index. It also performs poorly in terms of disposable income and the ration of GVA to people at work. Of the areas where it scores well, the improvement in the number of houses connected to the internet stands out, although the score for the overall number of houses connected is still poor. It should also be noted that these measures give no indication of the quality of the connection which is likely to be below average given the large amount of rural area within this Sub-Region

Midland Region

This Sub-Region ranks worst or second-worst on many measures and ranks best only in terms of percentage population increase. This is all likely to be influenced by the impact of the overspill from Dublin on the Eastern part of the Sub-Region. It is quite likely that, while this overspill has given rise to a significant growth in population, the economic activity of many of those who are resident in the Sub-Region takes place outside that area. These demographic factors may also have impacted on the levels of unemployment in the Sub-Region as the closure of firms and the loss of employment in other regions impacts on the unemployment levels in this Sub-Region. Finally, this may also explain the low level of disposable income (related to the high unemployment) and the low number of active SMEs per head of population if this Sub-Region was acting as an employment pool for the Dublin and Mid-East Regions.

West Region

The West Region ranks fourth-best in terms of the Pobal Deprivation Index and performs well with regard to changes in the index. However the overall picture is mixed, with the Sub-Region scoring above average on some measures and below average on others. The only measure on which it performs worst is the Older Dependency Ratio which would reflect the somewhat greater aging of the population in the BMW Region. It ranks best with regards to changes in disposable income, showing the smallest drop in the 2007-2010 period and also scores well with regard to unemployment and changes in unemployment.

5.3.2 S&E Region

Dublin Region

As might be expected this Sub-Region shows the lowest level of deprivation of all the subregions. It scores poorly on the change in the number of houses connected to the Internet though this reflects an already high level of connection, the quality of which is also likely to be better than the rest of the country. It also shows a low level of increase in unemployment with the overall level of unemployment also being relatively low. It scores best on the Pobal Deprivation Index as well as the changes in that index and has the highest disposable income of all the Sub-Regions.

Mid-East Region

This Sub-Region ranks high in terms of disposable income and the Pobal Deprivation Index. However, it displays some trends which might give cause for concern. So, for example, while it ranked second-best in terms of disposable income, it ranked worst in terms of decline in that income. In addition, while it ranked second best in terms of the Pobal Deprivation Index, it ranked worst in terms of changes in that index. In addition while it is ranked at the midpoint with regard to unemployment it ranks below that in terms of changes in unemployment. This suggests that the new populations which grew up in this sub-region in the last decade may be under particular pressure from the economic decline and the associated loss of employment.

Mid-West Region

The Mid-West Sub-Region performs somewhat less than average with regard to the Pobal Deprivation Index and performs at or near average on many measures. It ranks low on three measures – overall unemployment, changes in unemployment and percent population change. However, it performs best with regard to the number of SMEs per head of population which suggests that there is a strong entrepreneurial spirit in the Sub-Region which may help in addressing the issue of unemployment over time provided the right supports are provided.

South-East Region

Overall this Sub-Region scores poorly on a number of measures, including unemployment where it ranks lowest, change in unemployment, disposable income and change in disposable income as well as the Pobal Deprivation Index and the changes in that index where it ranks sixth out of the eight Sub-Regions. It also shows a low number of SMEs per head of population which adds to the difficulties for the Sub-Region in addressing the unemployment and disposable income issues. It performs best with regard to population change and internet connectivity.

South-West Region

This Sub-Region performs at or better than average on most measures and performs poorly on two measures only. The lower than average increase in population may not be a matter of particular concern and the percent of houses connected to the Internet may also be regarded as less critical than some other measures. The Sub-Region performs third best in terms of the Pobal Deprivation Index and performs nest with regards to unemployment and changes in unemployment.

Conclusion

This section has given an indication of the relative deprivation in the NUTS III sub-regions of the country. In general, it suggests that those regions with or under the influence of the largest cities are more likely to perform best. It is acknowledged that the ranking report can be somewhat misleading in that it does not address the extent of the differences between regions on the various measures; the absolute scores for each region are included in Annex 3.

5.4 Specific Needs of Urban and Rural Areas

While many of the same or similar issues apply to both urban and rural areas within Ireland, there are also differences in the nature and extent of these issues. It should also be noted, that urban and rural areas are not homogenous categories and that each situation that applies generally to urban and rural areas may not apply to a particular area.

Urban Areas and Sustainable Urban Development

Sustainable Urban Development requires that urban areas would be effective and attractive locations economically, socially and environmentally. This would suggest that levels of unemployment should be low, enterprise development high, educational attainment and skills levels high, social deprivation relatively low and environmental indicators such as water quality, air quality and energy use should all be good and improving.

The Gateways and Hubs Development Index is a useful tool for considering the issues that apply generally within the urban areas of Ireland. This index (some data from which is included tables 19 and 20) was developed in 2013 by the Regional Assemblies and is based on 2011 data that applies to the nine Gateways and the nine Hubs. It should be noted that for

the purposes of the index the boundaries extend beyond the administrative boundaries of the cities and towns involved and, in some cases, incorporate a significant element of the rural hinterland, within the functional areas of the growth centres.

From this data it can be seen that the population of each Gateway and Hub grew without exception in the period between 2006 and 2011. The rate of population growth varied considerably between settlements from a high of 13.2% (Cavan) to a low of 4.6% (Tralee-Killarney). This suggests that, from a population point of view, the Gateways and Hubs have the potential to remain and develop as sustainable entities.

The next point of note is the increasing skill levels of the workforce in urban areas. This is reflected in the increase in third-level-qualified workers within the urban areas. It is interesting to note that the variation in this change is significantly less than that relating to population with most rates lying between 6% and 9%. This suggests the emergence of a more skilled workforce but may also reflect in part losses from the construction industry. From a sustainable development point of view this suggests that the Gateways and Hubs are well placed to engage in the knowledge economy from where much of the employment of the future is likely to emerge. It does also mean, however, that there is a danger of a social divide emerging based on educational attainment and consequent opportunities for employment.

Broadband connectivity has also increased at a very consistent rate within these urban areas – by between 42% and 48% for the majority of towns. This suggests a major increase in broadband activity during the period though it does not indicate the quality of the broadband, its cost or its speed. However, this increase does suggest that access to services and knowledge in an online context is now available to the majority of the urban population.

The level of unemployment in the Gateways and Hubs averaged 19.94% and 20.07% respectively in 2011. This compared with a national unemployment rate of 19.0% when calculated on the same basis with the level of unemployment in all locations having increased significantly since 2006. There was considerable variation in the unemployment rates which ranged from a high of 24% (Dundalk) to a low of 16.9% (Dublin). Within this range it is noticeable that, in general, the larger cities had the lowest rates of unemployment, though, census data also suggests that the unemployment rates in some core city areas area amongst the highest in the country.

Another factor contributing to economic sustainability relates to the rate of formation of new enterprises. This rate fell in virtually all urban areas during the 2006 to the 2011 period. The fall ranged between 1.9% (Cork) and 7.7% (Cavan). This is not surprising given the economic downturn. The decrease tended to be at the lower end of the spectrum in the larger cities and one city, Waterford, went contrary to the general trend with a small increase in business formation. This does suggest, however, that this is an area that needs particular attention across a range of initiatives if future economic vibrancy is to be maintained with its consequential impact on employment and poverty.

With regard to issues of environmental sustainability it is worth noting that the use of private transport generally in Ireland is very high. With the exception of Dublin, Cork to a lesser extent and the other cities to an even lesser extent, intra-urban public transport systems are poorly developed and there is little in the way of commuter services. This leads to congestion and/or slow journey times in many urban centres.

Air quality in Ireland is generally very good and is good in urban as well as rural areas. With regard to water and waste-water facilities, however, there are situations in which future water demand and future waste-water treatment capacity may have negative implications for future development. Some major infrastructure projects are under development such as the Dublin Region Water Supply Project. However, there is an urgent need to manage the use of water in urban areas and to provide additional waste-water treatment in certain urban centres. Finally, it is important to note that there are ambitious population growth targets for certain urban centres and that the achievement of these levels of growth is significantly dependent on the availability of water and waste-water treatment facilities.

A final issue worth considering is the need for significant investment in economic projects in urban areas. Where an area is in stagnation or not developing at the pace anticipated it often requires a stimulus to address the bottlenecks that are giving rise to the low levels of growth. It is important that any such investment would have a clear purpose, address an identified need and be clearly integrated with other activities. If these conditions are met, however, individual projects in urban areas can have a significant impact.

Rural Areas

Accessibility is a key need of rural areas in Ireland. Accessibility refers both to physical and electronic forms of access.

With regard to physical access, while the radial road system in Ireland and centred on Dublin has improved significantly in the past decade, the transverse routes connecting other major national and regional centres has not improved to the same extent. This still leads to transport bottlenecks in terms of congestion in some cases or slow journey times in others. In addition, rural public transport availability is inconsistent and creates access difficulties for those who do not own private transport.

With regard to electronic access, the availability of broadband in rural areas more restricted than that in urban areas and the speed and quality of the services that are available are also poorer. This gives rise to the danger of the emergence of a digital divide on a geographic basis as well as those that may arise from social and economic factors.

The GVA in rural areas tends to be significantly less than that in urban areas. That is to be expected given the higher value-adding occupations tend to be clustered in the urban centres of the country and particularly in the Greater Dublin Area.

Disposable income in the rural areas tends to be lower than that in urban areas. This situation and that in the previous paragraph are pointed to by the lower GVA and disposable income in those sub-regions that are significantly rural in nature.

The nature of water and waste-water services in rural areas is also a matter worth noting both in terms of the quality of service to the rural population and the implications for environmental quality. Nearly 80% of the dwellings in the Aggregate Rural Areas of the country were served by septic tanks in 2011 while nearly two-thirds were served by a private water supply.

The energy efficiency of dwellings in rural areas is not likely to be significantly different to that in urban areas when age of construction is used as a proxy. In 2011 43% of houses in urban areas were built prior to 1980 with 46% of the houses in rural areas built prior to the same year. The corresponding figures for houses built before 1990 were 53% and 57%.

Many rural areas had a significant exposure to the decline in employment in the construction industry. It is noticeable that in 2011 many of the highest unemployment rates in the country were experienced by the more rural counties as well as by the core areas of the country's cities.

The protection and conservation of the country's Natura 2000 sites will also fall primarily on the rural population as the vast majority of these sites lie within the rural areas of the country. This has some implications for social and economic development in these areas though proper management of development can minimise any potential negative effects of these designations.

The rural areas of the country also contain many resources and opportunities for future development including agriculture and food, eco-tourism, the development of the blue economy and wind, bio-mass and marine energy. While some of these developments may not add significant numbers of direct employment opportunities, they do offer the opportunity for the development of income for rural areas and, if managed properly, for the development of employment in the processing and distribution of the raw materials available from within rural areas.

Gateway	Key Trends 2006-2011
Dundalk	• 9.9% increase in Gateway population to 60,167
	• 6.8% increase in third level qualified workforce
	• 44.3% increase in broadband connectivity
	• 2.7% decrease in new firm formation per 1000 labour
	force
	• 14.4% increase in unemployment leading to a rate of
	24.19%
Galway	• 9.6% increase in population to 185,913
	• 8.4& increase in third level qualified workforce
	 46.6% increase in broadband connectivity
	• 4.5% decrease in new firm formation per 1,000 labour
	force
	• Third level research and development funding (€4,641
	per enrolled student) well ahead of the Gateway average
	• 10.49% increase leading to a rate of 17.02
Letterkenny	• 10.8% increase in population to 59,542
	• 7.5% increase in third level qualified workforce
	• 47.3% increase in broadband connectivity
	• 5.6% decrease in new firm formation per 1000 labour
	force
	High unemployment rate of 24%
Midland Gateway	• 9% increase in population to 131,661
(Athlone, Tullamore,	• 7.4% increase in third level qualified workforce
Mullingar)	• 43.8% increase in broadband connectivity

Table 19: BMW and S&E Regional Assemblies (2013), Gateways and HubsDevelopment Index 2012: Key Gateway Findings

	• 3.5% decrease in new firm formation per 1000 labour force
	• Third level research and development funding (€772 per enrolled student) well below the Gateway average
	• 14.16% increase leading to a 20.7% rate
Sligo	• 7.8% increase in population to 59,818
	• 8% increase in third level qualified workforce
	• 47% increase in broadband connectivity
	• 3.1% decrease in new firm formation per 1000 labour
	force
	• 17.6% unemployment rate which is lower than the
	gateway average of 19.9%
Cork	• 8.5% increase in population to 398,292
	• 7.9% increase in third level qualified workforce
	• 46% increase in broadband connectivity
	• 1.9% decrease in new firm formation per 1000 labour
	force
	• Third level research and development funding (€4,148
	per enrolled student) well above the Gateway average
	• Unemployment rate increased by 10.45% giving a rate of 16.6%
Dublin	• 8.5% increase in population to 1, 659,018
	• 7% increase in third level qualified workforce
	• 42.2% increase in broadband connectivity
	• 2.6% decrease in new firm formation per 1000 labour
	force
	• Third level research and development funding (€4,163
	per enrolled student) well above the Gateway average
	• Unemployment increased by 10.03% giving a rate of
	16.99%
Limerick – Shannon	• 5.8% increase in population to 222,604
	• 7.1% increase in third level qualified workforce
	• 45.4% increase in broadband connectivity
	• .28% increase in new firm formation per 1000 labour
	force
	• 19.69% unemployment rate
Waterford	• 6% increase in population to 97,076
	• 7% increase in third level qualified workforce
	• 44.3% increase in broadband connectivity
	• 0.45% increase in new firm formation per 1000 labour
	force High unemployment rate of 22.3%
	• High unemployment rate of 22.3%

Source: BMW and S&E Regional Assemblies (2013), Gateways and Hubs Development Index 2012; Summary

Report

Table 20: BMW and S&E Regional Assemblies (2013), Gateways and Hubs

Hub	Key Trends 2006-2011
Ballina-Castlebar	 5.8% increase in Hub population to 4,817
	• 7.4% increase in third level qualified workforce
	• 45% increase in broadband connectivity
	• 3% decrease in new firm formation per 1000 labour
	force
	• 11.1% increase in unemployment giving a rate of
	19.12%
Cavan	• 13.2% increase in Hub population to 29,498
	• 5.4% increase in third level qualified workforce
	• 44.8% increase in broadband connectivity
	• 7.7% decrease in new firm formation per 1000 labour
	force
	• 13.6% increase in unemployment giving a rate of
	20.62%
Ennis	• 5.3% increase in Hub population to 47,076
	• 5.4% increase in third level qualified workforce
	• 44.7% increase in broadband connectivity
	• 3% decrease in new firm formation per 1000 labour
	force
77'11	• 12% increase in unemployment giving a rate of 18.64%
Kilkenny	• 7.7% increase in Hub population to 59,414
	• 8% increase in third level qualified workforce
	• 44.7% increase in broadband connectivity
	• 0.8% decrease in new firm formation per 1000 labour
	force
	• 12.4% increase in unemployment giving a rate of 18.89%
Tralee-Killarney	 4.6% increase in Hub population to 95,661
	 7.15% increase in third level qualified workforce
	 44.5% increase in broadband connectivity
	• 4.4% decrease in new firm formation per 1000 labour
	force
	• 12% increase in unemployment giving a rate of 19.5%
Mallow	• 11.8% increase in Hub population to 14,569
	• 7.65% increase in third level qualified workforce
	• 43% increase in broadband connectivity
	• 4.56% decrease in new firm formation per 1000 labour
	force
	• 13.4% increase in unemployment giving a rate of
	19.82%
Monaghan	• 6.9% increase in Hub population to 25,937
	• 6.3% increase in third level qualified workforce
	• 44.7% increase in broadband connectivity

Development Index 2012: Key Hubs Findings

	 5.62% decrease in new firm formation per 1000 labour force 13.2% increase in unemployment giving a rate of 20.07%
Tuam	 12% increase in Hub population to 12,810 7.8% increase in third level qualified workforce 43.7% increase in broadband connectivity 4.8% decrease in new firm formation per 1000 labour force 13.6% increase in unemployment giving a rate of 22%
Wexford	 7.6% increase in Hub population to 54,662 6.4% increase in third level qualified workforce 49% increase in broadband connectivity 3.8% decrease in new firm formation per 1000 labour force 15% increase in unemployment giving a rate of 22.83%

Source: BMW and S&E Regional Assemblies (2013), Gateways and Hubs Development Index 2012; Hubs

Report

5.5 Specific Needs of Coastal & Marine Areas

The Irish seafood sector is a vital indigenous industry which makes a significant contribution to the national economy in terms of output, employment and exports. Generating over 11,000 jobs in the coastal regions the industry contributes circa \notin 700 million to the national economy annually. This is the equivalent of 0.44% of Irish GDP in 2011²²². Geographically the industry operates right around the coast of Ireland and is concentrated on the western seaboard from Castletownbere, Co. Cork, in the south-west, to Killybegs, Co Donegal, in the far north-west, and the harbour towns of the south-east coastline.

Ireland's natural resource based seafood industry provides an important source of economic activity in the remote coastal regions. It provides jobs on fishing vessels, on fish farms, in processing operations, in distribution and marketing seafood at home and to export markets and in a large number of smaller ancillary companies that provide services to the mainstream industry operators. In the Irish context the main industry stakeholders are the primary production sectors of fish catching (offshore and inshore) and aquaculture; the primary and secondary processing sectors; the marketing sectors; and ancillary industries such as

²²² http://www.cso.ie/en/media/csoie/releasespublications/documents/economy/2011/nie2011.pdf

netmaking, vessel repair, transport, and a number of other services, the majority of which are based in coastal locations.

A review of socio-economic data for coastal Electoral Districts indicates challenges in terms of retaining costal population, above average age dependency rates in areas of the South-East, North and West, poor educational attainment in the West and North-West and levels of semi or unskilled employment have declined, but remain above the national average in many coastal areas. Both male and female unemployment levels are above the national average in many coastal districts, with male unemployment rates higher in all areas.

These indicators illustrate that a fundamental issue arising from the process of restructuring of the Seafood Industry, is the impact that process is having on coastal communities dependent on seafood production. Mechanisms must therefore be developed to support communities dependent on fisheries and aquaculture to tackle the challenges they face as a result of change in the seafood industry, and improve their quality of life, by accessing support to enhance local seafood related activity, community infrastructure and diversification into other activities. The following challenges/ goals were identified as part of the Needs Analysis for the EMFF Programme in Ireland, and these are also relevant to the ERDF Operational Programmes.

- To develop networking and exchange of knowledge, industry collaboration which will lead to results in best practice and long term gains
- To ensure that responsibly harvested inshore seafood products are rewarded in the market place
- To ensure that fishing communities develop confidence, broaden their economic base and demonstrate innovation and sustainability
- To ensure that onshore side of fishing activities are safer, more efficient, and complemented by a substantial growth in marine tourism use
- To allow for skills development, service provision and support for new and reinvigorated marine based enterprises
- To ensure piers, harbours and coastal infrastructure that services both fisheries and tourism are sufficient for these purposes.

- To enable key fishing community members to develop new skills, access employment opportunities and develop new businesses
- To develop artisan seafood businesses which will increase the value and volume of local seafood processed

5.6 Summary of Territorial Needs and Imbalance

The key territorial needs and imbalances across the NUTS 11 regions as detailed in the thematic SWOT analyses are summarised here. To unlock the potential within each region, the Needs Analysis, drawing on the available trend data identifies the bottlenecks and the specific development needs of each region.

5.6.1 BMW Region

Bottlenecks:

- Capacity of HEIs in the BMW Region to competitively access research funding, generate R&D activity and commercialise R&D outputs;
- 2. Quality of academic-industrial linkages;
- Limited resources available for business-based research and innovation and relatively low levels of business R&D investment;
- 4. Level of SMEs establishment and growth including access to various forms of finance;
- 5. Broadband availability, quality and speed, particularly outside urban areas;
- 6. Deficient transport network (road, rail) in many parts of the region;
- 7. Poor energy performance of the building stock;
- 8. Level of provision of renewable energy relative to potential;
- 9. Availability of adequate water and waste-water treatment and distribution; and
- 10. Lack of funds to invest in major economic projects in key growth centres.

Potential:

- 1. Build on existing and emerging research specialisations;
- 2. Enhanced linkages between HEIs and enterprise leading to increased R&D commercialisation and increases in employment;

- 3. Enhanced skills of work-force relative to enterprise needs leading to reduced unemployment;
- 4. Increased provision of renewable energy from a variety of sources but particularly wind and marine;
- 5. Significant savings from improved energy performance of the building stock;
- 6. Growth of targeted enterprise sectors in which the region already has a strong base;
- 7. Increased economic activity and employment from enhanced high speed broadband provision;
- 8. Reduction in locational imbalances with enhanced roads, public transport and broadband provision;
- Increased investment in business and enterprise if water and waste-water bottlenecks are removed; and
- 10. Enhanced attractiveness of urban growth centres to support inward investment, tourism and enterprise development.

Development Needs:

- Increasing research and development activities within HEIs and specialised research institutions including the employment of high-quality researchers and those on research focussed programmes of study;
- Strengthening links between HEIs and industry to increase the level of innovation and R&D within enterprises and accelerate commercialisation of research outputs;
- 3. Increase the rate of establishment of new SMEs, the growth of SMEs and the entry of SMEs into the export market, including start-ups by women and young entrepreneurs;
- 4. The continued and expanded use of HEI incubation centres to facilitate the development of spin-in and spin-out enterprises;
- 5. The development of an appropriately skilled workforce available to SME;
- 6. The provision of high-speed and 4G broadband particularly in rural areas;
- 7. The upgrading of major secondary link roads in order to remove bottlenecks within the road system and the development of low-carbon transport infrastructure including public transport, rural transport services, cycling, and electrically powered vehicles;
- 8. The upgrading of water and waste-water facilities particularly in major urban centres;

- The development of renewable energy resources including wind and marine in particular and the enhancement of distribution networks and the continued upgrading of the Region's building stock to achieve better energy efficiency; and
- 10. Development of major economic projects within key regional growth centres.

Due to the need for thematic concentration in more developed regions, as set out in the Common Provisions Regulation and taking account of the likely ESIF allocation to the BMW Region it is important to note that not all priority needs identified in the BMW region can be addressed by the ESI Funds solely.

5.6.2 S&E Region

Bottlenecks:

- 1. Capacity of HEIs throughout the region to access research funding up to the OECD average, generate R&D activity and commercialise R&D outputs;
- 2. Quality of academic-industrial linkages;
- 3. Limited resources available for business-based research and innovation;
- 4. Level of SME establishment and growth (in some sub-regions) including access to various forms of finance;
- 5. Broadband availability, quality and speed particularly outside urban areas;
- 6. Deficient transport network in certain parts of the region including roads, rail and public transport;
- 7. Poor energy performance of the building stock;
- 8. Level of provision of renewable energy relative to potential;
- 9. Availability of adequate water and waste-water treatment and distribution; and
- 10. Lack of funds to invest in major economic projects in key centres.

Potential:

- 1. Increased R and D activity particularly related to existing clusters and specialisations leading to enhanced innovation and commercialisation;
- Enhanced linkages between HEIs and enterprise leading to increased R&D commercialisation and employment;
- 3. Enhanced skills of work-force relative to enterprise needs leading to reduced unemployment;

- 4. Increased provision of renewable energy from a variety of sources but particularly wind and marine;
- 5. Significant savings from the improved energy performance of the building stock;
- 6. Growth of targeted enterprise sectors in which the region already has a strong base;
- 7. Increased economic activity and employment from enhanced high-speed broadband provision;
- 8. Reduction in locational imbalances with enhanced roads, public transport and broadband provision;
- Increased investment in business and enterprise if water and waste-water bottlenecks are removed; and
- 10. Enhanced attractiveness of urban growth centres to support inward investment, tourism and enterprise development.

Development Needs:

- Increasing research and development activities within HEIs and specialised research institutions including the employment of high-quality researchers and those on research focussed programmes of study and the co-ordination and management of inter-institution projects;
- Strengthening links between HEIs and industry to increase the level of innovation and R&D within enterprises and accelerate commercialisation of research outputs;
- Increase the rate of establishment of new SMEs, the growth of SMEs and the entry of SMEs into the export market, including start-ups by women and young entrepreneurs;
- 4. The continued and expanded use of HEI incubation centres to facilitate the development of spin-in and spin-out enterprises;
- 5. The development of an appropriately skilled workforce that is available to enterprises;
- 6. The provision of high-speed and 4G broadband particularly in rural areas;
- 7. The upgrading of major secondary link roads in order to remove bottlenecks within the road system The continued development of low-carbon transport infrastructure including public transport, cycling, and electrically powered vehicles;
- 8. The upgrading of water and waste-water facilities particularly in major urban centres;
- 9. The development of renewable energy resources including wind, marine and biomass in particular and the enhancement of distribution networks and the continued upgrading of the Region's building stock to achieve better energy efficiency; and

10. Development of major economic projects within key regional growth centres.

Due to the need for thematic concentration in more developed regions, as set out in the Common Provisions Regulation and taking account of the likely ESIF allocation to the S&E Region it is important to note that not all priority needs identified in the Southern and Eastern Region can be addressed by the ESI Funds solely.

Chapter 6: Application of Horizontal Principles

6.1 Introduction

This chapter sets out the key principles which should inform and underpin the selection and implementation of priority investments actions that will take account of EU and national horizontal principles, namely:

- Promotion of equality between men and women;
- Promotion of equal opportunities and prevention of discrimination; and accessibility for people with disabilities;
- Promotion of sustainable development; and
- Promotion of social inclusion.

It also considers the importance of North/South Co-operation as an important cross-cutting theme for the BMW Region in particular.

6.2 Promotion of Equality between Men and Women

Gender Equality means that women and men should enjoy the same rights and opportunities and that the different behaviour, aspirations and needs of women and men are equally valued and favoured.

The Common Strategic Framework 2014-2020 specifies that Member States should pursue the objective of equality between men and women as set out in Article 8 of the Treaty on the Functioning of the European Union (TFEU) and ensure its mainstreaming in the preparation, implementation, monitoring and evaluation of actions under all the Funds. ERDF, ESF and Cohesion Fund programmes are required to explicitly specify the expected contribution of these Funds to gender equality.

Gender analysis should be included in the analysis of the objectives of the intervention and the participation of the relevant bodies responsible for promoting gender equality in the partnership should be ensured. It is also recommended to organise permanent structures or explicitly assign a function to existing structures to advise on gender equality in order to provide the necessary expertise in the preparation, monitoring and evaluation of the CSF Funds. Monitoring systems and data collection are considered essential to provide a clear picture of how programmes are meeting gender equality objectives. In this respect Managing Authorities, in conjunction with the Monitoring Committees, must undertake either general self-assessment exercises, specific evaluation studies or a structured reflection focusing on the application of the gender mainstreaming principle. The composition of the monitoring committees should be gender balanced, to the extent that is feasible, and should include a gender expertise/responsibility function. All actors in the Programme should undergo a short training in gender equality and gender analysis. Irish Government policy in this area includes a double strategy consisting of a legal framework which provides for equal treatment for women and men and legislative backing for positive action initiatives for women and men including positive action in particular circumstances and commitments to apply a gender equality perspective in all areas (gender mainstreaming).

The National Women's Strategy 2007-2016 reflects a commitment to the achievement of "an Ireland where all women enjoy equality with men and can achieve their full potential, while enjoying a safe and fulfilling life". The Strategy contains over 200 key actions, the implementation of which will require action on the part of almost all Government Departments and several State Agencies. The Strategy is underpinned by three key themes:

- Equalising Socio-Economic opportunity for women;
- Ensuring the wellbeing of women; and
- Engaging women as equal and active citizens.

These themes are similar to the priority policy areas set out in the EU's Strategy for Equality between Women and Men 2010 -2015. The National Women's Strategy 2007 - 2016 includes commitments to increase the availability of childcare services and other initiatives to assist the return to employment of the often highly educated women who have interrupted their careers for family purposes. The Strategy also envisages building further upon gender mainstreaming, a methodology that has been used effectively in many European countries to ensure that a gender perspective is systematically included in all public policy making.

The Managing and Intermediary bodies for the ESF co-financed Human Capital Programmes and the ERDF co-financed Regional Operational Programmes 2014-2020 should therefore have regard to this principle in the identification of investment priorities and in the drafting of the programmes and take actions such as:

- Involve bodies in charge of gender equality at all stages (preparation, implementation, monitoring, evaluation), including the provision of advice on gender equality in fund-related activities;
- Pursue the objective of equality between men and women and ensure its mainstreaming through the integration of a gender perspective at all stages of the implementation of the funds, including preparation, implementation, monitoring and evaluation;
- Include specific actions to promote gender equality including engagement with structures with a function to lead on gender-equality issues;
- Take careful account of how the implementation of projects may affect women and men (gender mainstreaming);
- Take account of the potential contribution of the Operational Programmes to gender equality with reference to the specific challenges in the priority investment areas chosen, where relevant;
- Make arrangements for training of relevant staff in the fields of gender equality law and policy as well as on gender mainstreaming related to the implementation of the funds, in accordance with the general ex ante conditionality;
- Promote gender balance on the monitoring committees; and
- Monitor and evaluate the application of the principle and having regard to the results of such monitoring and evaluation actions, impose appropriate sanctions.

These commitments should be additional to legal obligations which apply in relation to gender equality. This is consistent with the mechanisms in the National Women's Strategy to foster gender mainstreaming at all policy formation and implementation levels, including EU co-financed programmes. The mainstream approach, gives the responsibility to address gender equality to the lead Department which is responsible for implementing the particular measure/activity.

6.3 Promotion of Equal Opportunities, Non Discrimination and Accessibility for persons with Disabilities

The Common Strategic Framework requires that Member States should take appropriate steps to prevent any discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation as well as to ensure accessibility during the preparation and implementation of programmes and operations co-financed by the CSF Funds and describe explicitly the actions to take into account this principle in the programmes. In addition, the involvement of equality bodies or other organisations active in combating discrimination is recommended in order to provide the necessary expertise in the preparation, monitoring and evaluation of the Funds.

The Common Strategic Framework 2014-2020 (CSF) specifies that Member States should pursue the objective of equality between men and women and ensure its mainstreaming in the preparation, implementation, monitoring and evaluation of actions under all the Funds. This may be done through specific actions to promote equality or to combat discrimination, as well as by taking careful account of how other projects and the management of the funds may affect the different target groups.

The EU's economic policy "Europe 2020" requires Member States to increase their employment rate for men and women aged 20 to 64 years to 75 % by 2020. Ireland has been permitted to achieve a lower target (69 %) but this remains challenging at a time when the Europe 2020 male employment rate in Ireland is at 68.1 % and the corresponding female rate is at 59.4 %.

Furthermore, the CSF states that Member States should take appropriate steps to prevent any discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientations as well as to ensure accessibility during the preparation and implementation of programmes and operations co-financed by the CSF Funds and describe explicitly the actions to take into account this principle in the programmes. It is recommended that accessibility should be a characteristic of all products and services offered to the public and co-financed by the CSF Funds. In particular, accessibility to the built environment, transport and information and communication, including new technologies, should be required by the

Managing Authorities. Besides the principle of mainstreaming, Member States will need to put in place positive actions to be supported by the ESF to promote equal opportunities.

The Equality Authority is an independent body set up under the Employment Equality Act 1998 with an expanded role in relation to the Employment Equality Act, 2004 and the Equal Status Acts, 2000 to 2004. These Acts outlaw discrimination in employment, vocational training, education, advertising, collective agreements, accommodation, the provision of goods and services and other opportunities to which the public generally have access on nine distinct grounds: Gender, Civil Status, Family Status, Age, Disability, Race, Sexual Orientation, Religious Belief and Membership of the Traveller Community. Inequality is also strongly linked to exclusion, as groups that tend to be subject to inequality also tend to be socially excluded, and have higher levels of deprivation.

Ireland's National Disability Strategy 2004 builds on existing policy and legislation, including the policy of mainstreaming public services for people with disabilities. The strategy aims to address the diversity of circumstances, needs and abilities of people with disabilities, and to enhance the operation and effectiveness of the range of supports and services for facilitating increased participation of the cohort in the labour market. The strategy also addresses issues of education and training provision, information and advocacy services, social welfare benefits, health and social service supports, accessibility of public facilities, and accessibility of public transport services. A number of Government Departments have set out sectoral plans detailing the measures to be taken in relation to the Structures and a reporting framework have been put in place to oversee the implementation of the National Disability Strategy. The Office for Disability and Mental Health, headed by a Minister of State, has a specific remit to develop cross-sectoral engagement across the Departments of Health; Education and Skills; Jobs, Enterprise and Innovation; and Justice and Equality.

The Managing and Intermediary bodies for the ESF co-financed Human Capital Programmes and the ERDF co-financed Regional Operational Programmes 2014-2020 should, therefore, have regard to this principle in the identification of investment priorities and consider the following steps in the drafting of the programmes:

- Involve bodies in charge of equality and organisations representing people with disabilities at all stages (preparation, implementation, monitoring, evaluation), including the provision of advice on equality in fund-related activities;
- Identify particular target groups which may have a reduced access to support or are at risk of discrimination, and identify measures to mitigate this risk;
- Take appropriate steps in the implementation of the funds to prevent discrimination in relation to the following categories which are protected by Irish equality legislation: Gender, Civil Status, Family Status, Age, Disability, Race, Sexual Orientation, Religious Belief and Membership of the Traveller Community;
- Ensure that the project selection criteria will, as appropriate, assess projects on the basis of their compliance with equal opportunity requirements and non-discrimination;
- Incorporate accessibility for disabled persons as a criterion to be observed in co-funded public services and facilities including in project specifications, as appropriate;
- Monitor and evaluate the application of the principle and have regard to the results of such monitoring and evaluation actions; and
- Make arrangements for the provision of training and guidance to relevant staff in the fields
 of antidiscrimination law and policy, disability law and policy, including accessibility and
 the practical application of the United Nations Convention on the Rights of People with
 Disabilities, in accordance with the general ex ante conditionality.

The Equality Authority, which has a statutory responsibility to promote equality, should be engaged to offer support to intermediary bodies in assessing the impact of their measures on the nine equality grounds and incorporating an equality dimension, as appropriate, in project design and delivery.

The Managing Authority for the ESF Operational Programme will address the impact on the Equal Opportunities Horizontal Principle at implementation level. The annual implementation reports submitted in 2017 and 2019 may, depending on the content and objectives of operational programmes, set out information and assess the specific actions taken to promote equality between men and women and to prevent discrimination, in particular accessibility for persons with disabilities, and the arrangements implemented to ensure the integration of the gender perspective in the operational programme and operations.

6.4 Promotion of Sustainable Development

The principle of sustainable development requires that the needs of the present be met without compromising the ability of future generations to meet their own needs. In practice, this implies ensuring that environmental protection requirements, resource efficiency, sustainable management of natural resources, climate change mitigation and adaptation, disaster resilience and risk prevention and management our addressed through both dedicated funding streams and through their horizontal integration across the relevant Operational Programmes; for the 2014-2020 programme period, at least 20% of the ERDF allocation must be allocated towards low carbon economy measures.

The objectives of the CSF funds are to be pursued in the framework of sustainable development and the Union's promotion of the aim of protecting and improving the environment as set out in Articles 11 and 19 of the Treaty taking into account the polluter pays principle. This implies that those who cause environmental damage should bear the costs of avoiding it or compensating for it. As a general rule, this means that funding should not be used to meet the costs of complying with existing legislation and the principle should be systematically applied across programmes and projects.

The Irish Government launched a renewed sustainable development framework in June 2012. The *objectives of the Our Sustainable Future – A Framework for Sustainable Development for Ireland*²²³ are to identify and prioritise policy areas and mechanisms where a sustainable development approach will add value and enable continuous improvement of quality of life for current and future generations and set out clear measures, responsibilities and timelines in an implementation plan.

The framework broadly follows the thematic approach of the *EU Sustainable Development Strategy* and sets out a wide range of measures that seek to ensure an improvement in Ireland's quality of life into the future in areas such as:

- Sustainability of public finances and economic resilience;
- Sustainable consumption and production;
- Conservation and management of natural resources;

²²³http://www.environ.ie/en/Environment/SustainableDevelopment/PublicationsDocuments/FileDownLoad,30452,en.pdf

- Climate change and clean energy;
- Sustainable agriculture;
- Sustainable transport;
- Social inclusion, sustainable communities and spatial planning;
- Public health;
- Education, communication and behaviour change;
- Innovation, research and development;
- Skills and training; and
- Global poverty and sustainable development.

The framework identifies the green economy as a central plank to Ireland's economic recovery, consistent with the Action Plan for Jobs 2012. It sets out a medium to long-term plan to guide the essential work needed to progress the sustainable development agenda and more fully exploit opportunities in the green economy in Ireland. It sets a vision on how to transition Ireland to a resource efficient, low-carbon and climate resilient future.

The framework aims to address policy conflicts and trade-offs as part of a coherent, joined-up approach to policy making on sustainable development and is set to make Ireland a leader in sustainable development. It signals a major reorientation of public and private investment, particularly in terms of innovation, research and development in those areas where radically new approaches are considered necessary.

The Government sustainable development framework document is intended to provide a platform for the integration of sustainable development principles into policies across all sectors. The framework broadly follows the thematic approach of the EU Sustainable Development Strategy and sets out a wide range of measures that seek to ensure an improvement in Ireland's quality of life into the future. Among the areas listed are sustainability of public finances and economic resilience, sustainable consumption and production, conservation and management of natural resources, climate change and clean energy, social inclusion, sustainable communities and spatial planning, education, communication and behaviour change, innovation, research and development, skills and training and global poverty and sustainable development.

Implementation in Ireland of the Europe 2020 Strategy, which the EU adopted in 2010 as its successor to the Lisbon Strategy on Growth and Competitiveness, should assist in responding to our economic challenges by contributing to the creation of employment and smart, sustainable and inclusive growth, driven by an accelerated national effort to ensure that Ireland becomes a low-carbon, competitive, resource-efficient and climate-resilient country. At the EU level, a long list of activities is envisaged for the short term, covering the formulation of new visions and strategies (e.g. on biodiversity), the review of existing policies, use of financial instruments, structures and monitoring provisions, amongst others. In the medium term, the establishment of concrete tools is addressed (e.g. Life Cycle Assessment, eco-labelling, Green Public Procurement and others), leading to long-term support for research, the introduction of market-based instruments and the abolition of counter-productive subsidies. The extent to which these tools will be used will be further considered when the draft OPs have been finalised.

The ESF Operational Programme will support the principle of equality for women and men as set out in the Regulations.

The priorities for action cut across many key challenges and include:

- An effective framework for transition to an innovative, low carbon and resource efficient society;
- Identifying and adopting policies that can help achieve a shift towards a green economy, while maintaining fiscal stability and ensuring sustainable public finances into the future;
- Protecting and restoring Ireland's biodiversity and ecosystems so that benefits essential for all sectors of society will be delivered;
- Securing health and social well-being to enable full participation in society and economic development;
- Effective governance arrangements to ensure delivery of sustainable development;
- A partnership approach to implementation of the strategy; and
- Developing a set of indicators to measure and report on progress.

The Managing and Intermediary bodies, in accordance with this principle should, therefore, consider the following steps in the identification of priorities and in the drafting of the programmes:

- Involve bodies working in the fields of sustainable development at all stages (preparation, implementation, monitoring, evaluation), including the provision of advice on sustainable development in fund-related activities
- Comply with the Strategic Environmental Assessment Directive, where appropriate;
- Incorporate the principle of sustainable development in the design of measures and operations;
- Ensure that project selection criteria will assess projects on the basis of environmental protection requirements, resource efficiency, climate change mitigation and adaptation, disaster resilience and risk prevention;
- Monitor and evaluate the application of the principle and have regard to the results of such monitoring and evaluation actions; and
- Comply with the polluter pays principle.

6.5 Promotion of Social Inclusion

Social exclusion is defined as being unable to participate in society because of a lack of resources that are normally available to the general population. It can refer to both individuals, and communities in a broader framework, with linked problems such as low incomes, poor housing, high crime environments and family problems.

Social inclusion is an important horizontal theme across the Irish Government's priorities. The Irish Government launched the National Action Plan for Social Inclusion 2007-2016 in February 2007. The Plan identified a number of high level strategic goals in priority areas in order to achieve the overall objective of reducing consistent poverty. The targeted actions and interventions are designed to mobilise resources to address long-standing and serious social deficits. They focus on:

- Ensuring children reach their true potential;
- Supporting working age people and people with disabilities, through activation measures and the provision of services to increase employment and participation;
- Providing the type of supports that enable older people to maintain a comfortable and high quality standard of living; and

• Building viable and sustainable communities, improving the lives of people living in disadvantaged areas and building social capital.

The plan recognises the continuing challenges faced by those in work but on low incomes, as well as the vulnerability of those in households without any employment. The overall poverty goal is to reduce the number of those experiencing consistent poverty to 4% by 2016, and to 2% or less by 2020.

As indicated in the 2013 National Reform Programme Update for Ireland, the trend in meeting the Europe2020 has been upwards, highlighting the impact of the economic crisis in Ireland.

The high level strategic goals of the Action Plan are aimed at:

- The provision of targeted pre-school education;
- Reducing literacy difficulties and tackling early school leaving;
- Maintaining the combined value of child income support measures at 33%-35% of the minimum adult social welfare payment rate;
- Introducing an active case management approach to support those on long-term social welfare into education, training and employment, with an overall aim of reducing by 20% the number of those whose total income is derived from long-term social welfare;
- Maintaining the relative value of the lowest social welfare rate;
- Continuing to increase investment in community care services for older people;
- Maintaining, and if possible enhancing, the value of the State Pension;
- Increasing the employment and participation of people with disabilities;
- Delivering increased housing output to meet the accommodation needs of some 60,000 new households, the homeless, Travellers, older people and people with disabilities;
- Developing 500 primary care teams to improve access to services in the community, with particular emphasis on meeting the needs of holders of medical cards; and
- Developing a strategy aimed at achieving the integration of newcomers in Irish society.

In addition to the high level goals, there are some 154 targeted actions and interventions set out in the Plan designed to ensure that a decisive impact is made on poverty. The Managing and Intermediary bodies for the ESF co-financed Human Capital Programmes and the ERDF co-financed Regional Operational Programmes 2014-2020 should, therefore, have regard to this principle in the identification of investment priorities and in the drafting of the programmes:

- Involve bodies in charge of social inclusion policy and organisations representing excluded groups at all stages (preparation, implementation, monitoring, evaluation), including the provision of advice on social inclusion in fund-related activities;
- Incorporate measures to ensure Social Inclusion and minimise the effects of social exclusion in the development and implementation of the OPs;
- Track the impact of social inclusion at implementation level on relevant operations within the programmes; and
- Monitor and evaluate the application of the principle and have regard to the results of such monitoring and evaluation actions.

6.6 North South Co-operation

The economies of both parts of the Island of Ireland are currently facing significant economic challenges, moving towards more knowledge and innovation-oriented stages of development. Both economies also face similar challenges related to the increased pace and intensity of global competition. The two economies must build areas of co-operation particularly in the areas of infrastructure, research and development, skills formation and innovation which will enhance both communities' capacity to position themselves in the knowledge economy of the future. This is of particular importance to the Border counties of the Border, Midland and Western region.

Although not necessarily a formal national or EU-derived horizontal principle, the investment in the Operational Programmes should facilitate where possible, greater co-operation between communities, institutions and enterprises on both parts of the Island. Potential synergies should also be explored with the INTERREG and PEACE programmes implemented by the Special EU Programmes body on a cross-border basis (see section 7.3). At an institutional level, there is potential for ongoing engagement in relation to the investment priorities identified in this Needs Analysis.

Chapter 7: Potential Complementarities and Synergies

7.1 Introduction

This chapter reviews the potential complementarities and synergies that may exist within programmes, across CSF funds, with other EU funds and instruments and with national investment programmes. It also addresses the potential contribution of the ERDF and ESF programmes to the relevant Sea Basin Strategy, which for Ireland is the Atlantic Strategy Action Plan. These are set out in 6 sections, as follows:

- Potential complementarities and synergies between priorities and actions within ERDF and ESF programmes (7.2);
- Use of the European Structural and Investment funds in a complementary manner (7.3);
- Complementarities and synergies with other EU funds and instruments (7.4);
- Complementarities with the Europe 2020 Strategy and Flagship Initiatives (7.5);
- Complementary with national investment programmes (7.6); and
- Potential contribution to the Atlantic Strategy Action Plan (7.7).

7.2 ERDF: Potential complementarities and synergies between priorities and potential actions

For the ERDF co-financed programmes, the following potential complementarities and synergies between priorities and planned actions have been identified.

7.2.1 Strengthening Research, Technological Development and Innovation

• The transfer of commercially viable research outputs into industry is facilitated through the Enterprise Ireland managed National Technology Transfer system. The commercial potential of research outputs from the co-financed research, technological development and innovation initiatives under the Regional Operational Programmes acts as both a catalyst for new business start-ups, while also consolidating and improving the competitiveness of existing firms as an outcome of product innovation and new to market and new to firm product offerings; and • The shift to a low-carbon economy is predicated not only on behavioural changes but more substantively on solutions emerging from the scientific and research community. Support for research and innovation in this sector is critical for stimulating and catalysing technological and business opportunities in the transition to a low carbon economy.

7.2.2 Enhancing Access to and Use and Quality of ICT

- Ubiquitous high speed broadband is considered a fundamental basic infrastructure. It is essential for economic growth, job creation and competitiveness for SMEs and micro-enterprises. The report of the Next Generation Broadband (NGB) Taskforce recognises the potential that NGB has to enhance SME competitiveness and for job creation²²⁴; and
- The move to e-commerce is very attractive for retail and business-to-business activity on a number of levels. While there is a growing willingness among Irish people to shop and transact their business online²²⁵ the National Digital Strategy recognises that it is important to stimulate the indigenous economy by helping small Irish business to expand on-line²²⁶. The roll out of high speed broadband will further incentivise businesses to strengthen their on-line presence and maximise their e-commerce potential.

7.2.3 Enhancing the Competitiveness of SMEs

- The synergies achieved through technology transfer, applied research, technology development and demonstration facilities serves to help companies develop more innovative products, processes, marketing and services. It results in a more diverse national and regional economy through new high-growth activities;
- Compliance with environmental legislation is facilitated by the types of emerging technologies and practices supported under the co-financed Regional Operational Programmes, allowing businesses to met their obligations and achieve cost savings in terms of energy efficiencies and avoidance of penalties; and
- The roll-out of high speed broadband to the areas outside of the main cities will be of particular significance to the micro-enterprise sector. Improved speeds will improve

²²⁴ Department of Communications, Energy and Natural Resources (2012): Enabling a Connected Society: Report of the Next Generation Broadband Taskforce, May, 2012.

²²⁵ Digital marketing Institute: Social Business ECOMMERCE & THE DIGITAL DYNASTY, 2013.

²²⁶ Department of Communications, Energy and Natural Resources (2013): Doing More with Digital, National Digital Strategy for Ireland, phase 1- Digital Engagement, June 2013.

access to market from an e-commerce perspective for existing small businesses and will enhance the attractiveness of the more rural and peripheral regions as business locations.

7.2.4 Low-Carbon Economy

- The impetus to create a shift to a low-carbon economy permeates across all thematic objectives. The objective creates opportunities for research and development of lowcarbon and green technologies and their realisation to market can be assisted through business support programmes;
- Research and development coupled with pilot and demonstration models are an essential component of the planned investment in the renewable energy sector. Currently Ireland's portfolio of electricity comprises 15% wind energy²²⁷ which puts Ireland on target to meet its *Europe 2020* binding renewables commitment of 40%²²⁸. The potential now exists to develop Ireland's wind resource and by extension electricity export capacity to Great Britain and the rest of Europe. Investment in the East-West and North-South Interconnectors provides the requisite infrastructure to realise this potential; and
- Planned investment in the National Grid as envisaged under the GRID25 Investment programme will facilitate the integration of renewable energy and is highly ranked by the business community as a key to unlocking renewable energy opportunities²²⁹.

7.2.5 Integrated Urban Development

- The explicit inter-relatedness of the Europe 2020 priorities of Smart, Sustainable and Inclusive growth promotes an approach to programme design that values the efficiencies that derive from integrated planning and target setting²³⁰. Planned investment actions across all priorities of the programmes potentially have resonance for Integrated Urban Development;
- Sustainable Transport Initiatives impact positively on the goal of realising a low-carbon economy and contribute to the improvement in air quality and the general quality of life of urban dwellers;

²²⁷ http://www.iwea.com/: Wind Energy in Ireland Statistics.

 ²²⁸ EirGrid, 2013: "Evaluation of the wider economic benefits of GRID25 Investment Programme", April, 2013.
 ²²⁹ Ibid.

²³⁰ European Commission (2010): Europe 2020: A strategy for smart, sustainable and inclusive growth, March, 2010.

- Investment in Research, Technological Development and Innovation programmes provides employment opportunities and enhances the attractiveness of the location as a place to live; and
- The scale of benefits derived from schemes that seek to enhance the physical environment, public arts infrastructure and gains in energy efficiencies, contributes directly and indirectly to the improvement of the fabric of urban life and is an example of an integrated approach to planning and delivery of programmes.

7.3 Use of the European Structural and Investment Funds in a Complementary Manner

The basis for coordination between the European Structural and Investment (ESI) Funds is provided for in the Common Provisions Regulation, ensuring consistency and alignment between the funds. This includes a framework for close coordination to ensure that cofinanced interventions create synergies and that streamlining leads to a reduction of administrative cost and administrative burden for beneficiaries.

The arrangements for ensuring co-ordination and the concrete measures that will be taken to maintain this co-ordination throughout the programming period will be spelled out in the Partnership Agreement, including:

- The identification of areas of intervention where the CSF Funds can work together in a complementary manner to achieve the thematic objectives set out in the proposed Common Provisions Regulation; and
- The arrangements for close co-ordination of programme management, implementation and monitoring in order to ensure synergies and avoid duplication and overlaps.

This section details the use of the ESI funds in a complementary manner, from the perspective of the European Regional Development Fund (ERDF), including European Territorial Co-operation and PEACE Programme funding. It also analyses potential synergies with the recently adopted Atlantic Sea-basin strategy.
ESF Human Capital Investment Programme

There are several potential synergies between the objectives of the ESF co-financed programme and the ERDF co-financed Regional Operational Programmes.

- As a general principle, the up-skilling of the labour force across the regions to enhance employability will meet the evolving needs of the regional economies and will increase the competitiveness of enterprises, including micro-enterprises. Regional economic development requires a well-educated, capable and flexible workforce to increase productivity and adaptability within a competitive international environment;
- The micro-enterprise support programme provided by the Local Enterprise Offices will include training, mentoring and capability development programmes for would-be and existing entrepreneurs, complementary to the objectives of the ESF co-financed programme;
- The roll-out of high speed next generation broadband services across Ireland will be an enabler for the greater deployment of e-Government, e-health, e-learning services, thus promoting lifelong learning and social inclusion;
- The planned investment in energy efficiency and renewable energy services will stimulate the demand for skilled energy installers and technicians, thus creating an active labour market in this sector for the unemployed. It is anticipated that many of the energy services supported will be labour-intensive;
- The research, technological development and innovation initiatives co-financed under the Regional Operational Programmes will be largely delivered through the higher education institutions and through their incubation and applied research facilities. These initiatives will create a demand for highly qualified researchers and research assistants, many of whom would otherwise be unemployed or would seek employment outside of the state; and
- There is also potential for complementarity with the integrated urban development measures in the Regional Operational Programmes, through addressing the human resource and social inclusion needs of the selected urban areas.

It is proposed that there will be a continuation of mutual representation on the respective programme monitoring committees for the 2014-2020 period.

Rural Development Programme

- It is envisaged that the Rural Development Programme for Ireland 2014-2020 will be built around a number of key investment priorities, namely:
- Facilitating competitiveness, modernisation and restructuring;
- Promoting sustainability; and
- Enhancing quality of life and social inclusion in rural areas.

The first two of these priorities are directed primarily at restructuring and investment in the agriculture and forestry sectors, while the third priority, is aimed at the diversification of the wider rural economy and the provision of services to rural communities, with a particular emphasis on the sustainable exploitation of sectors such as food, rural tourism, and indigenous crafts.

The investment priorities selected for the Regional Operational Programmes will complement those of the Rural Development Programme in many ways as follows:

- By contributing to the competitiveness, innovation capacity and sustainability of the regions, which contain extensive rural areas from peri-urban to rural heartland to remote and coastal. The territorial challenges facing rural areas have been analysed as part of the Needs Analysis, for ERDF and ESF programmes, as set out in Chapter 3;
- ERDF co-financed investment in next generation broadband will ensure the progressive roll-out of high speed broadband services to all parts of Ireland, following a comprehensive mapping exercise which will identify areas that will not be provided with high speed broadband from commercial telecommunications providers. These areas, by definition will be largely rural towns, villages and open countryside. Thus a significant potential digital divide affecting rural areas will be addressed under the Regional OPs;
- Co-financing of energy efficiency and renewable energy sectors will complement the supports via the EAFRD funded programme for on-farm bio-mass production and distribution and community-based energy initiatives, both of which will contribute to Ireland meeting its low-carbon economy objectives;
- Support for entrepreneurship and business development provided by the Local Enterprise Offices across the country will complement the supports provided to natural resourcebased rural enterprises under the Rural Development Programme. Micro-enterprise

supports via the Regional OPs can include supports for the establishment and expansion of off-farm enterprises by farmers and rural dwellers;

- Investments in research, technological development and innovation under the Regional OPs will focus on the research priority areas identified in the recent national research prioritisation exercise. These priorities include several that are relevant to the agri-food sectors; and
- The ERDF has a particular remit for integrated urban development, with a minimum 5% of ERDF resources to be allocated to this objective. This will complement the focus on integrated rural development under the Rural Development Programme.

The Regional Assemblies have been consulted on the Strategy and content for the Rural Development Programme 2014-2020 and there will be a continuation of the inclusion of representatives from the Regional Operational Programme Managing Authorities on the Rural Development Programme Monitoring Committee.

European Maritime and Fisheries Fund

It is envisaged that support under the European Maritime and Fisheries Fund (EMFF) funded programme for Ireland 2014-2020 will focus on maximising the value added of catches and seafood products and the sustainable development of coastal areas.

There are potential complementarities and synergies in a number of areas between the ERDF co-financed programmes and the EMFF programme.

- The Regional Operational Programmes will support complementary research and innovation investments, including those related to marine sectors, consistent with the recent prioritisation of this sector under the Research Prioritisation Exercise. Several research institutions including universities, institutes of technology and the Marine Institute have established specialisations in marine research and these centres will be eligible for support either individually or collaboratively, under the Regional Operational Programmes;
- Enterprises which seek to add value to marine products or provide innovative marine services will be eligible for support under the micro-enterprise supports provided from the Regional Operational Programmes;

- As stated above, ERDF co-financed investment in next generation broadband will ensure the progressive roll-out of high speed broadband services to all parts of Ireland, following a comprehensive mapping exercise which will identify areas that will not be provided with high speed broadband from commercial telecommunications providers. These areas will include peripheral coastal areas, and the provision of high speed broadband services to households and business premises in these areas will make a major contribution to the sustainable development of coastal communities; and
- The generation of off-shore renewable energies (wind, wave, tidal) has been recognised as having enormous potential in Ireland. Projects with commercial potential in this sector will be eligible for support through the planned financial instrument for renewable energy and resource efficiency. These will add value to the economies of coastal communities.

The Regional OP Managing Authorities have taken account of the Strategic Plan for the marine sector, "Our Ocean Wealth" and the Atlantic Area Sea-basin strategy in undertaking the Needs Analysis and the identification of investment priorities for the 2014-2020 period. The Regional OP Managing Authorities will continue to be represented on the Monitoring Committee for the EMFF programme for the 2014-2020 period.

European Territorial Co-operation Programmes

- For the 2014-2020 programming period, Ireland will be included (either full territory or partially) in the following European Territorial Co-operation Programmes:
- Atlantic Area Transnational Co-operation Programme;
- Ireland/Scotland/Northern Ireland Cross-Border Programme;
- Ireland-Wales Programme Cross-Border Programme;
- Northern Periphery and Baltic Transnational Co-operation Programme;
- North West Europe Transnational Co-operation Programme; and
- INTERREG V Inter-regional Programme.

Irish authorities will be represented on the Steering and Monitoring Committees for all of these programmes and are currently actively engaged in the preparatory work for the 2014-2020 period for all of these programmes. The Irish representatives on these bodies represent the regional and national authorities responsible for Structural Funds, while the National

Contact Points for the transnational co-operation programmes are hosted by the ERDF Managing Authorities, thus ensuring clear linkages with the ERDF investment priorities for Ireland.

The thematic priorities for these programmes are not yet finalised, but it is expected that there will be a high degree of overlap with the themes selected. Many of the expected beneficiaries under the ERDF co-financed programmes in Ireland are also likely to participate in the ETC programmes, including, higher education institutions and research bodies, enterprise support agencies, regional bodies, local authorities and energy agencies.

PEACE IV Programme

The PEACE IV Programme, managed on behalf of the UK and Irish Governments by the Special EU Programmes Body is of particular relevance to the Border, Midland and Western Region, as its eligible area includes the six Border Counties.

The overall focus of the current PEACE programme is to reinforce progress towards a peaceful and stable society and to promote reconciliation through building positive relations, creating shared public spaces and developing key institutional capacities for a shared society.

The BMW Regional OP Managing Authority is a consultee for the development of the PEACE IV Programme and is represented on the Programme Monitoring Committee, Steering Committee and several Working Groups. It is expected that the integrated urban development initiatives supported under the Regional OP will include urban centres in the Border Counties thus contributing in a complementary manner to creating shared spaces. The enhancement of the overall economy of the Border region with the support of the BMW Regional OP will also create a more favourable environment for peace and reconciliation.

Co-ordination structures and arrangements

Arrangements will be put in place at a national level to ensure close co-ordination of programme management, implementation and monitoring in order to achieve synergies, clarify demarcations and avoid duplication and overlaps between the funds.

A Committee on Coordination of EU Funds was established for the 2007-13 programming period to address cooperation and demarcation issues between ERDF/ESF, EFF and EAFRD. The role of the Committee was to put in place, where necessary, appropriate systems to address these issues in the Operational Programmes, and address any implementation issues that may warrant demarcation in the operational programmes and any plans for new programmes to ensure that the Funds are not overlapping. The Committee comprises of the relevant Government Departments and all Managing Authorities for the funds.

For the 2014-2020 period the role of such a committee could be expanded to put in place appropriate mechanisms, within the context of administrative simplification, to enable beneficiaries to use the funds in a complementary manner and where appropriate to combine funds within an eligible operation.

There has been a high degree of co-operation and co-ordination between the Managing Authorities in Ireland in the preparation of the programmes supported by the ESI funds and this will continue in the implementation and monitoring of the respective programmes.

7.4 Complementarities and Synergies with other Union funds and Instruments²³¹

Article 55(8) of the draft Common Provisions Regulation provides that:

An operation may receive support from one or more CSF Funds and from other Union instruments, provided that the expenditure item included in a request for payment for reimbursement by one of the CSF Funds does not receive support from another Fund or Union instrument, or support from the same Fund under another programme.

In tandem with the ESI funds, the EU offers an additional, and entirely separate, form of funding programmes. As opposed to the Shared Management system of ERDF, ESF, EAFRD and EMFF (jointly administered by the European Commission and appointed Managing Authorities in the Member States), these "Centrally Managed" or "direct" funds are the exclusive competence of the Commission and its agencies as instruments to reflect sectoral EU policy priorities.

²³¹ The extensive work undertaken by Ronan Gingles, Irish Regions Office in Brussels in the compilation of this section is acknowledged.

Rather than being financed from pre-allocated national envelopes which are directed towards pre-identified priority areas of expenditure as determined by government (in Ireland's case) in line with over-arching EU policy, funding from these programmes is only allocated on the basis of competitive bids judged to have best responded to (annually evolving) set criteria, open on a pan-European basis (sometimes beyond) and usually requiring the formation of collaborative transnational partnerships among applicants in order to provide for exchange of experience and transfer of knowledge between different systems and cultures. Their objectives include the provision of a means for the testing of new approaches to address specific EU policy concerns and/or to deliver upon/implement the terms of policy objectives.

Traditionally, the shared management and direct funding streams have tended to exist in isolation from one another with project promoters opting for an either/or approach in terms of whichever source presented the best prospects for success. Ireland's historically ready access to Structural and Rural Development funding has meant that the alternative pathway has not always been fully appreciated in this country. This may be, perhaps, because of a perception that dealing with Brussels was more complex than going through a government department or state agency in pursuit of funding, and, perhaps to the extent that the effort involved was seen as outweighing the benefits accruing. Consequently, a generalised familiarity with the terms of the Commission Programmes is not especially in evidence across parts of the Irish system, even as the flow of allocated (now ESI) funds has comparatively slowed in recent years.

There is a need to ensure that the ultimate choice of thematic objectives and activities to be funded by Operational Programmes should be arrived at by reference to the wider EU funding landscape in order to avoid duplication; differentiate programme content, target beneficiaries and delivery mechanisms as necessary; and maximise the impact of the limited resources available, including by the identification of issues with the potential to be mutuallyreinforcing if properly handled.

This section will set out six such Commission funds thought to present some scope for synergies with the ESI equivalents:

- Horizon 2020 (research and innovation);
- COSME (competitiveness of small businesses);

- Creative Europe (culture and creative industries);
- LIFE (environment and climate change);
- 'Erasmus+ (education, training, youth & sport)' and
- EASI (employment and social innovation).

In addition, reference will be made to the Connecting Europe Facility (CEF) for infrastructure and to a number of non-grant financing schemes operated by the European Investment Bank (EIB) – both of which operate on a different basis. While definitive budgets remain to be confirmed, the collective EU funding value for 2014-2020 of these six programmes alone is estimated to be in excess of $\bigoplus 0$ billion. Purely on a *per capita* basis, it is reasonable to assume that Ireland and Irish organisations (public, private and third sector) could be in a position to access a baseline amount of approximately $\bigoplus 000$ million worth of EU funding – a figure not far below the combined national ERDF/ESF allocation – from these sources. That being the case, it is important to establish how added value can be maximised from being more cognisant of the potential activities to be funded by each of the two streams and any beneficial synergies which might arise.

Although the Commission has brought forward overview proposals for these funds (and others²³²), and general acceptance has been granted by the Council of Ministers and the European Parliament at this stage, it should be appreciated that the details provided below remain indicative, subject to the publication of the relevant Decisions (generally to be expected over the second half of 2013 or in early 2014) to provide a formal legal basis for each programme, and subsequently of guidance materials setting out full details of priorities, structures, budgets and timeframes.

There may be a case for accelerating and activating new initiatives at EU level for pooling available resources from COSME, Horizon 2020 and European Structural and Investment Funds in order to enable additional funds to be leveraged through the European Investment Bank and the European Investment Fund.

^{232 &#}x27;Europe for Citizens Programme'; 'Consumers Programme'; 'Health for Growth Programme'; 'Rights and Citizenship Programme'; 'Asylum and Migration Fund'; 'Internal Security Fund'.

The Joint Financial Instruments proposed will create new funding mechanisms and could have a significant impact in terms of stimulating SME financing and economic growth

<u>'Horizon 2020'</u>

Given its sheer scale, with a funding budget of €71 billion, the necessity for the development of synergies between ESIF and Horizon 2020, the EU framework programme for Research and Innovation, cannot be understated in order to blend the use of research and innovation funds with those of the ESI funds. Through a mixture of instruments, encompassing research and innovation projects; support for innovation ecosystems; research coordination (e.g. ERA-NETs²³³); SME financing via loan guarantees and risk-sharing arrangements; and research professionals' career mobility and training (Marie Sklodowska-Curie Actions) – Horizon 2020 will provide substantial support to build Europe's excellence in research, its dominance in key enabling technologies (KETs), solutions to a set of major societal challenges and general support for innovative SMEs.

The programme will be focused upon a more business-oriented approach than its predecessor, the outgoing Seventh Framework Programme for Research and Development (FP7), particularly in support of SMEs, focussing on the entire innovation cycle and favouring actions aimed at creating innovative products and services that provide business opportunities and change daily life for the better. In this regard, a particular emphasis will be placed on sustainable development issues and the use of ICT.

Equally, the concept of "innovation" is recognisably broader than under FP7, to take in nontechnological developments, new uses and combinations of existing technology, new business models and forms of end-user interaction, and non-commercial applications (e.g. social innovation).

Compared to FP7, Horizon 2020 will involve a tighter focus on 3 strategic priorities: 'Excellent Science': strengthening the quality of the EU's science base with an eye towards ensuring its long-term competitiveness through world-class research activity. This is intended:

²³³ ERA-NET is a scheme to step up the cooperation and coordination of research activities carried out at national or regional level in the European Research Area (ERA) through networking and joint collaborative research programmes to enable national systems to take on tasks collectively that they would not have been able to tackle independently.

- To support the best frontier research ideas;
- To enable collaborative research to open up radical, high-risk yet promising fields of Future and Emerging Technologies (FETs);
- To develop researcher talent (training and career development and mobility opportunities); and
- To provide researchers with access to priority research infrastructure (including e-infrastructures).

'Competitive Industries': strengthening European industrial leadership in innovation and creating a more attractive location to invest in research and innovation. This includes:

- A major focus on developing key enabling and industrial technologies (KETS) across a range of fields (ICT, nanotechnologies, advanced materials, biotechnology, advanced manufacturing and processing, and space);
- Access to business risk finance (debt and equity) for R&D and innovation-driven companies and projects at all stages of development (together with the equity instrument of the COSME programme, this will support the development of EU-level venture capital); and
- Support for all forms of innovation in SMEs with significant international growth potential.

'Better Society': The largest portion of the programme will support efforts to tackle major societal challenges as reflected across the *Europe 2020* growth strategy:

- Health, demographic change and wellbeing;
- Food security, sustainable agriculture, marine and maritime research, and the
- bio-economy;
- Secure, clean and efficient energy;
- Smart, green and integrated transport;
- Climate action, resource efficiency and raw materials; and
- Inclusive, innovative and secure societies (including the internet).

This strand would involve partnerships of the private and public sectors which should bring together the resources needed to bridge the gap between the research and market stages through a new focus on innovation-related activities, such as piloting, demonstration, testbeds, and support for public procurement and market uptake (e.g. helping innovative enterprises to develop their technological breakthroughs into viable products with real commercial potential).

In addition to combining all outlets for research and innovation funding as currently provided through FP7, the new programme will assume the non-enterprise related activities of the Competitiveness and Innovation Framework Programme (CIP) such as a refocused Intelligent Energy Europe programme.

Areas of synergy between the two streams should be readily apparent in relation to the ERDF and EAFRD programmes' ex-ante conditionality for the development and delivery of bottomup research and innovation strategies for smart specialisation (RIS3). As per the Common Provisions Regulation (Annex 1) "these strategies shall be developed through involving national or regional managing authorities and stakeholders such as universities and other higher education institutions, industry and social partners in an entrepreneurial discovery process".

This is intended as an approach whereby the stock of knowledge-based productive assets and interconnections in evidence across a particular territory ('place-based'') can be coherently drawn together in order that future policy support and (mainly private) investment may be channelled towards a limited set of viable domains of expertise and potential while avoiding duplication and fragmentation of effort and of resources. The Commission's DG REGIO and the Joint Research Centre's (JRC) Smart Specialisation Platform have made clear that this does not involve simply selecting particular firms or sectors, but rather, identifying the research and (broadly-defined) innovation activities and/or generic technology(ies) (with a special focus on digital growth and interoperable ICT-enabled services) that can help a regional economy to diversify into higher value-added markets, to modernise/rejuvenate or to exploit new/emerging economic activities. As such, RIS3, as a means of identifying required support actions, presents an obvious conduit between the ESI funds and Horizon 2020.

By reference to the implementation of aspects of the relevant RIS3, areas of activity with potential for joint funding between the two instruments might include:

- Development of research infrastructures and e-infrastructures of European interest and recognised as vital to undertaking ground-breaking research;
- Collaboration between emerging centres of excellence and innovative regions through 'Twinning', to significantly strengthen a specific field of research in an emerging institution by linking it to at least two leading international institutions and 'Teaming' to create new centres of excellence, or significantly upgrade existing ones, in regions that are performing poorly in terms of R&D and innovation by teaming-up with a leading counterpart institution elsewhere in Europe;
- Building links with innovative clusters and recognising excellence in less developed regions;
- Establishing "European Research Area (ERA) Chairs" to attract outstanding academics, to institutions located in less developed regions but with a clear potential for research excellence;
- Supporting access to international networks for researchers and innovators who are less involved in the ERA or from less developed regions;
- Contributing as appropriate to the European Innovation Partnerships (EIPs)²³⁴;
- Preparing national institutions and/or clusters of excellence for participation in the European Institute of Innovation & Technology (EIT)²³⁵ and its Knowledge and Innovation Communities (KICs)²³⁶; and
- Hosting high-quality international researcher mobility programmes with co-funding from the Marie Sklodowska-Curie Actions.

In terms of the mechanics of blending the funds into joint approaches, the potential exists in relation to development of research infrastructure where ERDF (or EAFRD) may be deployed towards construction and fitting-out costs with Horizon 2020 being used for

²³⁴ EIPs are challenge-driven collaborations, fusing EU, national and local/regional efforts in R&D and demand-side measures to accelerate research, development and market deployment of innovations and to achieve societal benefits targets more efficiently (rapid modernisation of associated sectors and markets). University College Cork and the Louth Age-Friendly County Initiative have jointly secured the first formal Irish involvement (as reference sites) in an EIP – for Active & Healthy Ageing.
²³⁵ The EIT aims to enhance Europe's ability to innovate, providing solutions to rapidly emerging societal problems and

²³⁵ The EIT aims to enhance Europe's ability to innovate, providing solutions to rapidly emerging societal problems and developing products that meet the demands and needs of consumers by bringing together the expertise of higher education institutions, research centres and businesses (education, research and innovation) on a cross-border public-private-partnership basis as a means of creating the critical mass to drive innovation.

²³⁶ KICs are the EIT's highly integrated, creative and excellence-driven partnerships comprised of regionally-embedded colocation centres. KICs for climate change adaptation and mitigation; "Innovation for Healthy Living and Active Ageing; Raw Materials - Sustainable Exploration, Extraction, Processing, Recycling and Substitution; Food4Future - Sustainable Supply Chain from Resources to Consumers; Added-value Manufacturing and Urban Mobility system.

preparatory phase (planning and design – including legal and technical requirements). However, there are other approaches by which useful synergies between the instruments could arise.

The different funding sources could, in fact, support different phases of the development of a technology over time, starting from basic research, to applied research, to demonstration or to pre-competitive market introduction, meaning that the inverse "downstream" sequential approach to the above capacity-building scenario is also envisaged as being possible. This would involve existing Horizon 2020 (or possibly ongoing FP7) activities being built upon by using ESI fund interventions as a means to diffuse and commercially exploit their results by turning them into marketable innovations. Here, in terms of the ERDF programmes, the attention would broaden beyond thematic objective 1 to include aspects of numbers 2 and 3 on ICT (applications) and the competitiveness of SMEs (specifically new business models and entrepreneurship) respectively. Horizon 2020's emphasis on the development of key enabling and industrial technologies (KETS) in ICT (for one field) may offer further scope in this direction as may interaction with the EIT ICT Labs KIC.

At individual firm or research body level, this approach to innovating towards commercialisation could entail an Operational Programme grant aiding activities such as applied research, development and demonstration, experimental development and prototyping; technology transfer and adoption; innovation audits to identify potential demand for R&D results; proof-of-concept; and pilot production.

Between the two ends of the pipeline as outlined, there is further potential for viable interaction between a range of Horizon 2020 activities as structured under the 'Excellent Science' strand, such as ERA-Nets and Marie Curie, and particular research and innovation aspects of the ESI funds. These include business R&I, product and service development and demonstration pilots.

Subject to compatible themes in relation to the research, technology or innovation in question, it may also be possible for ERDF to effectively step in and continue support for (one partner to) a (transnational) project whose Horizon 2020 funding is concluding but

which makes a compelling case for being sustained, e.g. due to a spin-off activity idea or a plan to develop the facilities required to perform further significant in-house research.

Equally, the two sources could be combined to finance elements within the same overall investment project – subject to concerns over double-funding being satisfied and the funded actions being clearly distinct. A possible example might involve ESF providing business-related training to the staff of an SME which is also in receipt of a Horizon 2020 loan guarantee to support an innovative project. Similarly, an integrated approach to the funding of aspects of the operation of a science or technology park, business incubator or a cluster/network arrangement by Horizon 2020 and ERDF could be considered based on the dual innovation-regional development potential of such facilities (there may also be potential for transfer of experience between transnational network and cluster initiatives supported by the two different kinds of EU fund and for mainstreaming).

In fact, given the likely complexity of differences in expenditure eligibility rules under the two streams, despite proposals to simplify and align methodologies, there may well be multiple, highly technical, scenarios which could be played out. By and large the concepts of fund blending as suggested above, notwithstanding the additional administrative burden and the need to ensure achievement of priority milestones within each programme, could equally be related to finding synergies between the ESI funds and the other 5 programmes which follow.

<u>'COSME'</u>

The first EU instrument to be dedicated entirely to SMEs largely continues the enterprise (i.e. non-innovation) aspects of the outgoing Competitiveness & Innovation Programme (CIP.) This programme should be seen as complementary to Horizon 2020 in its objectives of generating growth and jobs via the Single Market. While H2020 will target innovation-driven growth, COSME will support the creation of a favourable business environment and competitiveness in general and aims to be of relevance to all types of dynamic SME, not only start-ups.

As such, the bulk of this €2 billion fund will not be allocated via calls for proposals to support projects, but will instead provide policy actions, financing and business services

support in line with the goals of the Small Business Act (SBA) and as a means of reinforcing the 'Think Small First' principle in EU and Member State policy making. COSME will specifically tackle transnational issues that – thanks to economies of scale and the demonstration effect – can be more effectively addressed at European level. Its four key areas of focus will be:

- Improving the consistency of framework conditions of the economic and regulatory environment for the competitiveness of EU enterprises through benchmarking based on reliable, EU-wide data; best practice identification and exchange; and sectoral initiatives to test sustainable solutions. Particular attention is to be focussed on two sectors: tourism, in terms of issues including trend analysis, combating seasonality, skills development, more sustainable product offerings and promoting ICT uptake by enterprises; and developing the commercial use of new business concepts for sustainable, user-driven design-based textiles, footwear and sport and other consumer goods;
- Measures promoting entrepreneurial skills and attitudes particularly among specific target groups, such as young or female entrepreneurs (easing administrative procedures in setting up and transferring enterprises; encouraging transnational networks to exchange good practices and identifying scope for expanding business activities including through the 'Erasmus for Entrepreneurs' programme for mobility exchange);
- Improving SME access to finance in the form of integrated debt and equity "financial instruments for growth" (collectively amounting to €1.2 billion) to operate through financial intermediaries: This will involve a loan facility to provide direct or other risk-sharing guarantee arrangements to cover SME credit up to €150,000, allied with an Equity Facility to provide commercially-oriented reimbursable venture capital for start-up and growth-phase investment; and
- Enhanced access to markets and international operation, both within Europe and beyond, through business cooperation support services to reduce the effect of differences in regulatory and business environments between the EU and its main trading partners. In particular, the programme will operate the regionally-established Enterprise Europe Network (EEN) (which provides nationwide coverage from bases in Dublin, Cork, Galway, Waterford and Sligo) to provide a free 'one-stop shop' information and advisory service to growth-oriented SMEs. This should cover business expansion and partnering in the EU Single Market and beyond; access to energy efficiency, climate and environmental expertise; and enabling uptake of EU funding opportunities for businesses.

The programme's target is to assist approximately 40,000 European businesses each year and to help create about 30,000 jobs. Synergies could possibly be achieved with the ERDF microenterprise support scheme which is likely to encompass training, mentoring, and capability development programmes for would-be and existing entrepreneurs. COSME's offer of loans and venture capital support could be used to complement the ERDF grant element as a next step in output development. Specifically, the programme's support for the commercialisation of sustainable new business concepts in the textiles, footwear and sport and other consumer goods sectors could present opportunities once ERDF has put foundations in place. More generally, the programme's solid focus on SME internationalisation offers prospects to build on ERDF/EAFRD investments in ambitious micro-enterprises.

It may also be worthwhile to consider better integrating the largely under-utilised Single Market/EU enterprise-support functions of the five EEN offices as a potential add-on element in the delivery of services for micro-enterprises. This could be part of efforts to improve the overall micro-enterprise support environment on a regional basis by integrating niche expertise into coordinated packages.

The stimulation of ICT demand and usage among tourism SMEs may present an opportunity in relation to the ERDF's potential roll-out of next generation broadband services. This might be considered especially relevant in remote and peripheral areas as well as in coastal areas where an interaction with EMFF co-financed initiatives would be a further possibility.

'Creative Europe'

The new e1.8 billion programme for the arts, culture, heritage and related areas, draws together the current Culture, MEDIA and MEDIA Mundus programmes under a single framework to create a simplified and more accessible gateway for European cultural and creative professionals.

'Creative Europe' is intended to strengthen the competitiveness of the sector by looking beyond the intrinsic value of activities in these spheres towards their economic potential to drive growth and employment. It will particularly target support to improve the prospects of artists and cultural professionals and organisations in what is recognised as a fragmented market/cultural space. This includes a strong emphasis on assistance in accessing new markets in Europe and beyond through training to strengthen capacity to work internationally (e.g. language issues) or through direct support (e.g. with distribution of cultural works).

Support for cultural operators' efforts to adapt to the digital era will also be available. The largest chunk of the fund is being provided to the media strand (audio-visual sector including TV and video gaming) while almost €500 million is destined for cultural actions relating to music, publishing, performing arts, fine arts, heritage and other areas.

In recognition of the specificities of cultural and creative industries (which tend to be small in stature, to work on a non-mass production basis, and to deal in intangible assets such as intellectual property rights) the Commission is also proposing to allocate more than \notin 200 million to a 'Cultural and Creative Sectors Loan Guarantee Facility' which would attract extra financing from investors on the basis of risk sharing with the EU, thereby enabling small operators to access up to \oiint billion in bank loans.

Another cross-cutting element would provide €60 million in support of transnational policy cooperation and exchanges of experience between policymakers and operators, fostering innovative approaches to audience-building and cultural and media literacy, and new business models. The support for cultural operators' efforts to adapt to the digital age may be of relevance to the ERDF programme's ICT objective.

LIFE Programme

The next (and fifth) generation of the EU programme for the Environment will broadly continue to act as a platform for the testing, implementation, updating and development of EU policy and legislation in this field through innovative pilot or demonstration project approaches which unlock environmental added value. These are intended to ensure policy learning, promote implementation and integration of environmental and climate objectives in Member States' policies and act as a catalyst for more effective investments to transform Europe into a resource-efficient economy. However, it will be more closely aligned to the *Europe 2020* objectives than the current LIFE+ programme has been, including a significant new emphasis on bottom-up climate action.

The larger sub-programme for Environment will operate according to the following strands:

- 'Resource Efficiency' integrating waste, water and air objectives in other sectors;
- 'Biodiversity': to halt loss and restore ecosystem services, while maintaining support for Natura 2000 sites – in particular by actions implementing 'Prioritised Action Frameworks' (to coordinate each Member State's own approaches to the management of its network sites) – and the implementation of the EU Biodiversity Strategy 2020; and
- 'Environmental Governance & Information': information and awareness-raising and knowledge sharing activities to facilitate better environmental enforcement and compliance approaches and overall governance (this will include support for environmental NGOs).

The second sub-programme on Climate Action represents a more radical departure from the current programme and is set to account for approximately a quarter of the overall budget. Its focus has been outlined as covering:

- 'Mitigation': to reduce greenhouse gas emissions, including support to SMEs, improving the knowledge base and facilitating the implementation of EU climate priorities;
- 'Adaptation': efforts to increase resilience in the face of climate challenges notably through the development or implementation of national/regional/local low-carbon and climate-resilience strategies and enabling decision makers to effectively use knowledge and data about climate change impacts, in particular for adaptation-related planning. This could relate to:
- Policy studies for development of EU policy and legislation and support for local implementation;
- Improving local and regional capacity to develop and implement climate actions in practice, including that of NGOs;
- Facilitating development and implementation of integrated strategies and action plans at regional level centred around climate objectives and mainstreaming across policy areas; and
- Development and demonstration of innovative technologies, systems, methods and instruments for replication, for transfer or mainstreaming.

'Governance & Information': awareness, communication, networking and dissemination on climate mitigation and adaptation actions with a view to influencing behavioural change, contributing to more effective compliance and enforcement of EU climate legislation, and promoting better climate governance by stakeholder involvement (e.g. NGOs) in policy consultation and implementation.

It is worth noting that on all evidence to date, the current LIFE+ programme has displayed a very stable set of annual calls for proposal covering all aspects of the fund. It has also, uniquely among the direct funding programmes, operated off a system of pre-allocated national funding envelopes (something whose continuance is a subject of some debate) and even a possibility for national authorities (never exercised by Ireland) to stipulate their own annual priority topics to which they wish to channel funding. Were this to continue in the next period, it would offer a sense of strategic assurance in terms of allowing ample scope for the timely planning and development of suitably-scaled project bids – perhaps in order to add further European value to activities which have benefitted from initial support from ESI funds.

This is particularly relevant in the light of a key new delivery aspect "Integrated Projects" which are intended to foster an overall strategic approach to a particular issue and to enable the funding of activities through a range of mechanisms, including a coordinated mixed-use of LIFE and other EU, national and private funding sources. The approach would allow the implementation of policy objectives in the areas of nature, water, waste, air, and climate change mitigation and adaptation to be more strongly linked into other sectoral policy areas. Integrated Projects are particularly envisaged as a means of using reasonably wide-scale territorial strategies - based around, for example, River Basin Management Plans, Waste Management Plans, or Prioritised Action Frameworks for the collective management of NATURA 2000 network sites - as a means of accessing relevant ESI funds. This would allow the LIFE programme to contribute more to complementing the mainstreaming of environment and climate issues and approaches across the 2014-2020 MFF, most notably in compliance with the ERDF (low-carbon economy), EAFRD (delivering public goods and improving the uptake of efficient technology, including through agri-environment measures), and EMFF (reducing overfishing/overcapacity and direct impacts such as by-catch, as well as supporting marine-protected areas) instruments.

The potential prioritisation of the ERDF 'Low-carbon economy' objective by reference to housing/public building energy efficiency and renewables issues only, restricts the potential for synergies with LIFE which will not cover energy issues. If waste management were to be included within the scope of the ERDF programme this could offer some scope for synergies.

It is expected that the new programme may continue to allow some focus on "urban environment" issues as part of its remit. This could possibly be deployed in tandem with the 5% minimum Sustainable Urban Development expenditure under the ERDF programmes. It may also be of relevance to Territorial Cooperation activities – specifically to the proposed Innovative Urban Actions to support new ways of tackling future challenges where €300 million will be made available to an indicative 30-40 European cities based on highly transferrable approaches to (inter alia) reconciling economic activities and growth with environmental considerations and to developing sustainable urban mobility solutions. There may also be scope for coordinated linkages with Irish involvement in the URBACT III sustainable urban development networking initiative – which itself may continue to be linked into the ERDF programmes.

ERASMUS+

The new integrated programme for education, training, youth and sport amalgamates the various elements (Comenius – schools; Erasmus – higher education; Leonardo – vocational and educational training; Grundtvig – adult education) of the current Lifelong Learning Programme, along with five international cooperation programmes in the field of education (Erasmus Mundus, Tempus, Alfa, Edulink and the programme for cooperation with industrialised countries), and also includes the Youth in Action programme as well as a new focus on the role of sport in society.

Its overall objective is based on the premise that investing in formal, non-formal and informal learning is the key to unlocking people's potential, increasing their personal development, gaining new skills and boosting their job prospects, regardless of their age or background. In addition to these concerns it aims to support the modernisation of education and training systems. The main actions will continue in the form of:

- Learning opportunities through mobility for study, training, teaching, professional development and non-formal youth activities such as volunteering abroad;
- Cooperation projects among education and training institutions or youth organisations to develop and implement joining initiatives and promote peer learning and exchanges of experience – particularly on the use of ICT and/or with a view to including business as partners in their activities; and
- Strengthening the evidence-base for policy-making through exchange of good practices and benchmarking studies as well as addressing specific policy agendas such as the Bologna (higher education) and Copenhagen (vocational education and training) processes.

The focus will be on ensuring EU added-value and systemic impact through all the actions funded under the programme. Among the newer aspects are large-scale cross-sectoral cooperative ventures to boost creative input into and the job prospects of those engaged in education, training and youth activities. Four hundred 'Knowledge Alliances' (large-scale partnerships between higher education institutions and businesses to promote creativity, innovation and entrepreneurship by offering new learning opportunities including developing new wok-based learning curricula and pedagogical approaches) and 'Sector Skills Alliances' (between education and training providers and businesses to promote employability, contribute to new sector-specific or cross-sectoral curricula, develop innovative forms of vocational teaching and training and put Union transparency tools into practice) will be established. The programme will also offer a Master's degree student loan guarantee scheme to finance study abroad and to acquire the skills needed for knowledge intensive jobs. Synergies could be achieved with the ERDF programmes' roll-out of high-speed next generation broadband as an enabler for the greater deployment of e-learning services.

EASI (Employment and Social Innovation) Programme

This is the $\circledast15$ million integrated programme for employment, social policy and inclusion. It will support innovative solutions for developing and implementing adequate and effective reforms of social protection systems and labour markets so as to tackle demographic ageing, high unemployment rates, poor working conditions, poverty and social exclusion across the EU through improved policy coordination, sharing of best practices, employment mobility, capacity-building (notably entrepreneurship and self-employment) and testing of innovative policies with the aim that the most successful measures can be up-scaled with support from the European Social Fund.

The programme integrates and extends three existing EU initiatives through separate axes:

- The Progress Programme for Employment and Social Solidarity will continue its current activities of supporting policy analysis, mutual learning and developmental actions with social partners, civil society organisations and other interested parties on issues including improving working conditions; reducing the incidence of work-related accidents and illnesses including emerging risks in occupational health and safety; and ensuring gender and age equality at the workplace. A significant share of the budget will be set aside for 'social innovation and experimentation' projects, i.e., testing of innovative policies on a small scale, with the aim that the most successful ones can be up-scaled, including with ESF support;
- The Microfinance and Social Entrepreneurship Facility will extend support (finance and risk-sharing guarantees) to selected microcredit providers to provide loans setting up or developing small businesses; enable some capacity-building for microfinance institutions activities; and fund investments to develop, grow and consolidate social enterprises i.e. businesses whose primary purpose is social, rather than to maximise profit distribution to private owners or shareholders where the entrepreneur's status (e.g. unemployed or at risk of losing their job; considered too young or too old; a member of a minority group, disabled) entails difficulties in accessing conventional credit. This is intended to have a multiplier effect in laying the foundations for enhanced public and private action at national and regional levels in the years to come and to contribute to building sustainable and professional capacities for social impact investments across the EU; and
- The EURES (European Employment Services) system will be strengthened to offer modernised self-service transnational tools for matching job-seekers with job offers, including by creating and developing new targeted mobility schemes such as the' Your First EURES Job' scheme for young jobseekers.

A clear ''upstream'' effect is expected whereby successful EASI activities – particularly with 'social innovation and social policy experimentation' and the cross-border operation of the EURES job mobility scheme – can be mainstreamed and scaled-up by the ESF. Recognition

of social enterprises²³⁷ as a specific cohort within the SME definition could yield synergies with ERDF and EAFRD.

Connecting Europe Facility

The (significantly scaled-back) \notin 29.3 billion 'Connecting Europe Facility' (CEF) outlines plans for targeted infrastructure investment at European level which will make a significant contribution to the development of the single market and boost sustainable growth, jobs and competitiveness. The instrument will provide seed finance to kick-start the leverage of other private and public investment in transport (to complete the "transport core network'') and energy (completing the "energy priority corridors") to solve missing links and bottlenecks and (to a far lesser extent) digital networks. This is intended to make a significant contribution towards making Europe's economy both more competitive and greener by promoting cleaner transport modes, facilitating the use of renewable energy and enabling cross-border digital services.

The Commission has spelt out that a competitive process will apply and prospective applicants – likely to have a public-private partnership element, aided by the EU 'Project Bond Initiative' (see below) – will need to be proactive in submitting detailed proposals for infrastructure works and studies in order to avail of the EU co-financing.

In terms of transport, the policy establishes a "core" trans-European (TEN-T) network of the most strategic links between the EU's major "nodes" (social and economic centres, ports and airports) with a focus on safer, more efficient and less polluting modes in order to identify priority sections and projects. Investments are to be completed by 2030 to deliver a backbone for transportation within the Single Market. A series of cross-border corridors have been established to facilitate coordinated development and joining-up of infrastructure of added European value. Of these, one is entitled "Dublin-London-Paris-Brussels" and includes sections for "Belfast-Dublin-Holyhead-Birmingham" and for "Dublin/Cork/Southampton-Le Havre-Paris" with pre-identified sections being mentioned as upgrading the Dublin-Belfast rail line; the Dublin DART "Interconnectors"; port hinterland connections at Cork and Dublin; and "Rail connection Shannon-Cork-Dublin

²³⁷ There is a growing recognition of the important role that social entrepreneurship has to play - 'Study on Practices and Policies in the Social Enterprise Sector in Europe 2007' and has resonance within Europe 2020 see 'Social economy and social entrepreneurship Social Europe guide Volume 4'.

(studies ongoing)". Associated maps also identify the port of Foynes along with the airports of Dublin and Cork as elements of the core network. A further, longer-term "comprehensive" network of routes (for completion by 2050) is intended to feed into the core network at regional and national level in order to ultimately reach all parts of the EU. This second layer will largely be financed by Member States, with some EU funding possibilities, including with new innovative financing instruments. Various other Irish ports and airports are mapped in this category as are some transport routes. Horizontal priorities for CEF transport funding include rail signalling and air traffic control systems.

The energy component of CEF aims to help to meet the *Europe 2020* Strategy's energy and climate objectives while also further developing the internal market for energy through better interconnections, leading to security of supply and the possibility to transport renewable energy in a cost-effective manner across the EU. Irish energy investment projects included in the preliminary list of priority corridors relate primarily to the transmission and storage of electricity and gas interconnections with the UK and the wider continent via the following corridors:

- Northern Seas offshore grid ("NSOG"): an integrated offshore electricity grid to transport electricity from renewable offshore energy sources to centres of consumption and storage and to increase cross-border electricity exchange;
- North-South electricity interconnections in Western Europe ("NSI West Electricity"): interconnections between Member States of the region and with Mediterranean third countries, notably to integrate electricity from renewable energy sources; and
- North-South gas interconnections in Western Europe ("NSI West Gas"): interconnection capacities for North-South gas flows in Western Europe to further diversify routes of supply and increase short-term gas deliverability.

Furthermore, all Member States will be involved in the development and deployment of smart grids to integrate offshore renewable energy generation, "electricity highways" and cross-border carbon dioxide storage networks.

The decision by European heads of state to slash the budget earmarked for an EU-wide roll out of fast broadband (an element of the Commission's 'Digital Agenda for Europe' strategy)

has lessened the potential for mutually-beneficial interaction with the ESI fund programmes in Ireland.

EIB/EIF Financial Instruments and Europe 2020 Project Bond Initiative

As an alternative to the traditional grant-based approach associated with EU funding, for the 2007-2013 period, a series of European Investment Fund (EIF)-backed equity, debt and guarantee instruments have been developed (under Article 44, General Regulation (EC) No 1083/2006). As part of numerous Structural Fund Operational Programmes across the EU, these have provided financing for repayable investment in SMEs (JEREMIE) and sustainable urban development projects (JESSICA), and technical assistance for the development of bankable programmes on energy efficiency and renewable energy in buildings (ELENA) as a means to address market failure in these sectors.

Having recognised the success of this experimental approach, the Commission envisages its standardised wider deployment in support of these, plus a wider range of policies, for 2014-2020. The use of "Innovative Financial Instruments" offers a significant new financing stream for strategic investments with evident commercial potential and has the advantage of creating a multiplier effect to stretch the impact of EU funding further by facilitating and attracting other public and private financing to projects.

In line with the CEF (above) particularly, the joint European Commission-European Investment Bank (EIB) Europe 2020 Project Bond Initiative offers a means of securing investment resources for the building, financing and operation of infrastructure projects of key strategic European interest and public goods, including relating to climate and environment protection. Investment by the EU will largely be in the form of EIB-backed equity, debt or guarantees by which the (generally public-private partnership) promoter of individual infrastructure projects may issue bonds enhancing their project's credit rating and lowering their risk profiles in order to attract financing by financial institutions and private capital market investors (including pension funds or insurance companies).

It is envisaged that such an approach could be complemented by public investment at local, regional and national levels and through the Structural Funds – subject to a positive feasibility study – with energy efficiency measures in buildings likely to present an outlet for

the recurring use of ERDF resources and the additional leverage of external financing. The typical expectation is that the EU financing will generate a five-fold contribution in terms of public resources and a twenty-fold investment from the private sector.

Additionally, funds from the European Investment Bank Group (EIB and EIF) can generally be used to finance the national or regional contribution to a project under Horizon 2020 or the ESI funds. The EIB will typically provide a loan whereas the EIF will typically provide either Venture Capital funds or a guarantee.

7.6 ESI funds synergies with the Europe 2020 Strategy and Flagship *Initiatives*

For the 2014-2020 programming period, the EU policy agenda is dominated by the Europe 2020 – A Strategy for Smart, Sustainable and Inclusive Growth and its concrete European objectives and targets for employment, research and development, climate change and energy sustainability, education, and fighting poverty, in order to overcome the impact of the financial crisis and put Europe back on track for economic growth, which have, crucially, been translated into national equivalents to secure a more direct influence on Member State policies. Its seven related Flagship Initiatives²³⁸ represent sets of interlinking activities in the thematic areas of innovation, digitalisation, youth, resource efficiency, industry, employment and social inclusion (see section 7.5 of this chapter) They are intended (by the Commission) to guide coordinated action at European (mainly strategic and policy-relevant), national and development of programmes) and sub-national (formulation of strategies (implementation to support the fulfilment of the targets)²³⁹ levels towards ultimately realising the overall strategy in these fields.

These initiatives do not have their own budget, but, although there is not a direct correlation with EU funding instruments, their influence is, unsurprisingly, reflected in the content of the Commission's own funding programmes which have emerged from the various Directorates-Generale. Thus, for example, Horizon 2020 is the key mechanism for the implementation of the Innovation Union flagship initiative. In a bid to better involve Member States in the

 ²³⁸ 'Innovation Union', 'Digital Agenda for Europe', 'Youth on the move', 'Resource-efficient Europe', 'An industrial policy for the globalisation era', 'An agenda for new skills and jobs' and 'European platform against poverty'.
 ²³⁹ An annual updating of the National Reform Programme (NRP) grouping specific planned policy measures to boost

growth and jobs in line with Europe 2020 at Member State and sub-national level is provided for.

Strategy (not to repeat the ownership and implementation deficit recognised with the previous *Lisbon Agenda* – despite high levels of Cohesion Policy earmarking), the ESI funds have also been implicated as very significant delivery mechanisms towards the *Europe 2020* targets with the Commission framing the strategy as a means to identify those activities intended to form the basis of all Operational Programmes.

This has been broadly characterised as relating ERDF (through its thematic objectives) to "smart" growth and initiatives; EAFRD and EMFF pertaining in the main to "sustainable" and ESF covering "inclusive". In itself this division of the flagships into distinct fields is somewhat arbitrary and closer examination might suggest a more nuanced use of the interplay between the various instruments, including some of the Commission programmes, in terms of their relative degrees of relevance as below:

Growth	Europe 2020	Primary	Secondary	Partial
Orientation	Flagship	fund	fund	
	Initiative			
''Smart''	Innovation Union	Horizon 2020	ERDF	ESF <i>Erasmus</i> + EMFF EAFRD
	Digital Agenda	ERDF EAFRD	Horizon 2020	ESF CEF (Creative Europe)
	Youth on the move	Erasmus+	ESF (incl. Youth Guarantee)	
"Sustainable"	Resource-	ERDF	EAFRD	
	efficient Europe	LIFE	EMFF	
		CEF		
		EIB/EIF		
	Industrial policy	EIB/EIF	ESF	
		ERDF	COSME	

"Inclusive"	New skills and	ESF	Erasmus+	ERDF
				Creative
	jobs			Europe
	Platform against	ESF (incl. Youth	ERDF	EAFRD
	poverty	Guarantee)	EKDF	EASI

However, in order for this to take credible effect, a strong degree of coordination with the Flagship Initiatives (which have primarily sectoral characters – not ideal for integrated territorial cohesion purposes) will need to be in evidence in the design of ESI instruments. This includes a thorough reflection of their objectives and goals in the terms and alignment of national Partnership Contracts; a clear association with any ring-fencing of funding decisions; evidence of their scope for achieving bottom-up acceptance and support at sub-national level; an appreciable emphasis on Operational Programmes supporting structural and regulatory framework reform measures; and a possible niche role for European Territorial Cooperation in relation to facilitating their mainstreaming the initiatives into the Operational Programmes.

The general question of achieving synergies is all the more important when consideration is given to the fact that, in all cases, the EU provides co-financing (at varying degrees) in order to ensure commitment from project promoters and acceptable use of resources. This means that every EU-funded project with an Irish component also involves a commitment of Irish finances – usually provided, directly or otherwise, by the exchequer – and maximising the value of this outlay as well as the strategic worth of the activity it pays for is something that requires attention. While this is taken as read in the national choices underpinning the deployment of the ESI funds, in order for Ireland to assure that it can maximise the extent and benefit of its involvement in the direct funds offered by the Commission, it will be necessary to maximise the quality of engagement from potential Irish participants as part of competitive applications and well-implemented projects.

It should be appreciated that the rules for draw-down, management and reporting vary from fund to fund, meaning that availing of the hands-on guidance provided is very important. A relevant example t is the LIFE+ environment fund, where, according to figures gathered from

the programme website, of approximately 22.2 million pre-allocated²⁴⁰ to Ireland over 6 annual calls for proposals to date (2007-2012), only 9.4 million has been accessed by Irish bids with the majority being re-allocated to other Member States deemed to have submitted better quality, more strategic project applications.

As European Territorial Cooperation is part of the ESI structure (see section 7.3 of this chapter), the cross-border Interreg programmes (Ireland-Northern Ireland-Scotland and Ireland-Wales), along with PEACE IV, which must, by definition, involve a high degree of Irish involvement in all cases. Nonetheless, as these programmes also operate on a competitive bid basis, the same strategic approaches suggested above would be in order so as to optimise Irish involvement. The transnational and interregional programme (whose budgets are still unknown) might reasonably be expected to yield a baseline of a further $\notin 20$ million in ERDF support to Ireland on a per capita basis alone.

'Innovation Union' has the aim of supporting research, development and innovation policies on topics such as climate change, energy and resource efficiency, health and demographic change. The Flagship initiative should provide synergies between the various policies and instruments at European and Member State levels. Different European instruments are involved especially in this thematic field, but Member States also have national and regional policies and programmes related to this field. The Flagship initiative provides the opportunity to establish a unified innovation framework; however, it must establish a compromise between the pursuit of cohesion and the promotion of excellence. On one side, there is increasing global competitiveness, and on the other side there is scarce public funding and a fragmented operating environment. At the EU level, an extensive set of actions is detected in the short term for the definition and standardisation of the framework and the launch of specific support mechanism (e.g. on mobility of researchers). These activities serve the purposes of coherence and performance in the medium term, leading to the enhancement of the European Research Area in the long-term.

'Digital Agenda for Europe' aims to support the Digital Single Market by improving fast and ultra-fast internet and interoperable applications. This includes broadband access for all

²⁴⁰ Exceptionally for a competitive funding programme managed by the European Commission, LIFE+ provides indicative funding envelopes to all eligible countries as part of its annual calls for proposals system.

regions in Europe by 2013, increased internet speeds (30 Mbps or above) by 2020, and more than 50 percent of European households connected to internet with a speed above 100 Mbps. The Flagship initiative concentrates on the broad improvement of the 'hard' and 'soft' factors concerning ICT. The potential of a single market framework for ICT and the potent market drive on ICT are significant drivers of success related to this initiative. On the other side, the market orientation might also lead to market failures, which will require some form of public intervention. This is especially true in the EU-12, which often lack a sufficient basic infrastructure in their ICT network. At the EU level, in the short term the build-up of a legal and procedural framework including guidance to the Member States is foreseen. This will lead to the establishment of capable European agencies and the definition of an interoperable and cross-border network in the medium term, and to Europe-wide e-governance in the long-term. At the Member State and local and regional levels, the focus is on the enhancement of ICT skills in the short-to-medium term and the improvement of the infrastructure in the medium-to-long-term.

'An Industrial Policy for the Globalisation Era' concentrates on economic, business and labour force aspects considering among others innovation, resource efficiency, business environment, the Single Market and the improvement of SME support. However, this broad thematic spectrum can lead to a loss of focus, and competition between Member States, the lack of coordination and the deepening of existing disparities also jeopardise effectiveness. At the EU level, the establishment of an EU Industrial Policy in the short term is the cornerstone, accompanied by related regulations and guidance. In the medium-to-long-term, the horizontal approach to industrial policy, the enhancement of EU standards and the promotion of resource efficiency are identified as paramount challenges. At the Member State and local and regional levels, the focus in the short-to-medium term is on the enhancement of skills, the reduction of the administrative burden for SMEs, and the guarantee of a stable and trustworthy operational environment for SMEs. The restructuring of industries and the promotion of resource efficiency are mentioned for the medium term, and the utilisation of telematics and the creation of efficient transport and logistics networks are a long-term issue.

'Resource-efficient Europe' covers a very broad spectrum concerning resource efficiency and environmental protection related to all policies and programmes at European and national levels, emphasising the horizontal character of the topic. However, this horizontal dimension means that effectiveness and efficiency will only be generated through EU-wide implementation. The EU's fast-growing 'green' industry can be a powerful global asset. At the same time, globalised industrial competition confronts European industry with low-price products and low environmental standards, making the adoption of rigid legal changes towards resource efficiency less welcome. At the EU level, a long list of activities is envisaged for the short term, covering the formulation of new visions and strategies (e.g. on biodiversity), the review of existing policies, operationalisation via financial instruments, structures and monitoring provisions, amongst others. In the medium term, the establishment of concrete tools is addressed (e.g. Life Cycle Assessment, eco-labelling, Green Public Procurement and others), leading to long-term support for research, the introduction of market-based instruments and the abolition of counter-productive subsidies. At the Member State and local and regional levels, the focus in the short term is on the finalisation of the legal and administrative framework (where needed), leading to concrete implementation in the medium-to-long-term of very specific actions (e.g. energy efficiency in buildings, development of storage technologies, introduction of fiscal incentives etc.).

'Youth on the Move' addresses the high youth unemployment, suggesting actions concerning educational and professional mobility and the facilitation of entry into the labour market. At the EU level, the challenge in the short term lies in the definition of an education modernisation agenda to be carried out by the relevant programmes in the medium term. At the Member State and local and regional levels, the focus is on immediately improving entry into the labour market, while investments in infrastructure and human resources and the establishment of qualification frameworks in the medium term should lead to improved educational outcomes and reduced drop-out rates in the long-term.

'An Agenda for New Skills and Jobs' is closely related to 'Youth on the Move', shifting the focus onto formal, non-formal and informal learning aimed at demand-driven education and work-based learning. The main concern lies in matching skills with labour market demand and EU-wide harmonisation. National competences pose a serious obstacle in this field, and national administrations might be too weak or too slow in adapting to the rapid changing needs of businesses, hence the emphasis on on-the-job training approaches. At EU level, the focus in the short-term is on a review of the relevant directives and policies, and in the

medium-term on setting up an Integration Fund for third-country nationals. At the Member State and local and regional levels, where the main action is located, the administrations should focus in the short-to-medium term on the improvement of skills, investments in infrastructure, and support of self-employment and entrepreneurship. In the medium-to-longterm, the focus shifts to concrete training and skills programmes and Lifelong Learning Frameworks. The establishment of 'flexicurity' frameworks is mentioned as a long-term issue.

'European Platform against Poverty' addresses the disparity between wealth and poverty (and underlying unemployment) throughout Europe. The main aim is to make poverty visible on the daily agenda. To facilitate an informed discussion on the topic, the lack of adequate data to support theoretical considerations is addressed. However, this field is not problem-free, as Member States either lack the capacity or willingness (for various reasons) to implement the necessary activities. At the EU level, the promotion of evidence-based research in the short term is a *sine qua non*, which should lead to the medium-term support of social economy initiatives and partnership. At the Member State and local and regional levels, where the main action is located, assisted by evidence-based research in the medium term, which should lead to efficient migration management and flexibility of education and training in the long-term.

7.7 Complementary national investment programmes and strategies

The following table summarises the national investment programmes which will support and reinforce the achievements of the objectives set for the European Structural and Investment Funds:

Thematic Objective	Lead Fund	National Investment Programme
1.Strengthening Research,	ERDF	Strategy for Science, Technology and
Technological Development and		Innovation
Innovation		Programme for Research in Third level
		Institutions
		Smart Specialisation Strategy (forthcoming)
2.Enhancing Access to and use	ERDF	National Broadband Plan
and quality of ICT		

	National Digital Strategy
ERDF	Action Plan for Jobs
ERDF	Renewable Energy Strategy
	National Energy Efficiency Action Plan
	National Climate Change Strategy
ERDF	National Climate Change Strategy
ERDF	Capital Investment Framework 2012-2016
	Water Sector Reform Implementation
	Strategy
ERDF	Capital Investment Framework 2012-2016
ESF	Action Plan for Jobs
	Pathways to Work
ESF	National Action Plan for Social Inclusion
	2007-2016
	Action Plan for Jobs
ESF	National Strategy for Higher Education to
	2030
	ERDF ERDF ERDF ESF ESF

7.8 Potential contribution to the Atlantic Strategy Action Plan

The relevant Sea-basin strategy for the Irish programmes is the Atlantic Area Strategy (2011), supported by a more detailed Action Plan (2013), as outlined in Chapter 2 of this Needs Analysis. The Action Plan identifies four overarching priorities each of which contain a number of specific actions which Member States are invited to implement, using EU and national funds that are managed by Member States.

Priority 1: Promote Entrepreneurship and innovation – this will be complemented by the research and innovation support measures that will be supported under the Regional OPs, including support for maritime-related research activities undertaken by the higher education research centres and the Marine Institute. It will also be complemented by supports for micro-enterprise establishment and expansion by the Local Enterprise Offices of local authorities across Ireland. The availability of high speed broadband will also facilitate the establishment of knowledge economy enterprises in coastal Atlantic areas.

Priority 2: Protect, secure and develop the potential of the Atlantic marine and coastal environment – this includes actions to exploit the potential of off-shore energy, one of the potential areas that may be supported by a proposed financial instrument focussed on the renewable energy sector. It will also be supported by research investment in the marine energies and biotechnology sectors under the Regional OPs.

Priority 3: Improve Accessibility and Connectivity - ERDF co-financed investment in next generation broadband will ensure the progressive roll-out of high speed broadband services to all parts of Ireland, including peripheral coastal areas. This will make a major contribution to the connectivity of coastal communities.

Priority 4: Create a socially inclusive and sustainable model of regional development - the overall impact of the Regional Operational Programmes will be to enhance the innovation capacity, competitiveness, digital connectivity and resource efficiency of the Regions, along with sustainable development of urban centres. This will contribute to the priority of creating a socially inclusive and sustainable model of regional development along the Atlantic seaboard of Ireland.

Where appropriate/relevant the ESF Operational Programme 2014-2020 will contribute to the Priorities in the Atlantic Area Strategy (2011) Action Plan.

Chapter 8: Conclusions and Justifications for Selection of Thematic Objectives and Investment Priorities

8.1 Introduction

This Chapter draws upon the different elements of the Needs Analysis to make recommendations with regard to the thematic objectives and associated investment priorities that should be considered for co-financing for the 2014-2020 period. The Needs Analysis has reviewed the overall EU and national policy context (Chapter 2), the macro-economic context and outlook (Chapter 3), a review of EU, national and regional policy drivers, trends, activities and achievements 2007-13 for each of the thematic objectives (Chapter 4), a thematic SWOT analysis and territorial needs analysis by NUTS II region (Chapter 5), a review of the horizontal principles (Chapter 6) and an assessment of potential synergies, complementarities, co-ordination arrangements with other Funds, and the contribution to the Atlantic Strategy Action Plan (Chapter 7). In addition, the submissions received from stakeholders (summarised in the Annex) were reviewed and their proposals considered as an integral part of the needs analysis process. The needs analysis has therefore been both multi-dimensional and multi-factorial.

Particular account has to be taken of the requirements for thematic concentration in more developed regions in the draft Common Provisions Regulation, requiring that not less than 80% of ERDF resources must be concentrated on the thematic objectives 1 to 4, while 20% of ERDF resources nationally must be allocated to supporting the shift to a low carbon economy. In addition at least 5% of ERDF nationally must be invested in Sustainable Urban Development. Other relevant considerations are the likely availability of ERDF and ESF allocations for Ireland's NUTS II regions, which have not yet been finalised. Requirements with regard to ERDF/ESF splits in the final agreed regulation must also be respected.

At least 20% of the total ESF allocation will be allocated to the thematic objective of "promoting social inclusion, combating poverty and any discrimination". Additionally, at least 80% of the ESF allocation will be concentrate in up to five of the investment priorities set out in Article 3 (10 of the ESF Regulation No 1304/2013.

In addition, the Irish authorities need to have due regard to a number of administrative issues such as the administrative capacity and experience in the administration of EU Structural Funds by potential Intermediary bodies and the recent experience in administering the 2007-13 programmes, the amenability of investment priorities to performance appraisal and potential delivery mechanisms along with potential integrated approaches to territorial development. Each selected investment priority must contribute to a clear defined result indicator – this requires programmes to identify coherent actions within priorities that contribute to the selected result indicator for the relevant priority and avoid inclusion of a range of loosely related actions. The potential use of integrated approaches to territorial development has also been considered as part of the needs analysis process and the outcomes of this are summarised in section 8.4.

8.2 Conclusions and Recommendations for the Selection of Thematic Objectives and Investment Priorities

Thematic Objective 1:

Strengthening Research, Technological Development and Innovation

Overview

The Europe 2020 Flagship Innovation Union Initiative²⁴¹ stipulates that Member States should continue to prioritise investment to strengthen the research, technological development and innovation (RTDI) research base to build capacity and develop a high-added value and resilient European economy. This remains a key investment and developmental tool for the Irish Government demonstrated by significant investments over the past decade. Ireland's headline national target for Research and Development aims to raise combined public and private investment levels in this sector to 2.5% of GNP (approximately equivalent to 2.0% of GDP). More recently through the agreed framework that emerged from the National Research Prioritisation Exercise the following national targets were established in July 2013:

Increase the share of publicly performed R&D financed by enterprise to €180m over 2013 to 2017 – an average of €36m per annum, from a baseline of €31.2 m in 2010;

²⁴¹ European Commission (2010), Europe 2020: Flagship Initiative Innovation Union. October 2010.
- Increase the number of spin-out companies greater than 3 years old from 44 to 69 by 2017;
- Increase the number of firms engaged in R&D projects of significant scale by 115 firms by 2017, from 1070 companies in 2011 to 1185 companies in 2017;
- Increase, by 10%, the turnover due to new-to-firm or new-to-market product innovations from 9.3% to 10.3% by 2017;
- A further 1,100 researchers will be employed in the enterprise sector in addition to the circa 10,600 currently employed.

Recommendation

The findings of the Needs Analysis both in terms of the identified trends and deficits in RTDI and the findings of the SWOT, continue to strongly support the case for investment in RTDI to maintain their catalytic role in the development of the economies of Ireland's regions. It is recommended that RTDI investment follows Ireland's identified priority research areas to enable regions to maximise local and regional competitive advantages in emerging technological sectors as highlighted in the SWOT analysis. The maintenance of RTDI as a key strand of industrial policy was consistently highlighted in public submissions received. The selected investment priorities within this thematic objective must also reflect the renewed emphasis on achieving commercial outcomes from the public investment, through technology transfer, applied research and commercialisation support programmes.

Further investment in RTDI builds upon investment under the 2007-2013 Operational Programmes and their documented achievements. It presents synergies with the thematic objective of *Enhancing the Competitiveness of SMEs* and can act as a key programming tool to meet the needs of both regions.

The scale of investment demand in RTDI is likely to be higher in the Southern and Eastern Region, reflecting the greater number of research-active institutions in the region. There is further scope for investment in marine research activities, in line with Government policy "Harnessing our Ocean Wealth²⁴²" and consistent with Priority 1 of the Atlantic Strategy Action Plan, particularly in the BMW Region.

²⁴² Inter-Departmental Marine Coordination Group: Harnessing our Ocean Wealth: An Integrated Marine Plan for Ireland, July 2012.

Thematic Objective 2: Enhancing Access to and Use and Quality of ICT

Overview

The overall aim of the Digital Agenda for Europe is "to deliver sustainable economic and social benefits from a digital single market based on fast and ultra fast internet and interoperable applications"²⁴³. In line with this aim which is an Irish Government priority, ambitious targets are set for the provision of high-speed broadband by 2020 under the National Broadband Plan (NBP).

The NBP targets are:

- 70Mbps -100Mbps available to at least 50% of the population with a majority having access to 100Mbps;
- At least 40Mbps, and in many cases much faster speeds, to at least a further 20% of the population and potentially as much as 35% around smaller towns and villages; and
- A minimum of 30Mbps available to all.

Ireland's National Digital Strategy "Doing More with Digital" launched in July 2013 is focused on building momentum in digital adoption.

The prioritisation of investment in ICT infrastructure will:

- Contribute to the EU Digital Agenda objectives;
- Help meet national targets in respect of high speed broadband availability;
- Address identified gaps in high speed broadband availability in non-urban areas; and
- Provide a key enabling infrastructure for research and development, enterprise start-up and growth and e-government services.

Recommendation

While the Commission Services' position paper on Ireland does not prioritise ICT infrastructure, this was largely as a result of the fact that in the original Commission proposals for the Regulations, Thematic Objective 2 had not been included within the 80%

²⁴³ European Commission (2010), A Digital Agenda for Europe. May 2010.

concentration requirement. However, the policy context of Europe 2020 and the Irish Government policy set ambitious targets for the provision of high-speed next generation broadband and this is therefore justified for inclusion. The findings of the Needs Analysis both in terms of the identified trends and deficits in high speed broadband availability and in particular the findings of the SWOT in chapter 5, strongly supports this and recognises the role NGB plays in ensuring strong and competitive regions.

The development of telecommunications infrastructure was also highlighted in a number of the submissions received under the public consultation held by the Regional Assemblies on the preparation of the Regional Programmes 2014-2020. Broadband infrastructure investment forms a key element of the current Regional OPs and has been successfully implemented, with positive outcomes, as affirmed by the programme evaluations.

The benefits accruing from NGB investment permeates all aspects of the economy and society. Investment has the potential to impact positively on the environment and to promote and support the principles of equality and accessibility. Such investment also offers important synergies with other proposed investment priorities and other CSF funds in Ireland for the 2014-2020 period.

From a regional perspective, there are extensive areas in both regions that will require publicly funded investment in order to ensure that they will be provided with high-speed next generation broadband infrastructure, if both the national and EU targets are to be achieved, and the existing digital divide not be made worse.

Overview

The Small Business Act for Europe²⁴⁴ set out a clear imperative from the EU to support entrepreneurship and innovation among SMEs and to drive new firm creation, expansion and employment in SMEs, along with the need to overcome a range of operational barriers. This

Thematic Objective 3: Enhancing the Competitiveness of SMEs

²⁴⁴ European Commission (2008), Think Small First: A Small Business Act for Europe. June 2008.

is replicated by the emphasis that the Irish Government has placed upon facilitating and empowering Irish SMEs through their action plan for small business²⁴⁵

Recommendation

The findings of the Needs Analysis both in terms of the identified trends and challenges for SMEs, continue to strongly support the case for investment in Ireland's SMEs which have been most greatly impacted upon as a result of the economic crisis. Significant barriers exist for SMEs to overcome to be enabled to conduct business, therefore a sustained approach which builds upon the achievements of the 2007-2013 Operational Programmes initiatives remains a logical conclusion from this Needs Analysis. Investment in SMEs presents synergies with a range of thematic objectives to drive the Irish economy and impact upon employment and welfare levels. Investment in initiatives focused upon enhancing the competitiveness of SMES can act as a key programming tool to meet the needs of both regions. Micro-enterprises, which will be the primary focus of the LEOs account for 90% of enterprises in Ireland.

Ireland has a strong track record in SME formation and there is a clear justification to continue to build upon the successful track record of the City and County Enterprise Boards, albeit via a new institutional arrangement as part of the Local Enterprise Offices within local government. There is also a clear rationale to support entrepreneurship initiatives for emerging technology-based start-ups through initiatives such as the New Frontiers Programme, leveraging the resources of the Institute's Incubation Centres. The increased potential for youth and female entrepreneurship must also be recognised.

Thematic Objective 4: Supporting the shift towards a low-carbon economy

Overview

The resource-efficient Europe flagship initiative seeks to develop a framework for policies to support the shift towards a low-carbon economy. This potentially can be achieved through an increased use of renewable energy, development of green technologies and a modernised

²⁴⁵ Department of Jobs, Enterprise and Innovation (2011). The Voice of Small Business a Plan for Action.

transport sector, and promotion of energy efficiency²⁴⁶. The EU Atlantic Strategy Action Plan identifies the need to accelerate deployment of sustainable off-shore renewable energy. The Strategy for Renewable Energy 2012-2020 sets Irish policy framework for the promotion of the shift to a low-carbon economy. The *National Renewable Energy Action Plan* (NREAP) sets out the Government's strategic approach and concrete measures to deliver on Ireland's 16% target under Directive 2009/28/EC. The development of renewable energy is central to overall energy policy in Ireland. Renewable energy initiatives were co-funded over the past programming periods with investment in Energy for Business programmes, Ocean Energy Technology and a broad range of Renewable Energy Research, Demonstration and Development initiatives. Ireland's second National Energy Efficiency Action Plan, which was published in February 2013, reaffirms the commitment to deliver 20% energy savings in 2020 through investment in energy efficiency measures.

Recommendation

Central to attaining the 2020 targets for renewable energy while in tandem contributing to the reduction of greenhouse gas emissions, is the shift to a low-carbon economy. Recent trend data shows renewable energy accounted for just 2% of Ireland's total final energy consumption in 2010 compared to the EU27 average of 7% (see section 4.4). The headline target set for Ireland under Euope2020 is a 20% increase in energy efficiency. Ireland has continued to make progress in relation to its obligations under the Europe 2020 strategy of achieving 20-20-20 targets on energy efficiency. The Commission Services' position paper on Ireland reinforces the need for an increase in share of 'marine and wind energy and biomass energy' in Ireland's energy mix and highlights the need for investment in energy retrofitting in public buildings and housing to gain increases in energy efficiencies²⁴⁷.

The principal objective of the retrofitting proposal is to meet Ireland's commitments in relation to carbon emissions reductions and energy reduction targets for 2020. Implementation of energy efficiency measures in buildings will make a significant contribution to Ireland's carbon emissions reduction targets and energy reduction targets for 2020. The frameworks within which these measures can be implemented are provided by the recast Energy Performance of Buildings Directive and Energy Efficiency Directive.

²⁴⁶ European Commission (2011), A resource-efficient Europe – Flagship initiative under the Europe 2020 Strategy, January, 2011.

²⁴⁷ Position of the Commission Services on the development of Partnership Agreement and programmes in IRELAND for the period 2014-2020, November 2012, p. 12.

Energy savings in buildings which potentially will contribute 45% of Ireland's total energy savings targets for 2020. The energy retrofitting of buildings in the private and public sector hold the greatest potential for energy savings.

Given the requirement that 20% of ERDF resources must be allocated to this thematic objective nationally over the 2014-2020 period and Ireland's challenging targets under EU 2020, a new delivery mechanism maybe required in order to significantly boost investment in this sector. The outcomes of a feasibility study carried out on behalf of the EIB into the potential use of financial instruments in the renewable energy (including bio-energy and waste to energy generation), retrofit of social housing schemes and the energy efficiency field will be very pertinent in this regard. Many of these sectors have the potential for generating some financial returns, thus rendering them potentially suitable for co-financing via a financial instrument. While financial instruments are potentially more appropriate for large scale, energy efficiency schemes, for social housing retrofit schemes, a more conventional Local Authority/Voluntary Housing managed grant scheme may be more suitable.

The trend analysis which identified the inherent challenges in attaining the 2020 targets and the findings of the SWOT in chapter 5 strongly supports the inclusion of this as a key investment priority and recognises the opportunities for strong regional growth arising from such investment.

The positive environmental impacts of such investment are identified in a number of the public consultation submissions received in support of thematic objective four. Such investment also offers important synergies with other proposed investment priorities and other CSF funds in Ireland for the 2014-2020 period. Retrofitting of social housing also addresses environmental sustainability and social inclusion horizontal principles.

Thematic Objective 5:

Promoting climate change adaptation, risk prevention and management.

Overview

The EU 2020 Strategy sets out key targets for climate change and energy sustainability for the EU such as reduction in Green House Gas (GHG) emissions to 20% (or even 30%, if the

conditions are right) lower than 1990. Ireland's headline national target for Climate Change aims to reduce emissions in the non-traded sector by 20% compared to 2005 levels; to increase the share of renewables in final energy consumption to 16%; and to move towards a 20% increase in energy efficiency. Under the Kyoto Protocol Ireland agreed to a target of limiting its greenhouse gas emissions to 13% above 1990 levels by the first commitment period 2008-2012 as part of its contribution to the overall EU target. The strategy to meet this commitment is set out in Ireland's National Climate Change Strategy 2007-2012²⁴⁸. By 2013 Ireland has out-performed its 2007 National Climate Change Strategy forecast and is on-track to meet its commitment under the Kyoto Protocol. This achievement can primarily be attributed to the current economic recession however and there is a significant risk that Ireland will not meet its 2020 EU targets.

Recommendation

There is evidence that the impacts of climate change are already occurring in Ireland and that this can continue over the next half century. The effects of enhanced GHG levels are manifested in rising mean temperatures, more intense and frequent rainfall particularly in winter leading to river and coastal flooding, drier summers possibly leading to water shortages, particularly in the east of the country.

The Commission Services' position paper for Ireland sets out this thematic objective as a priority area for investment in Ireland, but recognises that this is primarily to be pursed through the Rural Development Programmes. In terms of climate change the paper proposes investments in relation to farm advisory services for climate change adaptation, developing the knowledge base in terms of mapping, monitoring and measures relating to increasing the capacity of the landscape to retain water and reduce the risk of flooding. In the area of risk prevention the Commission paper highlights marine forecasting capabilities, response mechanism for marine accidents, loss of agricultural income and sustainable development of coastal areas as priority areas for investment. These investment areas will primarily be relevant to the EAFRD and the EMFF. The SWOT analysis has highlighted that Ireland is projected to breach its annual GHG limits in 2015-2016 due primarily to strong projected growth in emissions from transport and agriculture. A number of the submissions received

²⁴⁸ Ireland's National Climate Change Strategy 2007-2012. Available at: <u>http://goo.gl/Jc8Wd</u>

through the public consultation highlight the need for investment on sustainable coastal development, coastal erosion defences and flood prevention.

Given that the key investment areas to address this Thematic Objective as prioritised in the Commission Paper for Ireland focus primarily on agriculture and the marine/coastal areas and the limited ERDF resources available, along with the requirement that 80% of the ERDF investment should be focused on Thematic Objectives 1-4, it is not recommended to prioritise this thematic objective for ERDF co-financing in either of the Regional OPs. The effect of the agriculture sector on GHG emissions may be addressed through the EAFRD whilst some sustainable transport initiatives could be incorporated into a sustainable urban development priority which will, in some way help reduce the GHG emissions from the Transport sector. Reduced CO2 emissions from more energy efficient building stock (co-financed under thematic objective 4) will also contribute to this objective.

Thematic Objective 6:

Protecting the Environment and promoting resource efficiency

The Europe 2020 flagship initiative Resource-Efficient Europe aims to increase certainty for investment and innovation to ensure that all relevant policies take due account of the resource efficient agenda in balanced manner²⁴⁹. EU environmental policy is guided by Environment Action Programmes (EAP) and in June 2013 the proposal for a successor programme to the 6thEnvironment Action Programme (EAP) which expired in July 2012 was agreed²⁵⁰. The importance ascribed by the European Commission to the protection of the environment is demonstrated by the breadth and depth of Community *acquis* governing the environment dealing with, *inter alia,* waste, water, cultural heritage, biodiversity, soil protection, ecosystems, air quality and urban environment.

 ²⁴⁹ The EU2020 targets for sustainable growth include (i) Reduced greenhouse gas emissions by 20% compared to the base level in 1990 by 2020; (ii) An increased share of renewables in final energy consumption to 20%; and (iii) A move towards a 20% increase in energy efficiency.
 ²⁵⁰ <u>http://eu2013.ie/news/news-items/201306197theappr/</u> The 7th EAP remains to be formally voted through by the Council

²⁵⁰ <u>http://eu2013.ie/news/news-items/201306197theappr/</u> The 7th EAP remains to be formally voted through by the Council and Parliament.

The Irish policy framework for water is set out in the Water Sector Reform Implementation Strategy²⁵¹ published by the Department of Environment, Community and Local Government. This announced the establishment of a national authority to manage investment and maintenance of the water infrastructure for the entire territory. Ireland's waste management policy²⁵² places an emphasis on a movement away from landfill and reflects the policy on the EU Waste hierarchy. The protection and promotion of Ireland's cultural heritage is primarily the responsibility of the Department of Arts, Heritage and the Gaeltacht which is continuing to invest in this area. In terms of biodiversity agenda the EPA have raised concerns that a considerable threat remains for Ireland's biodiversity whilst the National Parks and Wildlife Service continues to work with farmers, other landowners and users in relation to designated conservation sites. Ireland's air quality is generally considered to be good and is monitored via the national air quality monitoring network²⁵³. In terms of urban regeneration some investment has continued in recent years in projects of varying scale. The Regional Operational Programmes funded projects in a number of NSS designated gateways and hubs in addition to the larger scale Limerick and Ballymun regeneration projects. Through the BMW Regional OP 2007-2013 there was also some investment in a Rural Water Programme: Water Services, including Water Conservation; Natural and Built Heritage: and Waste Management.

Recommendation

The Environmental Protection Agency's (EPA) four yearly state of the environment report²⁵⁴ states that Ireland's environment remains in a good condition, although there are a number of areas of concern, and Ireland faces a number of key challenges in the coming years. In comparison with other EU Member States, Ireland has better than average water quality with key concern being nutrient enrichment resulting in the eutrophication of rivers, lakes and tidal waters from agricultural run-off and discharges from municipal waste water treatment plants. The majority of Ireland's habitats that are listed under the Habitats Directive are also reported to be of poor or bad conservation status. On the positive side since 2008 commercial and household waste volumes have decreased significantly and Ireland has also achieved many of

²⁵¹ Department of the Environment, Community and Local Government (2012), Water Sector Reform Implementation Strategy, October, 2012.

²⁵² Department of the Environment, Community and Local Government (2012), A resource Opportunity, Waste Management Policy in Ireland, July, 2012.

²⁵³ http://www.environ.ie/en/Environment/Atmosphere/AirQuality/AirQualityStandardsMonitoring/

²⁵⁴ EPA (2012), Ireland's Environment 2012 – An Assessment.

its EU waste recycling and recovery targets for waste. In terms of land use Ireland has experienced a relatively high rate of land use change since the early 1990s primarily due to the demand for development purposes during the economic boom.

The Commission Services' position paper places a priority on this Thematic Objective specifically in the areas of:

- Improving the quality of water through measures to reduce water pollution (improved fertilizer and pesticide management, protection of watercourses from nitrate pollution).
- Protecting biodiversity, soil protection and promoting ecosystem services including NATURA 2000 and green infrastructures;
- Support to the restoration, preservation and enhancement of biodiversity, in particular the grassland, forest, heath and scrub habitats;
- Support the transition to environmentally sustainable fisheries;
- Measures targeting the quality of soils in Ireland;
- Support the use of integrated maritime policy tools for sustainable growth and competitiveness; and
- These investment areas will primarily relevant to the EAFRD and the EMFF co-funded programmes.

The SWOT analysis has highlighted that Ireland's environment is generally in good condition but has highlighted a number of challenges as outline above. A number of the submissions received through the public consultation highlight the need for investment on conservation measures, water management and infrastructure investment, promotion of the green economy, rehabilitation of contaminated sites, built and natural heritage inland fisheries infrastructures and waste management measures.

Notwithstanding the various challenges highlighted above and given the limited ERDF resources available, along with the requirement that 80% of the ERDF investment should be focused on Thematic Objectives 1-4 it is not recommended to prioritise this thematic objective for ERDF co-financing in either Regional OP, with the possible exception of urban regeneration, as part of a sustainable urban development priority. Based on the various challenges and the priorities as identified by the Commission position paper for Ireland, it would seem that most elements of this thematic objective would be more appropriate to the

EAFRD and the EMFF co-funded programmes. That said, there may be some scope to address the investment priority dealing with improving the urban environment and regeneration of brownfield sites as part of sustainable urban development strategies, to enhance the quality of urban environments. Given the requirement for a minimum of 5% of ERDF resources to address integrated urban development objectives, consideration should be given to including this investment priority, as set out in section 4.12 of this Needs Analysis.

Thematic Objective 7:

Promoting sustainable transport and removing bottlenecks in key network infrastructures

Overview

The European Commission White Paper on a Single European Transport Area²⁵⁵ has set a long-term vision and ambitious goals, including goals in relation to sustainable urban mobility, such as modal shift to public transport and reduced conventional fuel use. The Irish policy framework for sustainable transport is set by the Strategy for Sustainable Transport 2009-2020²⁵⁶. This strategy for smarter travel seeks to promote walking, cycling and public transport as the primary means of access, especially in urban areas. Transport infrastructure investment aimed at promoting sustainable travel and addressing bottlenecks are priorities for Ireland's Capital Investment Framework 2012-2016. There has been co-funded investment in the past decade on inter-regional primary and secondary roads, improvements in rail services and some urban transport initiatives funded under the recent ERDF Gateways and Hubs Scheme.

Recommendation

Promotion of sustainable transport is essential if Ireland is to meet its 2020 emissions targets. However, recent trend data (see section 4.7) shows that public transport use is declining relative to private cars in Ireland. Ireland faces significant challenges in reversing this trend, partly due to the relatively low density of its settlement patterns.

²⁵⁵ European Commission (2010), Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system. March 2011

²⁵⁶ Department of Transport (2009) Smart Travel: A Sustainable Transport Future – A New Transport Policy for Ireland 2009-2020.

The Commission Services' position paper for Ireland did not prioritise major transport infrastructures for co-funding over the 2014-2020 period. The SWOT analyses identified remaining deficiencies and bottlenecks in transport infrastructures and the need to promote sustainable urban transport infrastructure. Local and Regional Authority submissions highlight the need for continued investment in transport infrastructure including national primary and secondary roads and rail services.

Given the limited resources available and the need to concentrate ERDF co-funded investment in a limited number of thematic priorities, it is recommended to focus investment in sustainable urban mobility rather than in major road or rail infrastructure, notwithstanding the recognised need for Ireland to address recognised deficiencies in these infrastructures. Many of the sustainable travel initiatives such as the deployment of bus and cycle lanes could be incorporated in an integrated sustainable urban development priority along with mobility management measures to promote the modal shift to the use of more sustainable transport modes.

Thematic Objective 8: **Promoting Employment and Labour Mobility**

Overview

In order to promote sustainable and quality jobs, the education, training and upskilling systems must provide targeted, labour market relevant, portable and recognised skills and qualifications to the workforce. In particular, the programmes and measures delivering these skills and qualifications must target the unemployed with a strong focus on the long term unemployed, youth unemployment and re-integration of groups facing exclusion from the labour market such as women, migrants, ex-offenders and travellers. The investment priority aimed at providing access to employment for jobseekers and inactive people, including the long term unemployed and people far from the labour market also through local employment initiatives and supporting labour mobility is very relevant for Ireland. The sustainable integration of young people into the labour market, in particular those not in employment, education or training and those at risk of social exclusion or from marginalised communities is also at the centre of our challenges. The enhancement of equality between men and women in access to employment and career progression and the principles of promoting

equal pay for equal work should also feature as key objectives through the ESF in Ireland. Relevant supports for promoting employment opportunities in the area of self-employment can also contribute to the achievement of our labour market outcomes in addressing the needs identified.

Recommendation

The ESF Operational Programme should include measures to assist in delivering on the investment priorities set out above. They could include measures across the spectrum of training, education and work experience, as well as promotion activities and awareness raising among employers and providers of opportunities. A continued emphasis on activation schemes and innovative approaches to employment-focused measures would enhance the contribution that the ESF can make to effective solutions for the unemployed and disadvantaged groups. Support from the ESF for some mainstream skills or education programmes that are directly relevant to getting people back to jobs would also be a constructive way to deliver on this thematic objective in Ireland. Later sections of this Programme set out more clearly how specific measures or activities contribute to this.

Thematic Objective 9:Promoting Social Inclusion and Combating Poverty

Overview

In a society where unemployment and detachment from the labour market are at severe levels, the promotion of measures that seek to tackle social exclusion, poverty and discrimination are essential in achieving the ESF objectives. For Ireland, the investment priority of active inclusion, including with a view to promoting equal opportunities and active participation, and improving employability is central to this challenge. The Needs Analysis has identified low employment rates, low participation rates, high unemployment, long term unemployment and youth unemployment and jobless households as significant factors that must be addressed. Within those factors, all affected groups need to be supported by the ESF, but those groups facing the biggest barriers to inclusion must be included. The investment priority that seeks to support the integration of marginalised communities and the investment priority that supports combating of discrimination and promotes equal opportunities also merit attention in the Irish ESF programme.

Conclusion

The Operational Programme should seek to support measures that have active inclusion as a focus. Measures that target those from jobless households, the long term unemployed, women returners, migrants and ex-offenders are particularly relevant. The overarching objective of getting people back to work as quickly and directly as possible must be paramount in funding decisions. Measures more targeted at tackling poverty and discrimination where an employability focus is central are particular priorities in this thematic area for the time being. This focus will be kept under review as the Programme proceeds and any adjustment in focus to emphasise more the social inclusion aspects may be considered when the economy improves significantly

Thematic Objective 10: Investing in Education, Skills and Lifelong Learning by Developing Education and Training Infrastructure

Overview

The prevention of early school leaving and the promotion of equal access to education at all levels are key elements of this ESF thematic objective. These are well aligned with the Irish NRP targets under relevant headings as outlined earlier. There is still some way for us to travel to attain the NRP targets that will contribute to the EU2020 objectives as required.

Conclusion

Therefore, the Operational Programme should seek to support relevant initiatives that are designed to bridge this gap. The investment priorities that focus on reducing and preventing early school leaving and promoting equal access to good quality early childhood, primary and secondary education including formal, non-formal and informal learning pathways for reintegrating into education and training and for improving the quality and efficiency of, and access to, tertiary and equivalent education with a view to increasing participation and attainment levels, especially for disadvantaged groups are directly of interest for Ireland. Measures such as outreach to young people, supports against the barriers to staying in education and higher education labour market activation and conversion measures can contribute significantly under this thematic objective.

Thematic Objective 11: Enhancing institutional capacity and an efficient public administration

Overview

The current situation with regard to the ERDF Managing Authorities' administrative capacity was set out in Chapter 4. Under the current and previous Regional Operational Programmes, ERDF Technical Assistance funding has been used to provide training and guidance to the beneficiary and intermediary bodies and for the training of Managing Authority staff, where relevant. This can continue for the 2014-2020 Regional Programmes.

The Commission Services' position paper on Ireland acknowledges the existing capacity within the Irish Managing Authorities and did not identify the strengthening of institutional capacity as an investment priority for the 2014-2020 programmes. The possible simplification of the cascade system, as recommended by the Commission Services, would reduce the burden on intermediary body administrations and would also reduce the requirement to build institutional capacity within Government Departments to fulfil management verification functions for the new programming period.

Support for the development of a potential ITI for the proposed Midland and Eastern Assembly area and the monitoring of its implementation can be provided by the existing Managing Authorities' staff.

Conclusion

It is therefore not recommended that the strengthening of institutional capacity should be included as a specific investment priority for the ERDF co-financed programmes.

Sustainable Urban Development

Overview

Cohesion policy stresses the role of urban investment, in support of territorial cohesion objectives, through integrated urban actions. Urban areas are recognised as engines for economic growth and as hubs for knowledge, creativity and innovation. On the other hand,

particular challenges such as congestion, degradation and concentrations of disadvantage are prevalent in urban areas. Under the Investment for Growth and Jobs goal, a minimum of 5% of ERDF resources must be allocated to integrated actions for sustainable urban development.

In Ireland the principal strategic framework for urban policy is the national Spatial Strategy 2002-2020, which provides a 20 year planning framework and a hierarchy of designated growth centres. The key objectives of the NSS are set out hereunder. These align very well with the overall goals for the European Structural and Investment Funds:

- Sustain economic and employment growth;
- Improve competitiveness;
- Foster balanced regional development;
- Improve quality of life for all; and
- Maintain and enhance quality and diversity of natural environment and cultural heritage.

The findings of the Gateways and Hubs Development Index and the SWOT analyses highlight continued weaknesses and challenges to be addressed in ensuring that the designated growth centres fulfil their development roles. A number of the submission received as part of the public consultation also called for continued investment targeted at the growth centres.

Recommendation

The successful implementation of the urban development actions 2007-13 point to a continuation of this mechanism for the 2014-2020 period. Integrated urban development strategies can also contribute to equality, social inclusion and environmental sustainability objectives. A number of the submissions received as part of the public consultation also called for continued investment targeted at the addressing the physical, economic and social needs of urban centres in an integrated manner.

Investment priorities under thematic objective 6, which seek to protect, promote and develop cultural heritage and improve the urban environment are actions that could potentially complement an integrated urban development strategy. The proposed regulation permits a

blend of investment priorities from a variety of thematic objectives to enhance the delivery of an urban development strategy.

8.3 Overview of the Justification for the Selection of Thematic Objectives and Investment Priorities

Utilising the format provided in Table 1 of the draft Template for the content of an Operational Programme, the following tables synthesise the justification for the selection of thematic objectives and associated investment priorities for the BMW and the S&E Regional Operational Programmes 2014 - 2020.

Justification for the Selection of Thematic Objectives and Investment Priorities for the BMW Operational Programme 2014 - 2020

Selected	Selected Investment	Justification for Selection
Thematic	Priority	
Objective		
1. Strengthening	(a) Enhancing	• To assist in meeting a country-specific
Research,	research and	target in the National Reform Programme;
Technological	innovation	• Priority identified in the European
Development	infrastructure (R&I)	Commission position paper on Ireland;
and Innovation	and capacities to	• To build upon the positive achievements
	develop R&I	of the 2007-13 programmes;
	excellence and	• Potential synergies with Horizon 2020;
	promoting centres of	and
	competence, in	• Potential to contribute to the Atlantic
	particular those of	Strategy Action Plan.
	European interest.	• To support the achievement of the
		objectives of Ireland's Innovation
	(b) Promoting	Taskforce report;
	business investment in	• To contribute to the Innovation Union
	innovation and	agenda; and
	research, and	• Opportunity to commercialise through
	developing links and	technology transfer and applied research,

	synergies between	the substantial outputs of Ireland's
	enterprises, R&D	research programmes.
	centres and higher	
	education, in	
	particular product and	
	service development,	
	technology transfer,	
	social innovation, eco-	
	innovation, public	
	service applications,	
	demand stimulation,	
	networking, clusters	
	and open innovation	
	through smart	
	specialisation and	
	supporting	
	technological and	
	applied research, pilot	
	lines, early product	
	validation actions,	
	advanced	
	manufacturing	
	capabilities and first	
	production, in	
	particular in Key	
	Enabling	
	Technologies and	
	diffusion of general	
	purpose technologies.	
2. Enhancing	(a) Extending	• Europe 2020 – Employment,
access to, and	broadband	R&D/Innovation
use and quality	deployment and the	• AGS – promoting growth and

of, Information	roll-out of high-speed	competitiveness, tackling
and	networks and	unemployment
Communication	supporting the	European Commission
Technologies	adoption of emerging	position paper on Ireland –
	technologies and	promotion of the
	networks for the	competitiveness of the
	digital economy.	business sector
	digital economy.	
		• NRP – Target 1 Employment
		• Key competitiveness issue
		• National Policies – Action Plan
		for Jobs
		• To contribute to the EU Digital Agenda
		objectives;
		• To meet national targets in respect of high
		speed broadband availability;
		• To address identified gaps in high speed
		broadband availability in non-urban areas;
		and
		• To provide a key enabling infrastructure
		for research and development, enterprise
		start-up and growth and e-government
		services.
3. Enhancing the	(a) Promoting	• Priority identified in the European
competitiveness	entrepreneurship, in	Commission position paper on Ireland;
of SMEs	particular by	• To address the need to accelerate micro-
	facilitating the	enterprise start-up and expansion;
	economic exploitation	• To create employment in the start-up and
	of new ideas and	expansion of micro-enterprises;
	fostering the creation	• To continue the positive delivery of
	of new firms,	entrepreneurial supports; and
	including through	• Strongly supported in the public
	business incubators.	consultation submissions received.

	 (b) Developing and implementing new business models for SMEs, in particular for internationalisation. (c) Supporting the 	
	creation and the	
	extension of advanced capacities for product	
	and service	
	development.	
	(d) Supporting the	
	capacity of SMEs to	
	engage in growth in	
	regional, national and	
	international markets,	
	and in innovation	
	processes.	
4. Supporting	(a) Promoting the	• Support the attainment of Ireland's target
the Shift	production and	for renewable sourced energy and
Towards a Low	distribution of energy	increases in energy efficiency under the
Carbon	derived from	National Reform programme and the
Economy	renewable sources.	National Energy Efficiency Action Plan; and
	(b) Promoting energy	• Priority identified in the European
	efficiency and	Commission position paper on Ireland.
	renewable energy use	r r r r r r r r r r r r r r r r r r r
	in enterprises.	

	(c) Supporting energy	
	efficiency, smart	
	energy management	
	and renewable energy	
	use in public	
	infrastructures,	• As part of sustainable urban development
	including in public	strategy, to contribute to reduced carbon
	buildings, and in the	emissions targets; and
	housing sector.	• To align with the objectives of the
		National Spatial Strategy 2002-2020.
	(e) Promoting low-	
	carbon strategies for	
	all types of territories,	
	in particular for urban	
	areas, including the	
	promotion of	
	sustainable multi-	
	modal urban mobility	
	and mitigation	
	relevant adaptation	
	measures.	
	(g) Promoting the use	
	of high-efficiency co-	
	generation of heat and	
	power based on useful	
	heat demand.	
5. Promoting		The Needs Analysis considered Thematic
Climate Change		Objective 5 and while the TO is identified
Adaptation, Risk		in the Commission's Position Paper as an
Management		area prioritised for investment it was
and Prevention		concluded that it is more suitable for

			investment under the Dural Dovelopment
			investment under the Rural Development
			Programme 2014-2020 and therefore this
			TO is not prioritised for selection under
			the ERDF co-funded ROP.
6. Protecting the	(e) Action to improve	•	As part of sustainable urban development
environment and	the urban		strategy, to enhance the quality of urban
promoting	environment,		environments;
resource	revitalisation of cities,	•	To continue the positive delivery of
efficiency	[] regeneration and		sustainable urban development actions;
	decontamination of		and
	brownfield sites	•	To align with the objectives of the
	(including conversion		National Spatial Strategy 2002-2020.
	areas), reduction of air		
	pollution and		
	promotion of noise-		
	reduction measures.		
	(f) Promoting		
	innovative		
	technologies to		
	improve		
	environmental		
	protection and		
	resource efficiency in		
	the waste sector, water		
	sector, soil protection		
	or to reduce air		
	pollution.		

Justification for the Selection of Thematic Objectives and Investment Priorities for the S&E Operational Programme 2014 – 2020

Selected	Selected Investment	Justification for Selection
Thematic	Priority	
Objective		
1. Strengthening	(a) Enhancing	• To assist in meeting a country-specific
Research,	research and	target in the National Reform Programme;
Technological	innovation	• Priority identified in the European
Development	infrastructure (R&I)	Commission position paper on Ireland;
and Innovation	and capacities to	• To build upon the positive achievements
	develop R&I	of the 2007-13 programmes;
	excellence and	• Potential synergies with Horizon 2020;
	promoting centres of	and
	competence, in	• Potential to contribute to the Atlantic
	particular those of	Strategy Action Plan.
	European interest.	• To support the achievement of the
		objectives of Ireland's Innovation
	(b) Promoting	Taskforce report;
	business investment in	• To contribute to the Innovation Union
	innovation and	agenda; and
	research, and	• Opportunity to commercialise through
	developing links and	technology transfer and applied research,
	synergies between	the substantial outputs of Ireland's
	enterprises, R&D	research programmes.
	centres and higher	
	education, in	
	particular product and	
	service development,	
	technology transfer,	
	social innovation, eco-	
	innovation, public	

	service applications,	
	demand stimulation,	
	networking, clusters	
	and open innovation	
	through smart	
	specialisation and	
	supporting	
	technological and	
	applied research, pilot	
	lines, early product	
	validation actions,	
	advanced	
	manufacturing	
	capabilities and first	
	production, in	
	particular in Key	
	Enabling	
	Technologies and	
	diffusion of general	
	purpose technologies.	
2. Enhancing	(a) Extending	• Europe 2020 – Employment,
access to, and	broadband	R&D/Innovation
use and quality	deployment and the	• AGS – promoting growth and
of, Information	roll-out of high-speed	competitiveness, tackling
and	networks and	unemployment
Communication	supporting the	European Commission
Technologies	adoption of emerging	position paper on Ireland –
	technologies and	promotion of the
	networks for the	competitiveness of the
	digital economy.	business sector
		• NRP – Target 1 Employment
		• Key competitiveness issue

		 National Policies – Action Plan for Jobs To contribute to the EU Digital Agenda objectives; To meet national targets in respect of high speed broadband availability; To address identified gaps in high speed broadband availability in non-urban areas; and To provide a key enabling infrastructure for research and development, enterprise start-up and growth and e-government services.
3. Enhancing the competitiveness of SMEs	 (a) Promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators. (b) Developing and implementing new business models for SMEs, in particular for internationalisation. (c) Supporting the 	 Priority identified in the European Commission position paper on Ireland; To address the need to accelerate micro- enterprise start-up and expansion; To create employment in the start-up and expansion of micro-enterprises; To continue the positive delivery of entrepreneurial supports; and Strongly supported in the public consultation submissions received.

	extension of advanced	
	capacities for product	
	and service	
	development.	
	(d) Supporting the	
	capacity of SMEs to	
	engage in growth in	
	regional, national and	
	international markets,	
	and in innovation	
	processes.	
4. Supporting	(a) Promoting the	• Support the attainment of Ireland's target
the Shift	production and	for renewable sourced energy and
Towards a Low	distribution of energy	increases in energy efficiency under the
Carbon	derived from	National Reform programme and the
Economy	renewable sources.	National Energy Efficiency Action Plan;
		and
	(b) Promoting energy	• Priority identified in the European
	efficiency and	Commission position paper on Ireland.
	renewable energy use	
	in enterprises.	
	(c) Supporting energy	
	efficiency, smart	
	energy management	
	and renewable energy	
	use in public	
	infrastructures,	• As part of sustainable urban development
	including in public	strategy, to contribute to reduced carbon
	buildings, and in the	emissions targets; and
	housing sector.	 To align with the objectives of the
		- To angle with the objectives of the
1		

	(e) Promoting low-	National Spatial Strategy 2002-2020.
	carbon strategies for	
	all types of territories,	
	in particular for urban	
	areas, including the	
	promotion of	
	sustainable multi-	
	modal urban mobility	
	and mitigation	
	relevant adaptation	
	measures.	
	(g) Promoting the use	
	of high-efficiency co-	
	generation of heat and	
	power based on useful	
	heat demand.	
5. Promoting		The Needs Analysis considered Thematic
Climate Change Adaptation, Risk		Objective 5 and while the TO is identified
Management		in the Commission's Position Paper as an
and Prevention		area prioritised for investment it was
		concluded that it is more suitable for
		investment under the Rural Development
		Programme 2014-2020 and therefore this
		TO is not prioritised for selection under
		the ERDF co-funded ROP.
6. Protecting the	(e) Action to improve	• As part of sustainable urban development
environment and	the urban	strategy, to enhance the quality of urban
promoting	environment,	environments;
resource	revitalisation of cities,	• To continue the positive delivery of
efficiency	[] regeneration and	sustainable urban development actions;
	decontamination of	and

	brownfield sites	• To align with the objectives of the
	(including conversion	National Spatial Strategy 2002-2020.
	areas), reduction of air	
	pollution and	
	promotion of noise-	
	reduction measures.	
	(f) Promoting	
	innovative	
	technologies to	
	improve	
	environmental	
	protection and	
	resource efficiency in	
	the waste sector, water	
	sector, soil protection	
	or to reduce air	
	pollution.	
7. Sustainable	(c) Developing and	• The Commission Services' position paper
transport and	improving	for Ireland did not prioritise major
removing	environment-friendly	transport infrastructures for co-funding
bottlenecks in	(including low-noise)	over the 2014-2020 period. Given the
key transport	and low-carbon	limited resources available and the need
infrastructures	transport systems	to concentrate ERDF co-funded
	including [] inland	investment in a limited number of
	waterways and	thematic priorities, it is recommended to
	maritime transport,	focus investment in sustainable urban
	ports, [] multimodal	mobility rather than in major road or rail
	links and airport	infrastructure, notwithstanding the
	infrastructure, in order	recognised need for Ireland to address
	to promote sustainable	recognised deficiencies in these
	regional and local	infrastructures. Many of the sustainable

mobility.	travel initiatives such as the deployment
	of bus and cycle lanes could be
	incorporated in an integrated sustainable
	urban development priority along with
	mobility management measures to
	promote the modal shift to the use of
	more sustainable transport modes. This
	TO is not prioritised for selection under
	the ERDF co-funded ROP.

Justification for the Selection of Thematic Objectives and Investment Priorities for the ESF Operational Programme 2014 – 2020

Selected	Selected Investment	Justification for Selection
Thematic	Priority	
Objective		
8. Promoting Employment and Labour Mobility	(i) Access to employment for job-seekers and inactive people, including the long- term unemployed and people far from the labour market, also through local employment initiatives and support for labour mobility;	 (i) Strong imperative to tackle and reduce long term unemployment levels. (ii) Need to tackle and reduce youth unemployment and to implement the Youth Guarantee. (iii) Need to increase the employment rate for women in the context of the NRP targets.
	(ii) Sustainable integration into the labour market of young people, in particular those not in employment, education or training, including	

	young people at risk of social exclusion and young people from marginalised communities, including through the implementation of the Youth Guarantee;	
	(iv) Equality between men and women in all areas, including in access to employment, career progression, reconciliation of work and private life and promotion of equal pay for equal work;	
9. Promoting Social Inclusion and Combating Poverty	 (i) Active inclusion, including with a view to promoting equal opportunities and active participation, and improving employability; 	 (i) Strong need to tackle and reduce long term unemployment and social exclusion of people facing barriers to labour market participation. (ii) Strong need to tackle and reduce long term unemployment and social exclusion of people facing barriers to
	(ii) Socio-economic integration of marginalised communities such as the Roma;	labour market participation.
10. Investing in	(i) Reducing and	(i) Need to reduce early school
Education,	preventing early school-leaving and	leaving and to meet the NRP targets and
Skills and	promoting equal	those set in the NSS for the educational
Lifelong	access to good quality early-	profile of the labour force.
Learning by	childhood, primary	(ii) Need to meet NRP targets and
Developing	and secondary	NSS objectives. Need to improve
Education and	education including formal, non-formal and informal	matching of jobseekers with available

Training Infrastructure	learning pathways for reintegrating into education and training; (ii) Improving the quality and efficiency of, and access to, tertiary and equivalent education with a view to increasing participation and attainment levels, especially for disadvantaged groups;	opportunities through higher education upskilling and re-skilling interventions. (iii) Strong need to tackle and reduce long term and youth unemployment.
	(iii) Enhancing equal access to lifelong learning for all age groups in formal, non-formal and informal settings, upgrading the knowledge, skills and competences of the workforce, and promoting flexible learning pathways including through career guidance and validation of acquired competences;	

8.4 Potential for integrated approaches to territorial development

Three potential integrated approaches to territorial development have been reviewed as part of the Needs Analysis:

- Sustainable urban development;
- Integrated territorial investment (ITI); and
- Community-led local development (CLLD).

Sustainable Urban Development

At least 5% of the ERDF resources allocated at national level under the Investment for growth and jobs goal shall be allocated to integrated actions for sustainable urban development where cities, sub-regional or local bodies responsible for implementing sustainable urban strategies shall be responsible for tasks relating at least to the selection of operations.

The successful implementation of the urban development actions 2007-13 under the ERDF Gateways (and Hubs) Fund suggest a continuation of this mechanism for the 2014-2020 period. The principle criterion applied to the selection of eligible urban areas in the current programming period was the designated Gateways (and Hubs) under the National Spatial Strategy. A similar rationale could apply to the 2014-2020 period.

The content of the strategies could include investment priorities related to urban regeneration, low-carbon strategies, sustainable urban transport, and supporting the use of specific natural and cultural assets as per the summary table in section 8.3 (above).

Integrated Territorial Investment

In the context of the reconfiguration of regional governance structures in Ireland to take effect from mid-2014, there is the potential for the two Regional OPs to make specific provision, including an indicative financial provision, for the development of an Integrated Territorial Investment for the new Midlands and Eastern Region following the establishment of its Regional Assembly. The Midlands and Eastern Regional Assembly would be invited to prepare within an appropriate timeframe, an integrated territorial strategy, drawing on the priority axes of both the Southern and Eastern and BMW Regional OPs 2014-2020 (and potentially other OPs) and oversight of the strategy would be delegated to the new Assembly. Should this option be progressed such an arrangement would also enable the staff of the Midlands and Eastern Regional Assembly to build capacity in Structural Funds administration and monitoring over a 4-5 year period prior to potentially taking on full Managing Authority functions thereafter.

Community-Led Local Development

As outlined in section 2.10, CLLD is a method for involving partners at local level in programme delivery on a bottom-up basis. Decision-making and implementation are delegated to a local partnership of public, private and civil society actors as exemplified by the LEADER approach to rural development. It is recognised that Community-led local development has the potential to complement and add value to the delivery of public policies for all CSF Funds.

Consideration has been given to the utilisation of community-led local development (CLLD) in delivering some of the investment priorities for ERDF co-financing identified in section 8.3, above. The detailed submission received from the Irish Local Development Network (ILDN) was reviewed and a presentation was given by representatives of ILDN to the Partnership Agreement Working Group meeting on 18th July. Several submissions also recommended that a CLLD approach to programme delivery be considered, where appropriate.

In completing the Needs and SWOT Analysis, due consideration has been given to the utilisation of CLLD as an innovative implementation tool in delivering some of the investment priorities as identified in sections 8.2 and 8.3 above. Recognising that CLLD is an optional delivery mechanism for the ERDF funded programmes and following a thorough analysis of the thematic objectives and investment priorities that are justified for co-funding for the 2014-2020 period, the following table sets out if CLLD represents an appropriate delivery mechanism for any of these.

In respect of the ESF and following consultation with *inter alia* the Departments of Public Expenditure & Reform and Environment, Community & Local Government it was decided that the CLLD - an optional delivery mechanism for the ESF funded programmes - method was not suitable for use as a delivery vehicle for ESF assistance.

Thematic Objective	Possible Schemes	Suitable for CLLD	Reason
T.O.1	PRTLI (or its	No	RTDI schemes
Strengthening Research, technological	successor) to be delivered via the HEA EI's suite of schemes		delivered through national agencies, beneficiaries are

development & innovation	 Incubation, Applied Research Enhancement, Commercialisation Fund + other new schemes? SFI's research grant schemes Marine Institute research grants schemes 		HEI's and therefore not appropriate for CLLD delivery
T.O. 2 Enhancing access to and use & quality of ICT	National Next Generation Broadband scheme	No	National scheme
T.O. 3 Enhancing the Competiveness of SME's	Current schemes delivered by CEB's to micro-enterprises	No	Will be delivered through LEOs within Local Government sector
T.O. 4 Supporting the shift towards a low carbon economy in all sectors	A Financial Instrument to deliver an Energy Fund (either linked to proposed National Energy Efficiency Fund or a standalone Fund?) Social Housing Retrofit Scheme (for apartment blocks in Dublin, Cork & Limerick) and for single social housing units in other counties	No	Delivered through a Financial Instrument or direct grants to Local Authorities
T.O. 6 Protecting	Sustainable Urban Development Strategy, potentially	No	Delivered via Urban Local Authorities.

Environment &	including smarter	
Promoting Resource	travel and heritage	
Efficiency	buildings	

8.5 Implementation Arrangements

Financial Instrument

Arising from the feasibility study conducted (Annex 2) it has been considered that a financial instrument could be a suitable mechanism of supporting projects under thematic objective 4 and actions under a potential sustainable urban development priority, thus contributing to Ireland meeting its 20% low carbon target. The next step will be the development of specific proposals and conducting an ex-ante assessment of a proposed financial instrument.

Joint Action Plans

"Given the nature of Joint Action Plans as described in the relevant Articles of the Regulation (EU) No 1303/2013 of the European Parliament and the Council (the Common Provisions Regulation) and the proposed thematic focus of the ESF Operational Programme such an instrument was not deemed to be relevant in this instance."

Annexes

Annex 1: Summaries of Submissions Received

Review of Submissions Received: BMW and S&E Regional OPs 2014-2020

Submitter	Relevant material for Needs Analysis			
Declan Gibbons,	Identifies a need for a regional fund for film production in Galway,			
Manager	based on the Yorkshire Content Fund (financial instrument). The			
Galway Film Centre	fund would support SMEs working in film, television, animation			
(BMW)	and digital media. The fund would replace a fund previously			
	provided by the Irish Film Board to encourage filming outside			
	Dublin/Wicklow.			
Caroline Brady,	Highlights the particular demographic and economic profile of the			
Director	Border region. Key issues include high age dependency rates, high			
Border Regional	unemployment, vulnerable sectoral profile, below average			
Authority	disposable incomes, below average educational attainment, poor			
(BMW)	distribution of foreign direct investment.			
	The submission calls for support for RTDI investment in the			
	region's Institutes of Technology, continued investment in high			
	speed broadband infrastructure (particularly in rural areas),			
	dedicated supports for SMEs as the lynchpin of the regional			
	economy, investment in energy efficiency and exploitation of off-			
	shore wind and wave resources.			
	The submission calls for a package of measures (transport, energy,			
	broadband, skills etc.) for key towns to enable them to become			
	more attractive to FDI in future.			
	Other thematic priorities identified include investment in			
	education, skills and lifelong learning; and, promoting social			
	inclusion and combating poverty.			
	The submission states that CLLD has the potential to deliver			
	results, where all sectors work together. It also welcomes the			
	potential use of Integrated Territorial Investment, with clear			
	accountability and availability of indicators at NUTS III level.			
Mr. Joe O'Neill, City	The submission highlights the need to promote and support			
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Manager	sustainable transport (thematic objective 7) and to support a shift to			
Galway City Council	a low carbon economy (thematic objective 4) in Galway city.			
(BMW)	The submission calls for an active role for local government in the			
	implementation of the programme, including for community-led			
	local development initiatives.			
	The submission also calls for a lightening of the administrative			
	burden on beneficiaries, particularly relating to claiming and			
	recouping expenditure.			
Ms. Sheila Hunt	The submission states that decentralisation has a positive impact on			
Claremorris Chamber	overall GDP growth and that Ireland's centralism has hampered the			
of Commerce	country's development. One impact of the centralisation of			
(BMW)	economic and political/administrative power in the Greater Dublin			
	Area has been the creation of a radial transport network from			
	Dublin, leading to economic congestion in the Greater Dublin Area			
	and lack of economic opportunities elsewhere.			
	The submission proposes the development of a western arc route to			
	connect the 5 cities, from Cork to Belfast City. Such an arc would			
	intersect all major transport and telecommunications and energy			
	networks and be of immense benefit to the BMW region, and			
	enable east-west connectivity and north-south integration.			
Micheál Ó hEanaigh,	The submission on behalf of Donegal County Council highlights a			
Director of Services,	number of headline indicators on the county, most notably its			
Donegal County	demography, labour force, education attainment, employment			
Council	structure and skills, deprivation status and scale of wind resources.			
(BMW)	It identifies some key challenges to be addressed, including:			
	• Natural resource development, valorisation of forestry and			
	woodlands, realising the potential of renewable energy and			
	sustainable transport, resource efficiency and off-shore			
	energy (wind, wave, tidal).			
	• Access and connectivity to roads, ports and airports remains			
	a priority.			

	• Provision of access to local essential services e.g., health,
	rural transport, education
	-
	• Research and innovation capacity, including the facilities at
	LYIT, the new Clinical Research Academy in association
	with NUIG and the cross-border health innovation corridor
	• Cultural resources, with economic potential in cultural and
	creative industries
	• Education and skills development, promotion of academic-
	industrial links, skills upgrading and transnational
	partnerships
	• ICT infrastructure, exploiting existing ICT networks and
	building on a new digital strategy for the County
	• Enterprise and Employment support, across a range of
	sectors e.g., creative industries, agri-food, tourism, marine
	and better utilisation of Killybegs harbour
	• Rural economy development, including rural tourism and
	agri-food
	• Tourism development through strategic partnerships and
	iconic new
	attractions
	• Further development of the Letterkenny/Derry gateway
	remains a priority.
The	submission endorses the thematic prioritisation proposed by
	nanaging Authority and suggests the addition of actions under
	rther thematic objectives:
	6 - protecting the environment and promoting resource
	viency
ТО	8 Promoting employment and supporting labour mobility
	9 Social Inclusion and Combating Poverty
	10 Investment in education, skills and lifelong learning
	submission supports the use of innovative implementation
	ngements including CLLD, ITI, FEIs and Joint Action Plans
	Sements meruding CLED, 111, 1 Els und some recton 1 fulls

	and calls for increased simplification and more focussed training			
	supports to beneficiaries. It suggests that exemplars of best			
	practise, greater involvement of NGO interest groups and provision			
	of training to promoters on horizontal issues would be beneficial.			
Kevin Kelly, Director	The submission from Galway County Council highlights the need			
of Service,	for a greater role for local authorities in the planning and			
Galway County	implementation of local, rural and community development			
Council	programmes, aligned with the role of the SECs.			
	Areas for investment identified in the submission include:			
	• Rural development and outdoor recreation facilities			
	• Job creation, supported by Local Enterprise Offices			
	• Strategic road projects, such as Galway City Outer Bypass,			
	M17/M18 Gort – Tuam and improvements to R336, N59,			
	N65, N83, N66			
	• Marine infrastructure and off-shore energy			
	• Energy efficiency and sustainable energy communities			
	Flood relief measures			
	• Town and village renewal			
	• Water and waste water infrastructure			
	• Next generation broadband infrastructure			
	• Built heritage conservation, , cultural tourism and natural			
	heritage			
	The submission also highlights the difficulties faced by local			
	authorities in raising matching funds			
Máire Ni Chionna,	The submission highlights the complementarities between thematic			
Senior Engineer,	objectives 4 (supporting a shift to a low carbon economy) and 5			
Galway County	(promoting climate change adaptation, risk prevention and			
Council	management.			
	It proposes a focus on:			
	• Energy efficiency programmes			
	• Development of renewable energy sector			
	• Energy infrastructure e.g., district heating			
	1			

	Infrastructure investment to take account of weather			
	patterns			
	 Increased resilience to recover from extreme weather events 			
	The submission proposes the setting of regional and local targets			
	for energy efficiency, by sector			
	The submission proposes investment in measures to protect good			
	water quality status in support of the Water Framework Directive			
	obligations, on a multi-annual basis.			
Mark O'Donnell,	The submission highlights key investment priorities for the West			
Director,	region, drawing on the most recent Regional Planning Guidelines			
West Regional	for the region. These include:			
Authority	 Road and rail transport infrastructure 			
(BMW)	 Water and wastewater infrastructure 			
	Coastal protection			
	 Broadband infrastructure, to address regional 			
	Broadband infrastructure, to address regional competitiveness disadvantages			
	 SME development and innovation, building on recognised 			
	sectoral strengths			
	 Renewable energy, sustainable transport and energy 			
	efficiency			
	 Rural development, green economy, agri-food, tourism, 			
	social care creative industries			
	Town and village renewal			
	 Town and village renewal Development of the Atlantic gateways Corridor 			
	 Development of the Atlantic gateways Confidor Marine resource development 			
	• Industrial-academic linkages in support of smart			
	specialisation			
	The submission also highlights additional thematic objectives of			
	greatest relevance to the West region:			
	• Supporting sustainable transport and removing bottlenecks			
	in key network infrastructures (TO 7)			
	• Promoting employment and supporting labour mobility (TO			

	8)			
	• Promoting climate change adaptation, risk prevention and			
	management (TO 5)			
	• Protecting the environment and promoting resource			
	efficiency (TO 6)			
	• Promoting social inclusion and combating poverty (TO 9)			
	The potential for community-led local development is			
	acknowledged, aligned with an increased role for local authorities			
	in economic development and in and in the oversight and planning			
	of local community development programmes. It also states that			
	ITI and FEI instruments merit consideration.			
	The submission calls for proportionate and reasonable reporting			
	and administrative arrangements			
Professor Ciarán Ó	The submission sets Ireland's Campus Incubation Programme in			
Catháin, President,	the context of the EU2020 strategy, Innovation Union Flagship, the			
Athlone Institute of	2012 Action Plan for Jobs, the EU's Entrepreneurship Action Plan			
Technology	2020 and the Irish Government's Capital Investment Priorities			
(BMW)	2012-2016.			
	The submission sets out the headline achievements of the Campus			
	Incubation Programme and specifically the impacts of the MIRC			
	Centre at Athlone IT. The Midland region has not been a high			
	performer in terms of High-Potential Start-Ups generation, due in			
	part to its comparative under-provision in terms of knowledge-			
	based enterprise infrastructure.			
	The submission sets out the case for funding for additional			
	incubation space at Athlone IT under the 2014-2020 programme, to			
	enable the MIRC to deliver on a more ambitious HPSU agenda.			
	Such additional space would enable AIT to significantly enhance			
	the enterprise and innovation performance of the Midland region.			
	The case for additional space was supported by the Audit of			
	Innovation in the BMW region, published in 2011.			
	It is also proposed that enhanced incubation facilities at MIRC,			

	Athlone would support several thematic objectives, including, TOs			
	1,3,8 and 10.			
Ian Douglas,	The submission from Mayo County Council highlights the			
Senior Planner,	persistence of regional disparities in Ireland and notes the changed			
Mayo Co. Council	economic environment in which the new OP is being framed,			
(BMW)	compared with the current programme. It states that local			
	authorities should play a central role in promoting sustainable local			
	development, although they do not have a direct role in the deliver			
	of some of the proposed thematic priorities.			
	The submission states that infrastructure underpins regional			
	economic development and identifies some key investment			
	priorities, including:			
	National road network			
	Telecommunications infrastructure			
	• Electricity supply grid			
	• Port facilities to service off-shore renewable energy			
	Railway network			
	 Serviced land for development Regional Airport investment Renewable energy The submission notes the proposed closer alignment of local 			
	government and community development sectors and the			
	integration of enterprise supports under the auspices of the Local			
	Enterprise Offices (LEOs).			
	The submission notes the excessive audit scrutiny to which ERDF			
	co-financed projects are currently subjected and calls for a			
	lessening of this and greater flexibility for local authorities which			
	are already subject to audit by the local government audit service.			
	The submission calls for a higher priority for the horizontal			
	principles of social inclusion and sustainable development, going			
	beyond broad statements of compliance in this regard.			
Mr. John Reilly,	The submission from the CEB Network outlines the significant role			

Secretary	that CEBs/LEOS can play in creating employment through support			
CEB Network	for micro-enterprises throughout Ireland. It outlines the main			
(BMW & S&E)	activities and achievements to date of the CEBS.			
	The role of the new Local Enterprise Offices (LEOs) is outlined –			
	to be the critical access points for the delivery of an enhanced			
	system of supports for small and medium enterprises, offering a			
	single access point in each local authority area; while the Central			
	Co-ordination Unit within Enterprise Ireland is to become a			
	'Centre of Excellence' for small business development.			
	The CEB Network recommends that the delivery of all locally-			
	delivered business development and support measures should be			
	through the LEOs. This approach, it is submitted, would inter alia			
	ensure a common consistent approach to enterprise support while			
	optimising value for money to the State and the EU and providing			
	greater clarity for clients on available supports.			
	The submission identifies regional-level issues such as lack of			
	business confidence, access to capital, lack of employment			
	opportunities, and emigration and recommends invest in support of			
	enterprise development, facilitation of entrepreneurship and new			
	job creation. Opportunities for investment are identified in			
	food/beverages, seafood, creative industries, ICT/mobile			
	technologies, Spin-Outs, Tourism, Exporting, and Community-			
	based enterprises.			
	The CEB Network's submission endorses the prioritisation of			
	thematic priorities 1-4:			
	• RTDI (with greater business collaboration and SME			
	innovation supports);			
	• ICT (on-line platforms, ICT adoption by SMEs, e-business			
	opportunities);			
	• SME (mentoring, management development, financial			

	supports ovports development insubstion andusts			
	supports, exports development, , incubation, graduate			
	placement); • Energy (assist SMEs to reduce carbon footprint SME			
	Energy (assist SMEs to reduce carbon footprint, SME			
	energy awareness training).			
	An additional priority – promotion of entrepreneurship is proposed, including youth (graduate enterprise, unemployed youth, youth			
	including youth (graduate enterprise, unemployed youth, youth			
	mentoring etc.) and female (business start-up, mentoring,			
	networking, management training) entrepreneurship. The			
	development of business incubation facilities, based around the			
	LEOs is also proposed.			
	The submission outlines the supports that CEBs/LEOs can provide			
	to community/social enterprises and to integrated sectoral			
	investments on a cross-territorial basis. It is recommended that the			
	application of refundable aid should be an option at the discretion			
	of CEBs/LEOs and preference shares should be discontinued.			
	An annual budget of €40m is proposed by the CEB Network over			
	the lifetime of the OPs and the submission calls for adequate			
	human resources should made available through the new LEO			
	structure to ensure the effective delivery of quality support			
	services.			
Suzanne Campion,	Inland Fisheries Ireland (IFI) state that its objectives fit within TO			
Head of Business	3, 5, 6, 8, 9 and 10 and has identified 3 priority areas and			
Development	opportunities which support these TO's as follows;			
Inland Fisheries	Recreational Angling: IFI highlight the significant contribution			
Ireland (IFI)	angling plays in local and rural economy in terms of tourism and			
(BMW & S&E)	jobs sustained. It also points out other benefits of involvement in			
	angling such as social, environmental, etc. The submission			
	suggests investment in small businesses, training, angling product			
	and infrastructure development – all contributing to TO's 3, 8 & 9			
	- with funding allocated directly to IFI or through Leader (CLLD)			
	Extending Existing Funding Initiatives: IFI currently run schemes			

	to facilitate stakeholder engagement in conservation and resource			
	development – linked to TOs 3, 5 & 6. Funds are limited therefore			
	IFI suggest ERDF could be directed in this area, possibly matched			
	IFI suggest ERDF could be directed in this area, possibly matched by LEADER.			
	•			
	Bio-security Project Proposal: IFI submit a specific project proposal in line with the proposed new fisheries act to control			
	proposal in line with the proposed new fisheries act to control invasive species. This will include disinfection stations at airports			
	invasive species. This will include disinfection stations at airports and ports, biodiversity stations at fisheries nationwide and a			
	and ports, biodiversity stations at fisheries nationwide and a			
	communication campaign. IFI suggest this also has the potential to			
	create jobs – both construction and in implementation.			
Brian Carty, Director	The ILDN submission highlights the important role and			
Irish Local	contribution that CLLD can make in ensuring maximum impact for			
Development Network	the use of all ESI Funds. It also points to the unique role that			
(BMW & S&E)	LD/LAGs have played in Ireland in particular to the established			
	bottom-up delivery mechanism which has been successful over a			
	number of programming periods. ILDN are also requesting to be			
	involved as 'partners' in the development of the Partnership			
	Agreement.			
	The submission suggests that CLLD would be best delivered			
	adopting a multi-fund option and therefore recommends a			
	minimum of 5% of the ERDF, ESF and EMFF be earmarked for			
	the CLLD approach in addition to the EAFRD allocation. In			
	addition ILDN requests a national commitment to co-financing the			
	addition ILDN requests a national commitment to co-financing the EU 7 year multi-annual funds for use as global grants by			
	LD/LAGs.			
	LD/LAGS. The submission provides detail on the added value of CLLD in			
	terms of a number of TO and EU priorities:			
	TO 8: Here there is a large focus on ESF type activities dealing			
	TO 8: Here there is a large focus on ESF type activities dealing with Access to employment, integration of young people NEET			
	and modernisation of labour markets. It does however also make			
	reference to job creation and diversification of the rural economy			
	and new skills for the marine economy. Much of the narrative			
	and new skins for the marine economy. Which of the narrative			

speaks about greater flexibility on the use of the funds to allow for
greater integration. Under TO8 the submission also suggests
possible initiatives for retrofitting of social housing stock to
improve energy efficiency and also the establishment of Rural
Innovation Hubs to assist with stimulating rural micro-enterprise.
TO 9: again a large ESF focus and greater integration with
LEADER approach for the delivery of a range of initiatives
including active inclusion, childcare, basic services in rural areas
for those at risk of poverty.
TO 10: As above ESF focus on early school leaving, life-long
learning, etc.
TO 3: Focus is specifically on targeted solutions for rural areas.
The submission mentions: Rural Innovation Hubs and creating a
link with BTWEA; encouraging rural entrepreneurship and
diversification in farming and fishing communities and
competitiveness of SME's in these sectors; the provision of capital
through Leader to support rural SME's. The submission also
addresses the issue of the rationalisation of RTI.
TO 4: makes reference to Rural Innovation Hub, Leader supporting
renewable energy generation, smart grids, energy efficiency and
retrofitting of social housing stock. It also suggests that CLLD
could support approaches to reducing emissions from agriculture
and carbon sequestration in forestry and restoration of grassland.
TO 5: CLLD to support best practice in water management,
sustainable development of coastal areas, support the Water
Framework Directive and support restoration, preservation and
enhancement of biodiversity.
Finally the submission sets out that CLLD should be considered a
key part of the administrative arrangements for the 2014-2020
period in particular citing the benefits of a bottom-up approach for
addressing local/sub-regional needs, the potential benefit of
additional 10% co-financing available where CLLD is supported

	under a single priority axis, the potential for greater integration,				
	synergy with the use of the Funds and the long experience of				
	LD/LAGs in Ireland.				
Mr. Sean Griffin,					
Communications	Submission received from Communications Development Division				
	of the Department and related to the Next Generation Broadband				
Development Division,	Plan 2012. Details provided on the content of this plan and on the				
Department of	implementation process. Department requested that this Plan be				
Communications,	included as a suitable initiative under Thematic Objective 2 for				
Energy and Natural	inclusion under the two Regional OP's. Submission also made				
Resources	some suggestions for reducing the administrative burden on IB's,				
(BMW & S&E)	and in particular the need to better coordinate audits/control visits				
	from the various certifying and audit authorities.				
Aidan Corcoran	The EirGrid submission follows an exploratory meeting which took				
Manager Grid 25	place in EirGrid offices on 03/04/13 attended by S&E, BMW and				
Programme	DPER. The submission provides detail on a number of projects				
EirGrid	which are currently on the agenda for Eirgrid and which may				
(BMW & S&E)	provide an opportunity for earmarking as potential for ERDF co-				
	financing.				
	1. The Grid Link Project: Consisting of a new 400kV				
	overhead power line linking Leinster and Munster and will				
	involve an estimated investment of $\textcircled{5}00m$. the key benefits				
	include securing electricity supply to homes, factories,				
	farms, businesses, etc; empowering growth in the south and				
	east of Ireland; and helping Ireland meet its 40% renewable				
	energy targets.				
	2. The Grid West Project: This project will deliver 21 st				
	century energy infrastructure to the west of Ireland. It				
	initially involves €240m investment. By connecting				
	electricity by the regions huge renewable energy resources				
	the Grid west project will facilitate significant job creation				
	and investment.				
	3. North South 400kV Interconnection Development: Joint				
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	project between EirGrid and Northern Ireland Electricity
	(NIE). This will be the second connector between North
	and South and will be approximately 140km and cost
	€280m. It will increase capacity and reliability and allow
	the two independent networks to operate together resulting
	in cost savings along with security of supply.
4.	Renewable Integration Development Project (RIDP): Being
	developed jointly by EirGrid, NIE and the System Operator
	for Northern Ireland (SONI) the aim is to identify the
	optimum reinforcement of the electricity transmission grid
	in the North and North West of the Island of Ireland to cater
	for expected power output from renewable energy sources.
	As well as ensuring demands from renewable energy the
	project will also significantly enhance the existing grid. The
	project will create highly skilled jobs in the planning and
	construction phases and will facilitate investment into
	Ireland.
5.	Delivering a Secure Sustainable Electricity System (DS3):
	This is a multi-year programme of work being undertaken
	by EirGrid and SONI with the main aim being to manage
	the challenges associated with operating the power system
	with very significant levels of renewable generation. The
	main areas with the DS3 project which would require
	funding include further and more comprehensive studies
	and investment in control tools.
6.	Smart Grid: The project includes the procurement, licensing
	and installation of synchronised measurement devises to
	monitor the transmission system. The installation would
	occur over 3 years and the funding requirement will be
	approximately €1 m.
Many	of the projects delivered by EirGrid on done on a full cost
recove	ry basis via a charge to electricity suppliers.

Dermot Murphy	An initial exploratory meeting took place on 28/02/13 with
DTTAS	DTTAS, the NTA and Iarnród Éireann, attended by S&E, BMW
(BMW & S&E)	D/PER. A number of potential public transport projects and
	programmes which are either underway or planned in the medium
	term were discussed, including the City Centre Re-signalling
	project, Luas Cross City, the Railway Safety Programme, the
	Central Traffic Control project, DART Underground, as well as
	other Iarnród Éireann and NTA programmes in both the Greater
	Dublin Area and the Regions.
Mr. Geoffrey	The submission from the Marine Institute sets out the key policy
O'Sullivan	drivers that should orient the identification of investment priorities
Senior Policy Adviser,	in the marine research, innovation and capacity building sectors in
Marine Institute	the Regional OPs 2014-2020. These drivers include:
(BMW & S&E)	• EU Atlantic Action Plan 2014-2020
	• Harnessing Our Ocean Wealth – an integrated maritime
	plan for Ireland
	• Blue Growth Strategy, 2012
	Smart Specialisation Strategies
	• Action Plan for Jobs, 2012
	• Research Prioritisation Exercise, 2011
	• Food Harvest 2020
	Potential marine specialisation platforms identified in the
	submission include digital ocean/smart ocean, marine bio-resources
	and offshore aquaculture, while thematic objectives 1-4 all have a
	relevance for the marine sector.
	The submission presents the four overarching priorities and
	identified action areas under the EU Atlantic Action Plan. It also
	lists the goals of the Integrated marine Pan for Ireland along with
	the key actions areas identified.
	Three of the 14 priorities identified for Ireland's research agenda
	have a strong maritime focus, namely foods for health, sustainable
	food production and marine renewable energies. Several of the

	objectives identified in Food harvest 2020 relate to the marine food
	sector.
Mr. Algirdas Semeta	This submission, originally sent to DPER as part of the
European	consultation on the Partnership Agreement, proposes the inclusion
Commissioner for	of the modernisation of Customs services in both PA and the OP's.
Taxation and	It was accompanied by a separate submission from the Revenue
Customs Union, Audit	Commissioners. The submission sets out that ESI Funds, and other
and Anti-Fraud	EU funding instruments, could be used to help address gaps and/or
(BMW & S&E)	promote modernisation in the Customs Union, a Union exclusive
	-
	competence.
	The submission highlights the size of the EU export market
	(approx. €1.9bn per day) and the expected growth rate (25.40% by
	2020). It explains that bottlenecks slow this trade down and affect
	every MS. The submission suggests that significant investment is
	necessary to improve the system in terms of trans-European I.T.
	systems, detection technology, infrastructure at key border
	crossing, etc. Approximately €3bn investment EU wide will be
	necessary therefore Ireland is asked to take this into account in the
	development of its PA and Programmes.
Revenue	This submission is linked to the Algirdas Semeta submission – it
Commissioners	sets out proposals for support for the modernisation of customs and
(BMW & S&E)	cross border crossing points. It suggests that this will support
	economic growth through faster, safer and more secure trade. This
	submission is structured by addressing the key questions as set out
	in the PA consultation as it was originally sent to DPER as part of
	that process.
	1. The submission contents that the modernisation of the
	customs service will lead to growth and competitiveness of
	enterprises through smooth flow of trade and protection.
	 It recommends support for TO's 1, 2, 7 & 11.
	 It sets out a key project proposal as follows: Geographic
	Intelligence Network (GIN) phase 2. This will cover all
	interrigence retwork (Onv) phase 2. This will cover all

	aspects of frontier protection and establish a standardised
	framework for risk prevention – total cost €600,000.
	4. The submission also suggests other surveillance and
	scanning projects.
Mr Paul Kenny	The TEA submission focussed on energy/low carbon transition. It
Chief Executive	firstly highlighted an number of weaknesses in the current
Tipperary Energy	programmes being delivered by SEAI:
Agency (TEA)	• Focus on energy efficiency and not enough on renewable
(S&E)	energy
	• Time lines for grant award and project delivery too tight
	Procurement process complex
	• Too much focus on direct grant aid with no 'revolving'
	fund facility
	• Limited finance available overall.
	TEA then put forward some suggestions for 2014-2020:
	• Upscale ambition leveraging EIB funds
	• SEAI should have consultation for 2014-2017 funding
	programme in 2013 and then further consultation in 2017
	for next 3 year programme.
	• Establishment of revolving loan to support projects
	involving ERDF and EIB to focus on the following project
	types:
	 District heating in off gas towns
	• Village scale district heating utilising combination
	of energy sources
	 Large scale industrial biomass
	• Hydro resources e.g. old mills
	• Large scale social housing retrofits
	• Auto generation large scale wind
	• Wide scale roll out of electric car charging points
	• Ring fenced Carbon taxes for subsidy programmes (e.g.
	social housing energy upgrades)

	Community led organisations for delivery of programmes
	e.g. CEB's/LEO's deals with micro enterprises therefore for
	energy/carbon reduction a similar agency should be used –
	Energy agencies?
	• Where possible all actions under the OP should have an
	element of energy and carbon proofing e.g. no grants
	should be provided for buildings with a fossil fuel heating
	system or poor energy performance.
John Byrne	The Mid-East RA submission addressed specifically the 5 key
Director	questions posed in the consultation document:
Mid-East Regional	1. The MERA submission has its Economic Development
Authority	Strategy, which informed the RPG's, as the basis for the
(S&E)	submission with Dublin at its centre. It sets out 3 strategic
	goals for the Region which the New OP should have regard
	to:
	i. An Entrepreneurial Region: harnessing the regions
	highly skilled graduates, workers and managers.
	ii. A Networked Region: increasing collaboration
	between public and private institutions/organisations
	iii. A Skilled Region; education and training
	2. MERA identified 4 action areas: Entrepreneurship,
	Tourism, Agri-sector & Natural Resources and Education
	and Training. Other TO's which are relevant include 7, 8 &
	10.
	3. MERA support inclusion of CLLD, FI's & ITI with elected
	members having an involvement in design, delivery and
	monitoring of ITI.
	4. MERA recommend a simplified application procedure and
	improved payments processing procedure.
	5. MERA feel that the equality approaches built up over the
	previous programming periods work well. In terms of
	sustainable development issues it recommends wider use of
	1

	ICT to reduce the need to travel to meetings, etc.
Mallow Development	Point out that because Mallow is designated as a Hub town under
Partnership	the NSS it is precluded from funding under the Leader programme.
(S&E)	Notwithstanding this the Partnership has worked hard to find
	additional employment as the town transitions from a reliance on
	large agri-businesses to the more knowledge based economy. MDP
	provide a number of examples of projects they have been involved
	in and for which further funding is required.
	MDP support the deployment of CLLD, and wish to see the N22
	Cork-Limerick motorway project proceeded with.
	MDP did address the 5 specific questions posed. Under Q.1 they
	referred to the high levels of unemployment, especially youth
	unemployment to be found in Mallow, as well as the low
	availability of finance for SME's. Under Q.2 suggested that TO's
	7,8 & 10 should also be considered. Under Q.3 supported the
	deployment of CLLD and suggested that local group could be
	funded by a Financial Instrument. Under Q.4 suggested that
	cascade is too complicated, more power should be given to PBB's,
	and the lag time is too long before payments are made. Finally
	under Q.5 MDP state that funds are too concentrated in bigger
	cities, and need to be more widely dispersed to more rural areas.
Kerry County	Make a number of recommendations in relation to the following
Development Board	issues:
(S&E)	Broadband – Argue that existing broadband in County is very
	patchy and that need to continue to invest in broadband in next
	Programme so that all rural areas have access to high speed reliable
	broadband, whether it be for residential, commercial or community
	use.
	Roads infrastructure- most critical roads infrastructure projects
	which should be funded are the Macroom and Adare by-passes.
	Tourism & Agriculture Development- In context of ERDF support
	food technology investment and research in areas of biotech and
l	

	nutrition of feed a Need to develop ment to since a star for the s
	nutritional foods. Need to development tourism sector further,
	especially in cultural and heritage projects.
	Energy & Biomass- request investment in R&D on district heating
	systems for Killarney and Tralee, and seek ways of attracting
	private investment to drive business opportunities. Also seek
	support for liquid gas project at Ballylongford.
	Community Resilience- develop further a community resilience
	project to deal with severe weather/ natural disasters + also tackle
	issues of rural isolation and aging population.
	Port Development- funding should be provided to support Kerry's
	ports from a fishing, tourism and industrial perspective.
	The Board also made some general comments on the key questions
	posed, including the need to reflect on the changing demographics
	in Ireland, the need to support indigenous industry & tourism, and
	the need to address social inclusion/combating poverty. They also
	suggested to make more use of Local authorities in delivering
	initiatives as a means of reducing administrative burden, and to
	rethink the way we measure equality and sustainable development.
North Tipperary	North Tipperary Co. Co. structured their response around
County Council	answering the questions posed in the consultation document.
(S&E)	In response to Q1.the key issues identified by North Tipperary can
	be summarized as follows:
	• Broadband coverage is limited in rural areas and the quality
	of broadband service is in general an issue.
	• A decline in the numbers employed in a number of key
	sectors namely: industry, agriculture, forestry and wholesale
	and retail trade.
	• Public service supported jobs continue to fall
	• Decrease in ICT sector employment
	• Retail footfall and sales density
	• An inadequate road network throughout the County.

 Major downstream industries associat downsizing within Absence of emploinew FDI in the Construction From an economic perspension sectors for growth and point 	funding due to high national debt. In effects for sub suppliers and service ed with large companies closing and in the Region. In the Region. In the FDI sector as a result of no pounty in over twenty years. In the North Tipperary identified seven tential job creation are identified
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sectors for growth and po including:	
including:	tential job creation are identified
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medical technolog	ies
• convergence with	ICT
• food	
• internationally trac	led services
 logistics & supply 	chain management
energy and enviro	nmental sector
• tourism	
Other potential sectors for	the region include forestry, renewable
energy, mining and other	domestically traded services which are
likely to grow.	
In terms of infrastructural	requirements, North Tipperary listed a
whole range of improvem	ent schemes on the county's national and
regional road network, as	well as identifying the need to extend the
rural transport initiative.	
In response to Q2 North 7	Tipperary stated that the focus should be
on rural enterprise, especi	ally micro-enterprises, as well as
initiatives to promote the	green economy under Thematic
Objectives 6 & 8.	
In response to both Q3 &	Q4 the Council suggested that greater use
should be made of the pro-	posed new Socio-Economic Committees.
BallyhouraBallyhoura suggest that the	e Community Led Local Development
Development Ltd approach should be adopt	ed in the Regional OP and this should be
(S&E) used as a vehicle to integr	

	that the CLLD approach will both maximise the use of the funds
	coming to Ireland and mobilise local communities to achieving the
	Europe 2020 targets. They further state that the structures are
	already in place in Ireland to deliver CLLD, and that considerable
	experience has been built up over the years.
	Ballyhoura also responded to each of the key questions posed as
	follows:
	Q1 – key issues from their perspective are those matters affecting
	rural areas and the rural economy.
	Q2 – suggest programme should address all 11 Thematic
	Objectives.
	Q3 & Q4 – strongly support the widespread deployment of the
	CLLD approach.
	Q5 – support more 'open' demand-driven concept of innovation.
Waterford Institute of	WIT strongly supports the thematic concentration on the first four
Technology (WIT)	Thematic Objectives and identifies how the college has particular
(S&E)	strengths and expertise in relevant areas, which working in tandem
	with industry and the public sector (Triple Helix) has much to offer
	the future development of the south-east region, which is
	particularly hit by high unemployment rates and lower than
	average educational attainment levels. Accordingly the college
	identifies in its submission a range of initiatives and projects which
	the new Regional OP should build on in the WIT over the next
	programming period.
	WIT suggests that what is required is to build an ecosystem of open
	innovation. Such a system can absorb new knowledge and
	expertise from Multi-national enterprises within Ireland and
	leading organisations abroad, while at the same time disseminate
	knowledge, skills, and human capital out of the region to
	international centres of research, innovation and trade.
	On one hand, there is the required investment into research and
	development, the creation of human capital, and the enticement of

genius and expertise into the region. On the other hand is the
commercial economy, this is the investment in indigenous
enterprise, attracting of relevant FDI, the commercialisation of
research and the professionalising of manufacturing and services
across a range of sectors. Traditionally these two economies exist
in parallel. The challenge, to support the growth, development and
sustainability of the Southern and Eastern region, is to mesh these
economies together so that there is mutual gain and advancement in
a cohesive, coordinated, collaborative manner.
According to WIT there are three parallel processes that must be
adopted to achieve this which are, (i) build a wealth of sought after
knowledge of regional specialism and nuances, (ii) increase the
attractiveness of the region by creating and continuously
developing leading edge research centres, improving the quality of
tertiary education in the region beyond international standard
levels, and providing high-value add, interesting jobs, and (iii)
entering an arrangement with international partners whereby there
is an equitable process of brain exchange.
Immersing the regional community into an evolving
entrepreneurial culture is essential, particularly policy makers,
entrepreneurs, business owners, employers, and citizens must to
embrace the concept of job mobility, "brain circulation" and
labour/skill circulation. Instead of putting barriers in place to
hinder mobility and free flow of personnel, stakeholders should
encourage it knowing that the circulation of knowledge, skill and
labour is what is required to build regional wealth and
sustainability.
A central entity in making this happen is the catalyst which is
needed to create and implement the policies to nurture the
environment and provide the nutrients to develop the ecosystem of
open innovation. The catalytic agent should be a cohesive, all
inclusive, collaborative, cooperative group of relevant stakeholders

	including Higher Education, industry, entrepreneurs, investment
	and finance community, local government, and regional
	government. In WIT's opinion, the catalytic force should be led by
	regional government.
	Under Thematic Objective 1, WIT identify the following with
	growth potential in the region:
	• Agricultural and environmental science
	o Eco-innovation
	• Information and Communications Technology
	• Pharmaceutical Science
	o Advanced Manufacturing
	In relation to Thematic Objective 2 (ICT) WIT highlight
	videoconferencing infrastructure they are developing, and also the
	requirement for test-beds and service validation.
	Under Thematic Objective 3 (Entrepreneurship for SME's) WIT
	specifically mention the importance of the Enterprise Platform and
	the need for closer co-operation between HEI's and enterprises.
South-East Regional	The South-East Regional Authority (SERA) made a lengthy
Authority	submission running to 19 pages. The opening sections dealt with a
(S&E)	socio-economic profile of the South East NUTS III region,
	showing how it is under-performing relative to the rest of the S&E
	Region. It then summarised the regional policy/strategy context
	within the South East, and requests that the new Regional OP
	would have due regard to these strategies.
	The remainder of the submission is largely taken up by lists of key
	areas/projects which SERA would like to see funded under all 11
	of the Thematic Objectives. No attempt was made at prioritisation
	and no opinions are expressed on thematic concentration. Finally
	the submission concludes with some comments on implementation
	requirements, including NUTS III spatial dimension and sub-
	regional indicators, and supports the utilisation of the new tools of
	CLLD, ITI's and FI's.

South-West Regional	The South West Regional Authority (SWRA) submission was
Authority	divided into two parts – the first part provided an economic profile
(S&E)	of the South West region, together with a summary of the regional
	policy context. The second part provided a response to each of the
	key questions identified in the consultation document.
	Q1. SWRA consider unemployment as the number one issue facing
	the region. They also raise issue of connectivity, and in particular
	the need to improve broadband outside of the urban centres. They
	point to the fact that they have been successful in promoting
	clusters in various sectors, and they believe there is considerable
	potential to do more in this area. They support direct aid to
	companies, especially SME's, and investments in infrastructures
	linked notably to research & innovation, telecommunications,
	environment, energy & transport.
	Q2. In order to retain maximum flexibility SWRA suggest that
	programme should contain all 11 Thematic Objectives, with job
	creation and economic development as a cross-cutting objective
	across all themes.
	Q3. SWRA support the use of all three new implementation tools
	and suggest that a dedicated City/Urban Regeneration Fund be
	established to support the designated Gateways & Hubs.
	Q4. SWRA suggest better use should be made of accounting
	practices in Irish public service and digital copies to ease burden on
	retention of documents.
Mid-West Regional	The Mid-West Regional Authority (MWRA) submission focused
Authority	exclusively on providing responses to the five key questions posed
(S&E)	in the consultation document.
	Q1. MWRA identify the core principles of the RPG for the Mid-
	West as developing Limerick city, Ennis, Shannon and Nenagh as
	the core of the region's development, and the linkage of the rest of
	the region with the Limerick-Shannon Gateway through high

	quality transport infractinature. The submission than goes on to list
	quality transport infrastructure. The submission then goes on to list
	17 key infrastructure developments for the Mid-West region.
	Q2. MWRA support the inclusion of all of the other Thematic
	Objectives in the Regional OP, and give examples of suitable
	projects in the Mid-West.
	Q3. MWRA support utilisation of new implementation tools and
	suggest that priority projects, particularly those for Gateways, Hubs
	& County towns which are identified in new Integrated Regional
	Strategies should be funded by ERDF with match funding
	provided by the State.
	Q4. Suggest that middle layers in existing cascade structure should
	be removed.
	Q5. Require better initial proofing, with horizontal principles
	should be seen as associate objectives rather than direct objectives
	in their own right.
Dublin Regional	The DRA submission sets out across the 4 key TO's:
Authority	a. The Key issues and opportunities in the Dublin Region;
(S&E)	b. The need to maximise the value of the funds.
	In doing this the submission first outlines the importance of Dublin
	in terms of innovation, job creation and to the national economy.
	1. TO 4: Due to the demographic shift and concentration on
	the eastern seaboard significant opportunities exist to make
	an impact in terms of carbon emissions from transport and
	energy consumption (residential and commercial) in this
	region via the use of more sustainable technologies and
	solutions. Other regions offer a good opportunity for
	renewable energy production whilst Dublin offers the
	opportunity for the transition to greater use of renewables.
	Dublin would also be a great test bed for demonstration
	type projects such as the Future Cities Demonstration
	Project from Glasgow in addition to a commitment to the
	Green Digital Charter.

2.	TO 1: Important to Build on Dublin's comparative
	advantage and critical mass (highly skilled work force,
	universities, etc). Dublin is currently a hotbed of tech
	innovation this should be built upon to allow Dublin
	become the digital capital of Europe though supporting
	greater levels of collaboration 9research centres, industry,
	etc) and commercialisation of innovative ideas and
	research.
3.	TO 3: SME's crucial to economy therefore the OP should
	promote entrepreneurial talent, strengthen the SME base
	whilst attracting knowledge intensive FDI. In terms of the
	Services sector actions should be pursued which will assist
	this sector such as improvements in public transport
	(utilising renewable energy) and better quality office space
	in the city centre.
4.	TO 2: Quality ICT services for citizens and business. Use
	of e-Government services should be greatly improved.
	Need for faster and more reliable broadband (100mbs
	symmetrical).
The su	bmission also stresses that the OP must complement the
Region	nal Planning Guidelines for the Greater Dublin Area.
Other	Issues:
•	CLLD: The Submission stresses the importance of
	collaboration between business, academia, public sector,
	etc without specifically recommended a CLLD approach.
•	Sustainable Urban Development: Welcomes the 5% target
	in this area and suggests that it provides an opportunity to
	utilise it build on Dublin's reputation as a hotbed for the
	tech innovation.
•	Other TO's: Education, social inclusion and combating
	poverty.
•	Policy: EU and National policies such as Resource

	efficiency, digital agenda, Action Plan for jobs should also
	assist in framing the OP.
	• The Creative Dublin Alliance could be used as tool to
	promote greater collaboration with Universities, business,
	etc.
	• Local Gov Reform: The OP news to be cognisant of the New
	Eastern and Midlands Region.
Colm Ryder	The submission from the Dublin Cycling campaign and Cyclist.ie
Secretary	highlights the need for greater investment in sustainable transport
Dublin Cycling	and in cycling in particular under the next round of structural funds
Campaign/Cyclist.ie	and includes a copy of a paper submitted jointly with the European
(BMW & S&E)	Cycling Federation to the Minister for Transport on the economic
	benefits of cycling and a copy of a UK study on the value of the
	cycling economy there.
	It calls for an increased cycling modal share as a part of the EU
	sustainable transport strategy and sets out the estimated annual
	economic benefits in terms of health, congestion-easing, fuel
	saving, CO2 emissions and air pollution.
	It proposes further investment in cycle route networks, bicycle
	parking & storage facilities, promotional campaigns, public sharing
	schemes and greater monitoring of usage.
Martin Cunniffe	The West on track submission promotes the development of the
West on Track	Western Arc in terms of road, rail, electricity and
(BMW)	telecommunications and identifies two priorities for investment:
	• Rebuilding of freight line from Athenry to Claremorris to a
	standard that can also accommodate passengers later on
	(cost $\textcircled{S}2m$), linking freight exports to southern ports
	• Funding of the undertaking of a railway order to assess the
	costs and benefits of rebuilding the Claremorris to
	Collooney section of the Western Rail Corridor and
	establish a preferred route option to connect Ireland West
	Airport
h	

	These developments would connect 5 of the 6 largest cities in
	Ireland; promote investment, job creation and tourism.
	The submission also proposes that the Western Arc Cork-Belfast
	should be put forward as a main project as a TEN-T 'non-core'
	project.
Ms. Aoife Moore,	The submission from the Midlands Regional Authority highlights
Planner,	the importance of strategic enabling infrastructure in the Midlands,
Midland Regional	as set out in the Regional Planning Guidelines 2010 – 2022. In
Authority	particular, it highlights the need for improved transport links
(BMW & S&E)	between the interlinked Gateway towns of Athlone, Tullamore and
	Mullingar. Reference is made to the need to upgrade key road
	corridors, namely the N4 to Sligo, N52 and N80 in order for the
	transport links through the Midland region to function effectively.
	Environmental infrastructure investment needs are also
	highlighted, including the Portlaoise/Mountmellick Water Scheme.
	The submission recommends targeted investment in research,
	technological development and innovation base in order to promote
	innovation in important rural economy sectors such as food and
	green energy (contributing to a low carbon economy). The
	submission also highlights the importance of investment in
	resource efficiency in the region.
	It states that, depending on thematic objectives selected and their
	spatial focus, usage could be made of the CLLD and ITI
	implementation arrangements.
Mr. Bart Bonsall	The Technology Centre for Bio-refining and Bio-energy (TCBB),
Technology Leader	supported by Enterprise Ireland, is tasked with developing
	applications in the Irish bio-sector including, anaerobic digestion
Technology Centre	technologies, advanced gasification and combustion (CHP)
for Biorefining and	applications, production of second generation bio-fuels and bio-
Bioenergy	plastics.
(BMW & S&E)	The TCBB submission highlights the opportunities available in
	Ireland to promote local waste-to-energy projects, utilising biomass

	and municipal wastes. This would reduce reliance on fossil fuels,
	minimise landfill and help Ireland meet its renewable energy
	targets. Anaerobic digestion offers opportunities for the generation
	of renewable heat and transport fuels. The submission also supports
	the development of local/regional bio-refining plants, drawing
	upon local biomass sources, producing bio-chemicals and bio-
	plastics for which there is growing demand. These would generate
	employment, promote investment and contribute to the shift to a
	low carbon economy.
	The submission proposes the use of a financial instrument to
	finance viable projects and leverage EIB and other public and
	private funding. It also suggests that ERDF resources be
	concentrated on commercial projects. A paper on the economic
	potential of the bio-based economy in Ireland and the need for
	capital funding to develop the bio-based sector was also provided.
Manager	The Carlow Kilkenny Energy Agency (CKEA) highlighted
The Carlow Kilkenny	strengthened commitment towards energy efficiency and
Energy Agency	renewable energy for the 2014-2020 programmes.
(S&E)	The submission identified the expertise of the Regional and Local
	Energy Agencies as a resource for territorial sustainable energy
	actions. Initiatives such as the Covenant of Mayors and the
	'European Energy Award label' were noted.
	The CKEA submission supports the FEDARENE ²⁵⁷
	recommendation, of harnessing the expertise of the local and
	regional energy agencies in the implementation of potential
	renewable energy and energy efficiency measures in the
	forthcoming programmes.
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²⁵⁷ European Federation of Agencies and Regions for Energy and Environment

Annex 2: Summaries of Regional Stakeholder Consultation Workshops on the Regional Needs Analysis Report

BMW ROP 2014-2020

Introduction

The Regional Stakeholders Workshop was held in order to give an opportunity to stakeholders to review the findings of the Regional Needs Report and in particular to consider the, SWOT Analysis and the Indicative Investment Priorities set out in the report. Stakeholders were sent a link to the full text of the draft Regional Needs Report prior to the workshop.

Attendance

The 42 attendees came from local and regional authorities, development agencies, enterprise bodies, representative organisations, social partners and any others who had responded to the invitation for submissions earlier in 2013

Content

The workshop included 4 presentations, with opportunities for questions and discussions after each presentation:

- An overview of the context of the 2014-2020 Regional OP:
- A presentation of the key findings of the Needs and SWOT Analysis with reference to the investment priorities for ERDF co-financing
- A presentation of the selected investment priorities; and,
- A brief presentation by RSM McClure Watters on the ex ante evaluation process

Issues Discussed

- The impact of the re-configuration of regional structures under proposed regional and local government reforms on the Regional Operational Programme
- The extent to which the horizontal principles are integrated in programme planning
- Clarification was sought on household internet connection data

- The need to focus additional resources on start-ups, company expansion and export sales
- Challenge to the idea that new company start-ups will come primarily from the application of scientific research
- Greater emphasis on innovation within SMEs needed uptake of innovation vouchers indicates a demand for such supports
- BMW region is weak in its relative capacity and scale to attract large levels of competitive research funding
- Challenge to the idea that research in higher education institutions is having significant knock-on effects and in particular the lack of impact and investment outside Galway
- Need a broader view of the results and impacts of research activities links with multi-nationals, provision of world class post-graduates etc.
- In-company innovation does not come solely from engagement with HEIs
- Innovation requires a local integrated response, through local and regional incubation centres for example
- What is meant by sustainable development in the context of the proposed urban development priority
- How will the urban areas be defined for the purpose of the BMW Regional OP's requirement to spend 5% of ERDF on the integrated urban initiative.
- The needs of provincial or second tier towns which are not Gateways and Hubs should be addressed. Many have high vacancy rates and are visibly dis-improving
- A wider range of mechanisms are needed to support innovation. A programme to support enterprising graduates is needed.
- There should be a greater focus on promoting exports. Access to ports e.g., Foynes from the North-West is very poor – the Western Arc (road, rail, broadband) should be supported
- Potential for the co-funding of local authority enterprise activities complementary to the LEOs should be considered
- The timetable for preparing regional spatial and economic strategies
- The promotion of leadership and other competency skills

- How will the outcomes of the Regional Spatial an Economic Strategies process feed into the content of the OP?
- Provision of support for on-line services provision by local government?
- Funding of tourism as a thematic objective
- Support for co-financing of energy retro-fit in social housing
- Support for urban cycling, pedestrianisation strategies and a low carbon approach to urban development
- Need for further investment in rural transport services as part of local authority strategies for older people
- Sub-optimal provision of incubation facilities in the midland region. Fall-off in business start-up rates is of concern
- Need to address the unacceptably high level of youth unemployment
- Need to take account of territorial balance. Counties without Gateways or higher education facilities may lose out on co-funding
- Funding for bio-refining and bio-energy under the energy fund
- Concerns raised that the Department of Transport had not consulted properly on the TEN-T programme and that the region's transport needs have not been properly assessed.

Responses

All of the above issues were noted by the Regional Assembly. Clarifications were provided on many of the issues raised.

S&E ROP 2014-2020

Introduction

The Regional Stakeholders Workshop was held in order to give an opportunity to stakeholders to review the findings of the Regional Needs Report and in particular to consider the SWOT Analysis and the Indicative Investment Priorities set out in the report. Stakeholders were sent a link to the full text of the draft Regional Needs Report prior to the workshop.

Attendance

The 16 attendees came from local and regional authorities, State agencies, representative organisations, social partners and others who had responded to the invitation for submissions earlier in 2013

Content

The workshop included 4 presentations, with opportunities for questions and discussions after each presentation:

- An overview of the context of the 2014-2020 Regional OP:
- An Introduction to the Thematic Objectives relevant for ERDF and the
- needs identified for the region
- An Introduction to SWOT Analysis for the Southern and Eastern Region and,
- A brief presentation by RSM McClure Watters on the ex ante evaluation process

Issues Discussed

- Questions on the process for the development of the OP; how the Commission's position paper influences the design of the OP and how the development of the OP is funded;
- > The potential for the geographical targeting of resources;
- The process for the allocation of resources under requirement that calls for 5% of the ERDF resources be allocated to integrated actions for sustainable urban development;
- Integrated Urban Development, what urban centres are included and how can integrated urban development plans which are at a more developed stage be accommodated;
- Will Hubs and other county towns be able to avail of funding under an Integrated Sustainable Urban Initiative;
- How can the case be made for cities who previously engaged in URBACT programmes to ensure a progression of their initiatives under an Integrated Sustainable Urban Initiative;
- Smart Specialisation Strategies national or regional strategies, particular concern that a national strategy won't be responsive to more nuanced regional needs;

- > Potential for funding sustainable transport initiatives;
- > The potential use of Financial Instruments within the ROP;
- > Will bio-energy strategies be funded under the ROP, including anaerobic projects;
- Is there scope for funding thematic objectives (TO) outside of the four TO selected for concentration;
- Will the programme be designed in a manner that will make it responsive to the National Spatial Strategy which is due to be re-conceived and launched during the course of the ROP;

Responses

All of the above issues were noted by the Regional Assembly. Clarifications were provided on many of the issues raised.

Annex 3: Financial Instrument Feasibility Study

An evaluation study was conducted by PwC and Arup between November 2012- June 2013 on behalf of the European Investment Bank, European Commission and the Department of Public Expenditure and Reform into the prospective demand, potential thematic focus potential financial instrument architecture and size of the fund.

The study notes the Commission's recommendation in the position paper, that 'particular effort should be made to optimise use of financial instruments by deploying them more widely in sectors where they are particularly suitable and where an ex-ante assessment has established evidence of market failure or sub-optimal investment situations'.

As part of the study, 84 project outlines (66 S&E and 18 BMW) provided mostly by public authorities across Ireland, were examined in order to give an indication of the scale and scope of the potential demand for a financial instrument and the level of investment-ready projects likely to emerge. These projects were assessed in terms of their alignment with EU2020 funding priorities and in terms of their internal rate of return and the need for public investment.

The study found that 22 of the projects submitted would be potentially suitable in the categories of Resource Efficiency and Innovation, with the Resource Efficiency theme composed of three sub-themes; Greener Social Housing, Energy Efficiency and Waste-to-Energy. The Greener Social Housing theme included social housing retrofit projects. The Energy Efficiency theme included retrofits of commercial buildings, street lighting upgrades, combined heat and power plants and district heating systems. The Waste theme included municipal waste to energy projects. The Innovation theme included innovation hubs, campuses and enterprise centres. Business cases amenable to detailed financial examination were available for just 5 of the above potentially suitable projects. Each of these projects was examined from a technical perspective against 6 criteria.

Three optional fund architectures were examined as part of the study. A potential funding requirement of 134m (99m S&E and 55m BMW), for resource efficiency (excluding social housing) projects was identified, while for innovation the estimated requirement is 20m, all in the S&E Region. The study also found that for equity fund managers, there is

sufficient expertise, experience and interest among the domestic Venture Capital community to act as fund managers for a JESSICA-type equity fund. Set-up costs were estimated at 1-2% of fund value.

The key conclusions and recommendations from the study were as follows:

- The implementation of a financial instrument in Ireland could provide significant advantages and a valuable source of finance to take forward projects related to strategically important themes such as Resource Efficiency and Innovation. There is considerable appetite from partners to investigate the opportunity presented by a financial instrument in Ireland;
- The invitation to submit projects identified a strong current demand for a financial instrument in Ireland particularly with respect to the Resource Efficiency thematic objective. Excluding €250m of Social Housing Retrofit demand, there is a Resource Efficiency project funding gap of approximately €120-€150m. The Resource Efficiency funding requirement is split approximately 75:25 with regard to the S&E and BMW. For innovation projects, a funding gap of approximately €20m is estimated. Based on submissions received, all the funding demand for innovation projects is from the S&E Region;
- It is clear that the Project Types assessed for Ireland, appear to need some order of assistance in order to be realised (i.e. private sector market will need encouragement to invest) e.g. project subsidies, favourable loan conditions, combination of loans/equity/guarantees with grants, advisory support for project preparation and development. Other projects are financially viable and a financial instrument could help fill a market gap;
- The projects analysed represent a diverse sample of potential opportunities, at widely varying stages of development. Based on the information provided the projects appear to be technically viable and relatively robust against the assessment criteria. Further work and risk mitigation will be required as part of the development process for each project;
- Matching fund sources/private investment potential will influence the focus of any future financial instrument. Aligning financial instruments with private investment potential will also encourage leverage. The Project Types assessed as part of this project have economic benefits such as reducing energy consumption, increasing

research and development/innovation facilities, job creation in addition to financial returns that are a prerequisite for financial instrument investment; and

Based on our review, it appears that a Resource Efficiency financial instrument in the order of €120-150m would be a sufficient size to support implementation of the initiative. A much larger fund would be required to support the demand if a Social Housing Retrofit project is included. As such, it is recommended that a separate financial instrument is established for Social Housing Retrofits. There is also the option of allocating a portion of Structural Funds to a wider fund which would be eligible to finance energy efficiency retrofitting of social housing. A further circa €20m would be required if the Irish Authorities choose to also support the innovation

Measure	Border	Midland	West	Dublin	Mid East	Mid West	South East	South West
Unemployment 2013	15.50	17.10	12.90	11.30	14.30	15.60	18.40	11.10
Unemployment 2003	6.70	4.60	4.60	4.20	3.00	4.20	5.70	4.40
Difference in Unemployment 2003-2013	8.80	12.50	8.30	7.10	11.30	11.40	12.70	6.70
Disposable Income/person (€) 2010	17,374	17,133	18,495	21,515	19,223	19,122	18,125	19,197
Percent Change in disposable income 2007-2010	-9.40	-10.90	-6.00	-9.00	-13.50	-6.90	-12.00	-6.10
Percent of contribution to National GVA 2010	6.50	3.60	7.70	42.10	8.10	7.20	7.40	17.50
Percent persons at work in Ireland 2010	10.10	5.50	9.80	28.80	12.50	8.10	10.30	14.80
Ratio of GVA to people at work 2010	1.55	1.53	1.27	0.68	1.54	1.13	1.39	0.85
Percent population change 2006-2011	9.90	12.20	7.50	7.20	11.70	5.10	8.00	7.00
Youth Dependency 2011	34.87	35.99	31.63	27.60	36.51	32.08	33.82	31.39
Older Dependency 2011	19.49	17.19	19.70	15.67	13.56	18.79	19.34	18.85
Pobal Deprivation Index 2011	-4.00	-3.20	-0.40	3.70	1.50	-1.10	-3.20	1.00
Changes in Deprivation Index 2006-2011	7.00	7.90	6.50	5.00	8.10	7.20	7.30	6.50
Percent of houses connected to Internet 2007	43.00	54.00	52.00	66.00	66.00	58.00	49.00	56.00
Percent of houses connected to Internet 2012	75.00	74.00	82.00	86.00	87.00	79.00	79.00	78.00
Change in percent of houses connected to the internet 2007-2012	32.00	20.00	30.00	20.00	21.00	21.00	30.00	22.00
Number of Active SMEs 2010	19,302	9,749	17,728	57,770	21,571	15,672	18,932	29,028
Number of Active SMEs/Head of population 2010/2011	0.037488	0.025701	0.039806	0.045379	0.040617	0.055494	0.038048	0.043682

Annex 4: Sub-Territorial Trends and Disadvantages by NUTS III Region

Annex 5: List of Abbreviations

5	
AD	Anaerobic Digestion
AFF	Agriculture, Forestry and Fishing
ARE	Applied Research Enhancement
BERD	Business Expenditure on Research & Development
BGS	Beginning of Growing Season
BMW	Border, Midland & Western
BTWEA	Back to Work Enterprise Allowance
CCRP	City Centre re-signalling
CEB	Council of Europe Development Bank
CEBs	County & City Enterprise Boards
CEC	Controlled Environments Company
CEF	Connecting Europe Facility
CF	Cohesion Fund
CFP	Common Fisheries Policy
CHP	Combined Heat & Power
CIF	Capital Investment Framework
CIP	Competitiveness & Innovation Programme
CLLD	Community Led Local Development
ComReg	Commission for Communications Regulation
COSME	Competitiveness of Small & Medium Sized Enterprises
CPR	Common Provisions Regulation
CSF	Common Strategic Framework
CSFF	Common Strategic Framework Funds
CSO	Central Statistics Office
CTCC	Central Traffic Control
DAE	Digital Agenda for Europe
DCENR	Department of Communications, Energy and Natural Resources
DG REGIO	Directorate General for Regional Policy
DJEI	Department of Jobs, Enterprise and Innovation
DoECLG	Department of Environment, Community & Local Government
DPER	Department of Public Expenditure & Reform
DS3	Delivering a Secure Sustainable Electricity System
	388

DTTAS	Department of Transport, Tourism and Sport
EAFRD	European Agricultural Fund for Rural Development
EAP	Environment Action Programme
EASI	Employment and Social Innovation
EC	European Commission
ECB	European Central Bank
ECOFIN	Economic & Financial Affairs
ED	Electoral Divisions
EEA	European Environment Agency
EED	Energy Efficiency Directive
EEN	Enterprise Europe Network
EFF	European Fisheries Fund
EFSF	European Financial Stability Facility
EFSM	European Financial Stabilisation Mechanism
EGFS	Expert Group on Future Skills
EGTC	European Grouping of Territorial Co-operation
EI	Enterprise Ireland
EIB	European Investment Bank
EIF	European Investment Funds
EIP	European Innovation Partnership
EIT	European Institute of Innovation & Technology
EMFF	European Maritime and Fisheries Fund
EEA	European Environment Agency
EED	Energy Efficient Directive
EEN	Enterprise Europe Network
EPA	Environmental Protection Agency
EPP	Enterprise Platform Programme
ER	Employment Rate
ERA	European Research Area
ERDF	European Regional Development Fund
ESCO	Energy Supply Company
ESDP	European Spatial Development Perspective
ESF	European Social Fund
	200

ESI Funds	European Structural and Investment Funds		
ETB	Education and Training Board		
ETC	European Territorial Co-operation		
ETS	Emissions Trading System		
EU	European Union		
EURES	European Employment Services		
EUCP	EU Cohesion Policy		
FDI	Foreign Direct Investment		
FEI	Financial Engineering Instrument		
FETs	Future and Emerging Technologies		
FI	Financial Instrument		
FP	Financial Programme		
FP7	7 th Framework Programme for Research and Development		
GDA	Greater Dublin Area		
GDI	Gateway Development Index		
GDP	Gross Domestic Product		
GEM	Global Entrepreneurship Monitor		
GERD	Gross Expenditure on Research and Development		
GHDI	Gateways & Hubs Development Index		
GHG	Green House Gas		
GIF	Gateway Investment Fund		
GIN	Geographic Intelligence Network		
GMIT	Galway-Mayo Institute of Technology		
GNP	Gross National Product		
GSMR	Global System Mobile for Railways		
GVA	Gross Value Added		
H2020	Horizon 2020		
HEA	Higher Education Authority		
HEI	Higher Education Institute		
HERD	Higher Education Research & Development		
HP Deprivation Index	Haase-Pratschke Deprivation Index		
HPSU	High Potential Start Up		
ICT	Information and Communication Technology		
	390		

IFI	Inland Fisheries Ireland
IFI	Innovative Financial Instruments
ILDN	Irish Local Development Network
ILO	International Labour Organisation
IMF	International Monetary Fund
IP	Intellectual Property
IPF	Irish Policy Framework
IRC	Immunology Research Centre
ISIF	Ireland Strategic Investment Fund
IT	Institute of Technology
ITI	Integrated Territorial Investment
ITS	Institute of Technology Sligo
JRC	Joint Research Centre
KET's	Key Enabling Technologies
Kgoe	Kilograms of oil equivalent
KIC's	Knowledge & Innovation Centre's
Ktoe	Thousand tonnes of oil equivalent
LAG	Local Action Groups
LD	Local Development
LEO's	Local Enterprise Offices
LIT	Limerick Institute of Technology
LKIT	Letterkenny Institute of Technology
LULC	Land Use and Land Cover Charge
LUTS	Urban Transport Systems Laboratory
МА	Managing Authority
MAN	Metropolitan Area Networks
MBC	Manufacturing, Building and Construction
Mbps	Megabits per second
MC	Monitoring Committee
MFF	Multi-Annual Financial Framework
MIRC	Midlands Innovation and Research Centre
M_NMS	Market and Non-Market Services
MSFD	Marine Strategy Framework Directive
	391

MST Graduates	Mathematics, Science and Technology Graduates		
Mtoe	Million tonnes of oil equivalent		
NEEAP	National Energy Efficiency Action Plan		
NEET	Not in Employment, Education or Training		
NBP	National Broadband Plan		
NBS	National Broadband Scheme		
NCP	National Contact Point		
NGA	Next Generation Access		
NGB	Next Generation Broadband		
NGOs	Non-Governmental Organisations		
NHAs	National Heritage Areas		
NIE	Northern Ireland Electricity		
NIRSA	National Institute for Regional and Spatial Analysis		
NISRA	Northern Ireland Statistics and Research Agency		
NPWS	National Parks & Wildlife Service		
NRP	National Reform Programme		
NRP	National Recovery Plan		
NSI	North-South Electricity Interconnections		
NSOG	Northern Seas Offshore Grid		
NSS	National Spatial Strategy		
NTA	National Transport Authority		
NUI	National University of Ireland		
NUIG	National University of Ireland Galway		
NUTS	Nomenclature of Units for Territorial Statistics		
NZEB	Nearly Zero-Energy Buildings		
OECD	Organisation for Economic Co-operation and Development		
OEDU	Ocean Energy Development Unit		
OP	Operational Programme		
OPW	Office of Public Works		
PA	Partnership Agreement		
PMC	Programme Monitoring Committee		
PPP	Public Private Partnership		
PRTLI	Programme for Research in Third Level Institutions		
	392		

QNHS	Quarterly National Household Survey
QS	Quacquarelli Symonds World University Rankings
R&D	Research & Development
R&I	Research & Investment
RE	Renewable Energy
REE	Resource Efficient Europe
REFIT	Renewable Energy Feed in Tariff
RE RD&D	Renewable Energy Research, Development and Demonstration
RFES	Research Facilities Enhancement Scheme
RIDP	Renewable Integration Development Project
RIS	Research & Innovation Strategies
ROP	Regional Operational Programmes
RPP	Regional Policy Programmes
RPS	Regional Policy Strategies
RSMP	River Basin Management Plans
RTDI	Research, Technology, Development & Innovation
RTI	Research, Technology & Innovation
RTP	Rural Transport Programme
RTPI	Real Time Information
S&E	Southern & Eastern
SBA	Small Business Act
SEA(I)	Sustainable Energy Authority (of Ireland)
SEC	Sustainable Energy Communities
SFI	Science Foundation Ireland
SFPA	Structural Funding Partnership Agreement
SILC	Survey on Income and Living Conditions
SME	Small & Medium sized Enterprises
SONI	System Operator for Northern Ireland
SSTI	Strategy for Science, Technology & Innovation
STI	Science, Technology & Innovation
SuDS	Sustainable Drainage System
SUMP	Sustainable Urban Mobility Plan
SWOT	Strengths, Weaknesses, Opportunities, Threats
	202

TA2020	Territorial Agenda 2020
TCD	Trinity College Dublin
TEA	Total Early-stage Entrepreneurial Activity
TEN-T	Trans European Network – Transport
TFEU	Treaty on the Functioning of the European Union
THM	Trihalomethanes
ТО	Thematic Objective
UCC	University College Cork
UCD	University College Dublin
UFW	Unaccounted for Water
UL	University of Limerick
VEC	Vocational Education Committee
WFD	Water Framework Directive