An Roinn Comhshaoil,
Aeráide agus Cumarsáide
Department of the Environment,
Climate and Communications

David Kelly,
Director, Southern Regional Assembly,
Assembly House,
O'Connell Street,
Waterford,
X91 F8PC.

16 February 2022

Re: Section 25A RSES Monitoring Report

Dear David,

I refer to your letter to Minister Eamon Ryan in relation to the Section 25A RSES Monitoring Report and the requirement for the Department of the Environment, Climate and Communications to submit a report to the Regional Assembly every two years, as required under Section 25A (1) of the Planning and Development Act (as amended).

My officials have prepared a report setting out progress made in supporting regional objectives of the strategy, relevant to this Department. Our response comprises a report and two annexes from the Sustainable Energy Authority of Ireland (SEAI).

Department officials can make themselves available for a discussion on any of the matters raised in this submission or any other matters within the remit of the Department of the Environment, Climate and Communications relevant to the preparation of the monitoring report. Please direct any requests for further consultation to planningadvisory@decc.gov.ie

Yours sincerely,

Paul O'Neill

Principal Officer

29-31 Bóthar Adelaide, Baile Átha Cliath, D02 X285
29-31 Adelaide Road, Dublin, D02 X285
T +353 1 678 2000 | 1890 44 99 00
www.gov.ie/decc

Sustainable Energy Authority of Ireland 2021 Achievements

SEAI disbursed €196 million Exchequer funds to support Ireland's clean energy transition

CITIZENS AND COMMUNITIES

Home Energy Upgrades

- Grant support towards 11,368 home energy upgrades including 2,272 energy poor homes. There were also 4,089 solar PV installations supported. Total Government support of €100 million.
- 4,606 homes supported by SEAI grants achieved a B2 BER rating or higher.

Communities

- 39 community energy projects were funded with grant support of €26.5 million towards total investment of over €86 million.
- SEAI community energy network now has over 600 member organisations nationwide, comprising more than 30,000 citizens. SEAI and nine local authorities co-funded €700,000 in support to 44 communities to undertake energy master plans.
- Published the first four modules of the Community Energy Resource Toolkit, providing practical guidance for communities on wind, solar PV, grid connections and the planning process.

Building Energy Rating

- More than 95,000 BERs were published through SEAI systems.
- Launched the updated BER Advisory report which will provide homeowners with valuable information on home energy retrofits.
- Launched pilot BER API Service with three home upgrade supply-chain actors, providing digital transaction level BER data streamlining home energy services, reducing homeowner burden.

Schools and Education

- 185 school workshops as part of our education programme where over 4,600 students participated.
- SEAI published Guzzler's Party an illustrated story book for younger primary school children on energy and climate action.

BUSINESS, PUBLIC AND TRANSPORT

Electric Vehicles

- €63 million support towards purchase of 13,418 electric vehicles. This represents almost a threefold increase on 2020.
- €5 million support towards the installation of 8,428 EV home chargers.

- Completed mystery shopper research on almost 180 EV dealerships to evaluate EV salesperson competence and performance.
- Launched the inaugural award scheme for Dealership Excellence in Electric Vehicles. Award winners to be announced in Q1 2022.
- Significant stakeholder consultation on forthcoming public charging and apartment charging support schemes.

Public Sector

- SEAI supported and monitored the public sector to achieve 29% energy efficiency continuing good progress towards its 33% target, relative to 2009.
- More than 900 delegates attended SEAI's online public sector conference with keynote speaker Dr Tara Shine.
- Delivered further ISO50001 training with 35 public bodies now certified. Over 1,000 public service personnel trained in range of energy technologies and practices.
- Building on almost two years of work from SEAI's public sector team the new methodology for tracking public sector energy related CO_2 was published in the Climate Action Plan 2021.
- €14.5 million support provided towards 54 public building retrofit projects in schools, higher education, and health government. Total project value of €29 million.
- Supported Department of Housing Planning and Local Government with Energy Efficiency in Traditional Buildings guide and Building Automation and Control Systems.
- Established a Non-Domestic Retrofit framework to support the Public Sector Pathfinders and Commercial Retrofit scheme.

Business Supports

- Relaunched EXEED Certified as an emissions-based Scheme and developing a strong pipeline of projects. 73 new company engagements supported through SEAI Stage-1 grant, 20 companies offered Stage-2 capital grants. EED Expert training provided to over 250 supply-chain professionals. Irish Standard I.S.399 Energy Efficient Design relaunched by NSAI.
- Increased registration for Energy Academy to almost 3,300, increased module count by 8 to 24 and issued over 1,000 course certificates.
- Launched the Support Scheme for Energy Audits, a business-friendly scheme supporting high quality SME audits. 70 auditors signed up to participate in the scheme, over 400 SMEs registered, and more than 170 vouchers have been issued to date.
- Trained over 60 SMEs in new online Energy Management training. More than 300 delegates attended business briefing events throughout the year.
- More than 700 delegates participated in workshops on SEAI grants, solar PVs, energy efficiency in traditional buildings, achieving a BER B, thermal bridging and learnings from Pathfinder.
- Ran project accelerator for Solar PV and published Solar PV guidance document.
- Provided significant support to Departments of Enterprise, Trade and Employment and Environment, Climate and Communications in the development of a new online Climate Toolkit 4 Business, launched in December 2021.
- Participated in SOLAS working group for programme design of Level 5 QQI programme "Sustainability in the workplace" to be rolled out through ETBs.
- Supported Fáilte Ireland with the development of their new 2022 sustainability programme for the hospitality industry.
- Supported 17 businesses and public bodies with feasibility studies, audits and EPC implementation through Project Assistance Grants.

- Triple-E product register updated to remove all fossil fuel driven products from ACA eligibility. Completed public consultation on full category and technology review ahead of register relaunch in 2022.

Large Industry

- Supported and monitored the large industry energy network (LIEN) in delivering 1,843 GWh in energy savings.
- Delivered nine targeted knowledge sharing and training events to network members including topics such as ISO50001, energy auditing, energy performance indices and decarbonisation of Industry. Convened two new Special Working Groups on future fuels and digital energy data management.
- Commenced study into a LIEN buying group Corporate Power Purchase Agreement.
- Ongoing mandatory audit compliance programme, including communication with over 2000 commercial and 350 public organisations. Issued "SEAI Guide to Energy Audit Compliance".
- Support Scheme for Renewable Heat has to-date offered 15-year contracts to 73 installations, amounting to 78 GWh of renewable heat annually.

Energy Efficiency Obligations Scheme

- Formal closure and reporting of energy credit allocations to Obligated Parties, delivering additional 5,236 GWh primary energy saving, equivalent to an offset in emissions of 1.2MT CO2e, over the period of EEOS (2014-2020) Scheme.
- Transitioning Supplier Obligation to new policy design for period 2021-2030.

Market Surveillance Authority

- Delivered the comprehensive market surveillance compliance programme for energy labelling and eco-design, consisting of 190 retailer inspections, 150 product technical compliance validations, 16 company head office engagements and seven industry/stakeholder meetings.
- Delivered major campaign on new rescaling of energy label through webinar, animation, point of sale information and an advertising guide for retailers.
- Published a guide for tyre retailers and manufacturers regarding new labelling requirements.

RESEARCH, POLICY, AND INSIGHTS

Energy Modelling

- Developed modelling and analysis for Ireland's National Heat Study. Provided initial briefing material to DECC to support development of Climate Action Plan 2021 and presented initial findings to key stakeholders including the Climate Change Advisory Council.
- Expanded the SEAI energy modelling team and undertook a detailed review and upgrade of Ireland's National Energy Modelling Framework (NEMF). Outputs informed various aspects and actions in the 2021 Climate Action Plan.
- Contributed modelling and analysis to inform renewable electricity targets for Ireland's 2030 electricity grid.
- Provided analysis through the National Energy Modelling Framework to fulfil on Ireland's National Comprehensive Assessment of the potential for efficient heating and cooling in Ireland under the EU Energy Efficiency Directive.

Wind Energy

- Continued to develop the Irish Wind Energy Research Network to promote Irish wind energy research to national stakeholders – 2 webinars with 90 participants at December meeting.

- Published wind farm asset management paper: Asset Management and ISO 5500: A Guidance Document for the Wind Sector in Ireland, in collaboration with Wind Energy Ireland.
- Executed Wind Energy Resource spatial analysis supporting DECC in deciding final Wind Energy Development Guidelines.
- Update Analysis of LCOE of onshore wind energy in Ireland to contribute to IEA Wind Task 26 Report on the International Cost of Wind Energy.
- Conducted public consultation of Ireland's Renewable Electricity Corporate Power Purchase Agreements, bringing assessment of results to DECC and RECPP Steering Group.

Research and Development

- Awarded 50 new National Energy Research, Development and Demonstration projects, €19.5 million in funding.
- Grew Ireland's IEA Technology Collaboration Programme activity, adding 26 new Irish experts.
- Facilitated discussion on the role of energy research through the 2021 National Energy Research and Policy Conference: Decarbonising Transport, reaching 560 delegates.
- Represented Ireland at UNFCCC's COP26 in Glasgow as a National Delegate, contributing directly to the Climate Technology Centre Network and part of the EU negotiation team for technology.
- Commenced evaluation of community measures mandated in the Renewable Electricity Support Scheme (RESS), to satisfy EU DG Comp requirements.

Energy Statistics and Policy Insights

- Published updates to key statistical publications including Energy in Ireland, Energy prices reports, Renewable Energy and Energy Related CO2 Emissions in Ireland.
- Upgraded SEAI's Energy Data Portal to include a new dashboard on energy related CO2 emissions.
- Published updates to wind and solar GIS data sets to enable potential for these technologies to be more accurately estimated.
- Increased the number of energy data sets on the Irish Government's Open Data Portal to 42 – new data sets include average wind speeds (on- and off-shore), geothermal modelling of Ireland, updated National Energy Balances, and others (data.gov.ie).
- Provided enhanced monthly data reporting for electricity, gas and oil use via the SEAI website.

Behavioural Economics

- Progressed trials and pilots to test consumer behaviour including studies on consumers ability to use heat pumps, progressing Community Based Social Marketing (CBSM) and working to promote electric vehicle uptake.
- Continued engagement with the International Energy Agency (IEA) on the Users TCP to mainstream behavioural insights into policy practice.
- A number of presentations were delivered on the international stage. These included at Behavioural transformations for a more sustainable world (OECD) conference, Consumer & Behavioural Insights, Accelerating the Energy Transition Conference (with Ofgem at COP26).

CORPORATE

- Served 195,000 voice, email and webchat transactions across all programmes through our contact centre.
- Hosted SEAI's first ever virtual Energy Show with more than 2,000 participants across 23 sessions.
- Delivered a successful virtual Energy Awards cycle and ceremony.
- More than 1.2 million web sessions on www.seai.ie
- Prepared a new SEAI five-year IT Strategy (2021-2025) to support projected operational growth and capability needs.

Rialtas na hÉireann
Government of Ireland

Department of the Environment, Climate and Communications

Section 25A RSES Monitoring Report: Southern Regional Assembly

February 2022

Contents

Introduction

The Department of the Environment, Climate and Communication's vision of a climate neutral, sustainable, and digitally connected Ireland will be achieved by collaboratively delivering policies and programmes to empower people, communities, and businesses to continue the transition to a better quality of life for current and future generations. The work of the Department impacts of the daily lives of every citizen in Ireland and has major environment, societal and economic benefits.

The Department of the Environment, Climate and Communications (DECC) has responsibility for policy and programmes across a number of areas of national strategic importance, encompassing telecommunications; postal; energy; climate action; waste management, resource efficiency and the circular economy; environmental policy and air quality, and natural resources. It is supported in its mandate by 14 State bodies, comprising a number of leading commercial, non-commercial and regulatory bodies.

Our Statement of Strategy for the period 2021-2023, Le Chéile 23, sets out our five strategic goals:

1. Be a recognised leader in climate action.
2. Transform our energy system for a net zero emissions future.
3. Transition to a circular economy – protecting and restoring our environment through sustainable resource use.
4. Deliver world class connectivity and communications.
5. Ensure best in class governance and regulation.

Section 25A RSES Monitoring Report

As required under Section 25A (1) of the Planning and Development Act (as amended), the Department of the Environment Climate and Communication is required to submit a report to the Regional Assembly every two years setting out progress made in supporting regional objectives of the strategy, relevant to the Department. The report below sets out the Department's response and it is framed with reference to the following points as set out in the letter dated 23 December 2021:

1. Progress in implementation of the Climate Action Plan including decarbonising our energy system, decarbonising buildings and decarbonising the transport sector.
2. Progress in accelerating transition to low carbon and circular economy and society, for more sustainable management of natural resources, and realising blue growth and bioeconomy opportunities.
3. Progress in reducing greenhouse gas emissions in accordance with agreed national sectoral plans and 2030 targets, and support for undertaking emissions monitoring at a regional and local authority level.
4. Progress in achieving good air quality for all urban and rural areas in the Region and incorporating the objectives of the EU Environmental Noise Directive.
5. The role of digitalisation in enhancing urban and rural regeneration, supporting development of a network of co-working/remote working hubs and smart cities, towns and villages in the Region, including delivery of the national broadband plan and future communications networks.
6. Please outline any progress made by agencies that operate under the aegis of your Department, in supporting the objectives of the RSES which are relevant to that agency.
7. Please provide details of any policy initiatives/developments that have been finalised or are in preparatory stages that support the objectives of the RSES.

8. Please provide a summary of the funding programmes administered by your Department (or agency under the aegis of your Department), over the last two years, which have been awarded within the Southern Region.

In addition, there are two annexes setting out the response from the Sustainable Energy Authority of Ireland (SEAI).

A response is not provided on the following two points as they fall within the remit of the Department of Housing, Local Government and Heritage:

- Progress in protecting biodiversity and natural heritage and achieving improved conservation status of protected species and habitats in the Region.
- Implementation of the Water Framework Directive in achieving and maintaining at least 'good water status' for all water bodies in the Region and for mitigation of threats to 'At Risk' waterbodies, including delivery of wastewater facilities in the Region and guidance for achieving appropriate riparian setbacks from water bodies.

Department officials can make themselves available for a discussion on any of the matters raised in this submission or any other matters within the remit of the Department of the Environment, Climate and Communications relevant to the preparation of the monitoring report. Please direct any requests for further consultation to planningadvisory@decc.gov.ie

1. Progress in implementation of the Climate Action Plan including decarbonising our energy system, decarbonising buildings and decarbonising the transport sector

1.1 Progress on implementation of the Climate Action Plan 2021

2021 has seen a step change in our approach to climate action, with the signing into law of the Climate Action and Low Carbon Development (Amendment) Act 2021, and the publication of the National Development Plan (NDP) and the Climate Action Plan 2021 (CAP 2021). These reflect the enhanced ambition set out in the Programme for Government, which includes halving Ireland's emissions by 2030 and setting us on a pathway to reach net-zero greenhouse gas emissions no later than 2050.

The significantly strengthened legally binding framework established under the Climate Act, with clear targets and commitments set in law, will help ensure that Ireland achieves its national, EU and international climate goals and obligations in the near and long-term. Achieving these goals will require changes across all sectors of our society and economy, involving collaborative effort by Government, business, communities, and individuals to implement new and ambitious policies, technological innovations, systems and infrastructures.

The new statutory framework laid out in the Climate Act ensures delivery of successive Climate Action Plans, National Long-term Climate Action Strategies, and National Adaptation Frameworks, supported by a system of carbon budgeting and sectoral targets with appropriate oversight by government, the Oireachtas and the Climate Change Advisory Council. In November 2021, the Irish Government launched the Climate Action Plan 2021 – an ambitious plan to put Ireland on a more sustainable path, cutting emissions, creating a cleaner, greener economy and society and protecting us from the devastating consequences of climate change.

The Plan provides indicative ranges of emissions reductions for each sector of the economy by 2030. It also sets out the actions needed to deliver on our climate targets. The accompanying Annex which provides detailed implementation maps for actions, including specific timelines and clear lines of responsibility for delivery, was published in December 2021.

Following the process set out in the Act, on 25 October 2021, the Climate Change Advisory Council (CCAC) submitted, and published, the first proposed carbon budget programme (three successive 5-year carbon budgets) to the Minister for the Environment, Climate and Communications.

The carbon budget programme comprises carbon budgets for the following periods: 2021-2025; 2026-2030; and 2031-2035. The average annual reduction proposed over the first five years is 4.8%; for the second period it is 8.3%; and for the final period from 2031 to 2035 is it 3.5%.

The carbon budgets are now to be finalised, approved by Government and laid before both Houses of the Oireachtas for their consideration. Should the Oireachtas approve a motion on the government's proposed carbon budgets, they will then take effect from that date.

In line with the Climate Act, once the carbon budgets and sectoral emissions ceilings are finalised, sectoral targets will be replaced with binding targets under the Climate Action Plan 2022.

1.2 Progress in implementation of the Climate Action Plan including decarbonising buildings

Emissions from the residential sector must reduce from 7 Mt CO2 eq. in 2018 to between 3.5-4.5 Mt CO2eq. in 2030. A comprehensive retrofit programme is a key measure supporting the achievement of this target alongside other initiatives such as the roll-out of district heating systems. The Programme for Government and the Climate Action Plan set ambitious targets to retrofit 500,000 homes to a Building Energy Rating of B2 (or cost optimal equivalent), and to install 400,000 heat pumps to replace existing heating systems by 2030. This represents approximately 30% of the housing stock and is among the most ambitious retrofit programmes worldwide. The review of the National Development Plan (NDP) resulted in an unprecedented financial commitment to support achievement of the Government's retrofit targets. A total of €8 billion of Exchequer funding (including €5 billion in carbon tax revenues) is being made available to support home energy upgrades to 2030. The unprecedented levels of budgetary resources now being provided for retrofit will help to stimulate the creation of high-quality jobs throughout the country and support the development of supply chains for products and services required to transform Ireland's housing stock. This will also help to support a just transition.

The new National Residential Retrofit Plan, which was published as part of CAP 2021, sets out how the Government will deliver on our retrofit targets. The Plan is designed to address barriers to retrofit across four key pillars (see Figure 1 below): driving demand and activity; financing and funding; supply chain, skills and standards; and governance. For each pillar, barriers were identified and timebound policies, measures and actions were put in place to address them.

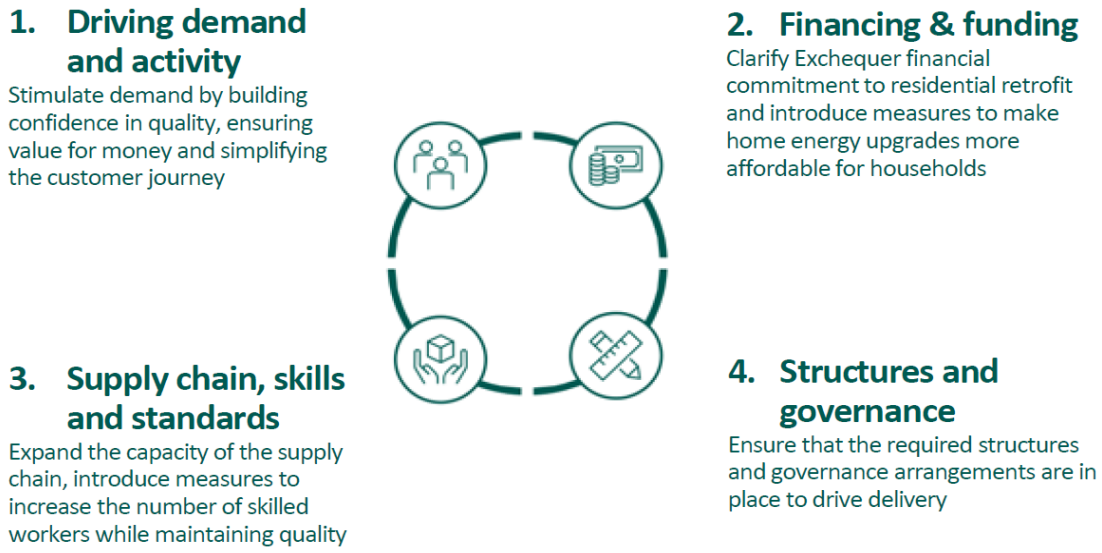

Figure 1 – National Retrofit Plan (Climate Action Plan 2021)

The 2022 allocations will be used to progress actions across the four pillars of the Plan.

The extensive COVID-19 related restrictions on construction activity for long periods in 2020 and 2021 had a significant impact on activity. Knock-on difficulties in the supply chain also had a negative impact. Despite these impacts, a total of 17,616 home retrofits were funded by Government through the Sustainable Energy Authority of Ireland (SEAI) in 2020:

- 3,210 were upgraded to a B2 standard.
- 1,977 of the upgrades were in energy poverty homes.

In 2021 there were 11,368 home retrofits and 4,089 Solar PV installations supported:

- 2,973 of these upgrades were in energy poverty homes.
- 4,606 upgrades were to B2 standard and 2,010 had heat pumps installed.

We need to greatly increase the depth and volume of retrofits as well as the number of heat pumps installed in order to deliver the required emissions reductions.

1.3 Progress in implementation of the Climate Action Plan including decarbonising our energy system - Renewable Electricity (onshore)

The development of renewable energy is central to achieving our climate ambitions and to overall energy policy in Ireland. Renewable energy reduces dependence on fossil fuels, improves security of supply, and reduces greenhouse gas emissions creating environmental benefits while delivering green jobs to the economy, thus contributing to our national competitiveness. Climate change, energy security and competitiveness are inter-related challenges that will be addressed through the transforming of Ireland's economy from one based on fossil fuel dependence to a low carbon economy based around energy efficiency, renewable energy and smart networks.

Proper planning and sustainable development on a national, regional and county and city level will be critical to achieving our renewable energy and climate goals and to providing the framework in which investment in renewable energy can take place. The Regional Spatial and Economic Strategies prepared by the Regional Assemblies play an important role in mediating between the National Planning Framework prepared by Government and the Development Plans published by our local governments.

The Department is encouraged by the level of ambition in the Southern Regional Assembly Regional Spatial and Economic Strategy (RSES), as demonstrated through the energy and climate related regional policy objectives. As a region, the Southern Regional areas are already the location of over half of Ireland's onshore wind capacity, when measured in megawatts. This decade will see more energy infrastructure in the Southern Region. The Celtic Interconnector with France, which will be vital to ensuring security of supply and in providing an export market for our renewable energy, will make landfall near Youghal in Cork. Planning is already underway for what may be a decade long effort to install offshore wind off the cost of Waterford and Wexford in the Celtic Sea. The regional planning objectives to support the new Interconnector and our plan for offshore renewable energy are welcomed.

The Southern Assembly RSES regional policy objective to support the development of a Regional Renewable Energy Strategy can ensure that we plan comprehensively for renewable energy deployment. It can also bring coherence to local authority level Development Plans across the region. The Department welcomes the regional policy objective to prepare a Regional Decarbonisation Plan, to include existing and future targets for each sector at a regional level. The Department also welcome the participation of the Southern Regional Assembly in the suite of actions set out in CAP 2021 to ensure a supportive spatial planning framework for onshore renewable electricity generation development. The Southern Assembly is due to participate in a Steering Group to oversee the implementation of this framework and deliver a Roadmap for the development of Regional Renewable Electricity Strategies.

Recent Sectoral Developments

Ireland's first Climate Action Plan (CAP 19) published in 2019 set out an ambitious target of 70% of electricity demand to be met from renewable sources by 2030 along with a suite of

measures and actions to deliver on this target. In the latest Climate Action Plan 2021, we have increased our ambition right across the electricity generation sector to now target that up to 80% of our electricity will come from renewable sources by 2030 in order to meet an emissions target for the electricity sector of between 2-4MtCO2 eq. by 2030 as compared with 10.6MtCO2 eq. in 2018. To enable this Ireland aims to have up to 8GWs of onshore wind capacity, 5GWs of offshore wind capacity and up to 2.5GW of solar capacity available for generation.

This fundamental shift will require major changes to the electricity generation mix, transmission and distribution grids alongside the significant changes that will need to be made to our national demand profiles and increased storage of electricity.

Expanding and reinforcing the grid – through the addition of lines, substations, and new technologies along with further interconnection to other grids will be required to facilitate the changes and ensure security of supply through our transition to a low carbon future. It will be essential to deliver at least 2 GW of additional gas generation capacity by 2030 to ensure security of supply, underpin our increased renewable targets, and give investment certainty.

As well as developing improved storage to balance intermittent renewable generation, renewable gas such as biomethane and green hydrogen will also be required.

Renewable Electricity Support Scheme (RESS)

The Renewable Electricity Support Scheme (RESS) is the primary support to commercial scale renewable electricity projects in Ireland. With a primary focus on cost effectiveness, the RESS delivers a broader range of policy objectives, including:

- An Enabling Framework for Community Participation through the provision of pathways and supports for communities to participate in renewable electricity projects.
- Increasing technology diversity by broadening the renewable electricity technology mix.
- Delivering on our ambitious up to 80% renewable electricity policy by 2030.
- Increasing energy security, energy sustainability and ensuring the cost effectiveness of energy policy.

The first RESS auction successfully concluded in September 2020 with 68 projects, 40 of which are in the Southern region, still progressing through delivery milestones to energisation by the end of 2023 at the latest. The second RESS auction qualification process completed in January 2022 with the results of the successful bidders expected to be announced in June.

Please see table below for RESS 1 projects for the Southern Region:

Area	Total Projects*	Solar Projects	Wind Projects	Amount in MW
Carlow	1	0	1	0.50
Clare	2	0	2	23
Cork	16	14	2	91.69
Kerry	1	1	0	4
Kilkenny	3	3	0	11.99
Limerick	0	0	0	0
Tipperary	3	2	1	89.33
Waterford	4	3	1	53.35
Wexford	10	10	0	153.92

*All information is correct to date; however, some projects may not progress to energisation.

It is expected that a strong future pipeline of onshore wind and solar projects from the Southern region will be required to participate in the future programme of RESS auctions over the coming years in order for Ireland to deliver on up to 80% renewable electricity target sets out in the CAP 2021.

In this regard, the Department published a schedule of auctions through to 2025 in December 2021 so that generators can develop their projects with confidence to line up with these regular auctions ensuring a steady supply of projects to meet regional and national targets.[1]

One of the key elements of RESS is the provision of pathways for communities to participate in renewable electricity generation. The Sustainable Energy Authority of Ireland (SEAI) has developed a number of toolkits and a trusted intermediary service to begin to assist communities in the development of their own projects. They will be further supported by the introduction of enabling grants and trusted advisory services for complex issues like legal, planning and grid connection. These supports are key to ensuring that communities can overcome the challenging hurdles of developing electricity generation projects and become an integral part of the energy transition.

Microgeneration Support Scheme – MSS

Micro-generation is the general term used to refer to the generation of electricity from renewable technologies including solar photovoltaic (PV), micro-wind, micro-hydro and micro-renewable combined heat and power (CHP). Micro-generation has an important role to play in empowering and driving engagement and participation. It creates opportunities for domestic, community, farming and small commercial customers to take the first steps towards investment in renewable technologies, which can play a role in shaping electricity demand and decarbonising homes and businesses.

The CAP 2021 includes a commitment to introduce a Microgeneration Support Scheme (MSS) which supports deployment of an expected 260 MW of new micro-generation by 2030, including an export payment for all micro- and small-scale generators that reflects the market value of their electricity to the grid, society and the environment. This reaffirms and builds on the commitment in CAP 2019 to develop an enabling framework for micro-generation which tackles existing barriers and establishes suitable supports within relevant market segments.

The Clean Export Guarantee (CEG) tariff represents the first phase of a comprehensive enabling framework for micro-and small-scale generators in Ireland. It will allow them to receive remuneration from their electricity supplier for all excess renewable electricity exported to the grid. The price paid (per kWh) will be a competitive market rate from their electricity supplier. The CEG will become available upon the transposition of Article 21 of the recast Renewable Energy Directive into Irish law and will be available to both new and existing micro- and small-scale generators who fulfil the eligibility criteria, as determined by the Commission for Regulation of Utilities (CRU).

The second phase of the enabling framework will see supports for new installations in the form of a capital grant for domestic and small non-domestic applicants, or a premium export tariff for larger non-domestic applicants, under the Micro-generation Support Scheme (MSS). The MSS was approved by Government in December 2021 and is targeting support for 380MW of

[1] https://www.gov.ie/en/publication/8b63a-renewable-electricity-support-scheme-schedule-of-future-auctions/

installed micro-generation capacity, to contribute to the target of up to 2.5GW of solar renewables under the CAP 2021. The scheme will open on a phased basis in 2022.

This enabling framework for micro-generators will support homes and businesses to participate as active energy citizens, reduce their energy costs and contribute to carbon reduction targets. The Southern region with its lower latitudes and increased solar irradiance can play an important role and derive increased benefits from solar micro-generation.

Small scale solar generation

The CAP 2021 also commits to the development of a support scheme for small-scale non-domestic renewable electricity generators (above 50kW, but smaller than those supported under the RESS). This will be progressed in 2022 and is expected to become available in 2023. This scheme will enable larger businesses, farms and community projects to maximise their participation in the energy transition. Like the microgeneration scheme, the Southern region is uniquely placed to benefit from such a scheme.

1.4 Progress in implementation of the Climate Action Plan including decarbonising our energy system - Renewable Electricity (offshore)

Offshore RESS

The development of significant Offshore Renewable Energy (ORE) is required over the coming decade to meet the ambitious goal of 80% renewable electricity by 2030 contained in the CAP 21. Owing to the specific large scale and nature of typical offshore wind farms, dedicated auctions are initially required to support the longer-term potential of this technology in Ireland. Three offshore auctions are planned to the end of the decade, and it is expected that the Southern Region will see successful projects in theses auctions. As of January 2022, the first auction for offshore wind generation projects, to take place within the RESS remains on schedule to commence before the end of the year, as per CAP 2021 Action 122. Likewise, following a public consultation in Q4 2021, terms and conditions for this first offshore auction are scheduled for publication in Q2 2022.

Maritime Area Planning Act

Ireland's ambitions for the ORE sector are contingent on delivering a licensing and regulatory regime for ORE. This will provide certainty to project promoters and provide a pathway to realising the necessary investment in ORE.

As per CAP 2021 Action 120, the Maritime Area Planning (MAP) Act, enacted in December 2021, provides a modern, up-to-date regulatory framework that will enable ORE developments beyond the limits of the current foreshore regime and paves the way for Ireland to meet its targets of 5 Gigawatts (GW) of offshore wind by 2030 and beyond. The Department has progressed significant work on the design of a new ORE consenting regime under the MAP Act which will be operated in 2022 by the Department in advance of the establishment of a new Maritime agency, the Maritime Area Regulatory Authority. Engagement is ongoing with Department of Housing, Local Government and Heritage on the ORE specific secondary legislation and regulations arising from the MAP Act.

ORE consenting regime

As per CAP 2021 Action 121, the Department of Housing, Local Government and Heritage is leading, with input from DECC, on the establishment of the Maritime Area Regulatory Authority (MARA) by Q1 2023, as provided for under the MAP Act. In Q1 2022, DECC opened a

consultation on the proposed assessment criteria for the first batch of Maritime Area Consent (MAC) applications from a set of seven qualified ORE projects. The window for the Minister for the Environment, Climate and Communications to receive MAC applications for the first batch of ORE projects is expected to open in Q2 2022. MARA will be responsible for subsequent ORE consenting, among other functions.

ORE Grid

As required by CAP 2021 Action 117, EirGrid continues to provide DECC with regular updates regarding measures being taken to ensure that the onshore electricity transmission system can integrate 5 GW of offshore renewable energy by 2030. This follows Government approval of a new offshore electricity transmission policy in April 2021.

ORE Phase One Grid Connection Policy

As per CAP 2021 Action 118, the CRU is on course to develop and publish a grid connection policy for participants in the First Offshore Renewable Energy Auction by Q2 2022.

Offshore Renewable Energy Development Plan (OREDP)

Action 116 of the CAP 2021 committed to the development of a new Offshore Renewable Energy Development Plan (OREDP II). Work has commenced within the Department on the OREDP II which will quantify the offshore renewable energy potential in Ireland's maritime area. The OREDP II will also provide an evidence base for the identification of areas most suitable for the sustainable development of offshore renewable energy and will include an assessment of other maritime activities and marine biodiversity. DECC is leading a comprehensive review of data on Ireland's maritime area to provide an evidence base for the assessment of areas suitable for ORE post-2030. A governing architecture has been established to engage key stakeholders and expertise. The first meeting of the OREDP II Steering Group was held on 23 September 2021 and the OREPD II Data and Scientific Group has been meeting regularly since 17 September 2021. The first meeting of the OREDP II Advisory Group, which includes stakeholders from the economic, environmental, and social pillars, was held on 27 January 2022. Work will commence on the Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) for OREDP II Q1 2022.

Electricity Grid Transformation

The CAP 2021 recognises the need for a range of supporting measure to enable the transformation of the electricity generation sector, including grid investment and storage facilities.

In 2020, the Commission for Regulation of Utilities (CRU), the energy regulator responsible for oversight of national electricity grid costs, sanctioned a €4 billion capital investment spend on the grid over the 2021-25 five-year period, reflecting Government's ambition to facilitate a low carbon future. The electricity system operators, EirGrid and ESB Networks, must use the funds to ensure the electricity grid is fit for purpose to underpin economic development and achieve energy and climate policy objectives including decarbonisation. Of particular importance is the need to accommodate the high level of renewables being added to the system to meet the Government's up to 80% target as well as the increased demands from the electrification of our heat and transport sectors.

The CAP 2021 underlines the need for further grid transformation as it requires the system operators to carry out power system modelling required to meet renewable energy and electricity emissions targets and analysis to underpin a Net Zero Roadmap. This modelling and

analysis must be completed by 2023 with DECC tasked with the delivery of a Net Zero Roadmap for the electricity sector by end 2024.

The CAP 2021 also recognises the important role of energy storage in facilitating the transition to higher levels of renewables on the system. Under CAP 2021, DECC has committed to developing a storage policy that supports the 2030 targets and aligns with our renewable gas ambition, security of supply, and flexibility policy drivers by early 2023. In combination, the CRU will be reviewing the regulatory treatment of storage, including licensing, charging and market incentives which is to be completed by end 2023.

In addition, regionally balanced development will need to be a guiding principle for the achievement of the step-up in ambition, locating renewable technologies and large demand users such as data centres as close as possible to large demand connections. This aligns with Project Ireland's 2040 objective of increasing economic development outside Dublin by ensuring that strategic locational planning is built into Ireland's electricity network development and connection processes.

Interconnection

In July 2018, the Department published a policy statement on electricity interconnection. In addition to articulating the Irish policy position, this statement has provided clarity to potential interconnector investors, and has assisted the CRU in determining an appropriate regulatory approach to electricity interconnection consistent with Government policy.

Government support for enhanced interconnection as a means of driving the transition of a low carbon energy future is more recently reflected in the 2019 and 2021 CAPs and 2020 Programme for Government. The CAP 2021 includes a commitment to update the 2018 National Policy on Interconnection during 2022 to facilitate further interconnection between Ireland and the EU and the UK.

Celtic Interconnector

The Celtic Interconnector is a €1 billion electricity interconnector jointly proposed by EirGrid and their French counterparts, the French transmission system operator, RTÉ (Reseau de Transporte d'Électricite). It is a 575km long (500km subsea), 700MW cable from the north-west coast of France to the south coast of Ireland. At this scale it would be able to provide electricity for some 450,000 homes.

The Celtic Interconnector will provide a reliable high-capacity electricity link between Ireland and France that will have significant benefits for the people of Ireland. The project will provide access to the European internal energy market, leading to expected increased competition and lower prices in Ireland. It will also enhance security of electricity supply and facilitate increased capacity for renewable energy here via export access to the mainland European markets.

In late 2019, the European Commission announced a grant of €530m towards the construction of the interconnector under the Connecting Europe Facility fund. This grant was made possible by significant support for the project from the Irish Government that resulted in its designation as an EU Project of Common Interest.

Extensive planning by EirGrid and public consultations have been held throughout the last 2 years with the planning application currently being reviewed by An Bord Pleanála.

Greenlink Interconnector

Greenlink is a 500 MW, 190 km HVDC subsea and underground electricity interconnector, with associated DC-AC convertor stations, linking the electricity grids of Ireland and Great Britain, and running from Pembroke, Wales to Great Island, Wexford. The proposed completion date for this project is 2024. Greenlink is a privately financed merchant project, promoted by Partners Group.

2. Progress in accelerating transition to low carbon and circular economy and society, for more sustainable management of natural resources, and realising blue growth and bioeconomy opportunities

2.1 Transition to circular economy and society

The Circular Economy is an alternative to the predominant 'take-make-waste' linear economic model. Meeting Ireland's climate action targets will require a transition to a circular economy which protects and restores our environment through sustainable resource use, as fully 45% of global emissions come from current systems of production and resource consumption.

Ireland's waste performance had improved significantly in recent decades. We are achieving or are on course to achieve all EU targets. However, in some areas, such as recycling, we appear to have hit a plateau at around 40%. The challenge we now faced was around creating a policy or framework that would radically shift focus back to the start of the product life cycle, to focus on prevention and designing out waste, and to effect behavioural change at an individual, household and business level.

This policy is set out in the government's Waste Action Plan for a Circular Economy, and the Whole-of-Government Circular Economy Strategy. Ireland's first Whole of Government Circular Economy Strategy was approved by Government and launched on 16 December 2021. This first iteration of the Circular Economy Strategy marks a significant milestone in Ireland's transition towards greater circularity. In tandem with the Strategy, the EPA developed a new Circular Economy Programme which was also launched in December 2021. This new programme which will be a driving force in Ireland's move to a circular economy by businesses, householders, and the public sector.

In 2021, the transposition of the Single Use Plastics Directive to tackle the use of single-use plastics was completed. These measures ban the use of certain types of single-use plastic items such as cutlery, plates, straws and expanded polystyrene (EPS) food containers. The legislative regulations for a Deposit Return Scheme (DRS) in Ireland for plastic bottles and aluminium cans were signed in 2021. The scheme is expected to become operational across the country in Quarter 3 of 2022.

Circular Economy Bill

The Circular Economy Bill (due to be enacted in 2022) will place the Whole-of-Government Circular Economy Strategy on a statutory basis. The Bill will also ensure all households have access to and use segregated waste services and incentivise the commercial sector to increase waste separation, as well as providing waste authorities with new tools to tackle illegal dumping. Government support will be provided to help communities make the transition to a circular economy. The Circular Economy Innovation Grant Scheme (CEIGS) provides grants of up to €50k for circular economy projects by social enterprises, voluntary and community organisations and businesses with less than 50 employees.

National Waste Prevention Programme

The National Waste Prevention Programme (NWPP) is a Government of Ireland initiative, led by the Environmental Protection Agency (EPA), which supports national-level programmes to prevent waste and drive the circular economy in Ireland. The NWPP is currently being re-configured to become Ireland's National Circular Economy Programme (NCEP). The NCEP will provide funding programmes to support the development of novel solutions for the circular economy and will be placed on a statutory basis by the passage of the Circular Economy Bill.

Waste Action Plan for a Circular Economy

The Department continued to deliver on the Waste Action Plan for a Circular Economy in 2021. Highlights in 2021 include:

- The inclusion of soft plastics in the national standardised list of items acceptable in the mixed dry recycling bin.
- The establishment of a Working Group to develop National End- of -Waste applications for identified priority waste streams.
- Publication by the EPA of updated Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction & Demolition Projects.
- The inclusion of a number of provisions in the Circular Economy Bill which will allow for the streamlining of By-Product notifications and End- of- Waste applications.

2.2 Sustainable Management of Natural Resources

Inland Fisheries

DECC and its state Agency, Inland Fisheries Ireland (IFI), have a long track record of managing the inland fisheries resource with a focus on the conservation imperative. The management of stocks such as wild Atlantic salmon and seatrout has been concentrated on adhering strictly to annual independent scientific advice and assessment of the genetically unique stack in each of Ireland's more than 140 Salmon rivers to underpin sustainable exploitation if the state of individual stocks permits.

This management and the management of coarse fish and sea angling species is carried out on a Nationwide basis and is underpinned by an array of legislation which seeks to facilitate rational and sustainable exploitation of the entire resource in line with conservation imperatives. The valuable amenity asset of fisheries and rivers/lakes in the Southern Region is well recognised and is managed on a regional basis by the Southern River Basin Region's local managers within IFI. This helps to bring an element of local knowledge and commitment to operational and management responsibilities.

While inland fisheries management in Ireland is well developed, DECC is mindful of emerging situations, threats and challenges. Therefore, the Inland Fisheries Division of the Department is currently reviewing existing policy and developing a new comprehensive policy platform for the Inland Fisheries Sector with a focus on conservation, protection, development and promotion of the resource and critically on the impacts of climate change, water quality, poor aquaculture practices, biodiversity loss, ecological and other factors.

Geological Survey Ireland (GSI)

The Tellus airborne geophysical mapping survey carried out survey flights over Wexford, Wicklow and Carlow in summer of 2019 collecting 35,657kms of data, further surveys were conducted over Kilkenny, Tipperary, Limerick and Cork between 2020 and 2021 with an

additional 38,410 km of flying. An earlier survey of co Waterford was flown in 2016. Much of this data has been released along with geophysical maps of the region on the GSI website.

Geochemical soil sampling has also been completed in the southeast region over counties Wicklow, Wexford Carlow and Kilkenny. With plans in 2022 to undertake soil sampling survey work in Counties Clare, Limerick and Kerry. This information is crucial in understanding the chemistry of the soil and is useful in a number of projects supporting the agricultural, environmental, mineral and geological sectors.

GSI continues to support the UNESCO Copper Coast Geopark in Waterford through cofounding of a geologist position, Geoheritage grants and technical support through participation in Project Management Board.

GSI provides maps, data and technical input into the Water Policy Advisory Committee, National Implementation Group and Regional Operational Committees.

GSI delivered on three actions in the Climate Action Plan:

- Action 26 – Complete offshore mapping through INFOMAR, which supports offshore planning and development including Offshore Renewable Energy Development by 2026. This programme is on-going and on target. INFOMAR has completed extensive offshore mapping in recent years off Cork, Kerry, Waterford and Wexford to support all offshore initiatives.
- GSI are also project partners in the CHERISH EU INTERREG Project developing best practice for mapping and cataloguing coastal heritage at risk from Climate change. This has included extensive fieldwork in selected sites in Wexford, Waterford and Kerry.
- Action 70 – Examine the potential of geothermal energy to contribute to district heating and develop a roadmap. This has been completed and GSI are now in discussions with DECC in relation to progressing policy and, separately, are investigating the possibility of installing geothermal demonstration boreholes and compiling a database to help de-risk geothermal exploration. The Roadmap documents, consisting of both a Technical Assessment and Policy Roadmap were published online in late 2020.
- Action 133 – Evaluate natural resources concealed by peat cover in the midlands and how geoscience might contribute to supporting the Just Transition. An initial GSI report was submitted to the Just Transition Commissioner in late 2020 and work is on-going.

Geosciences Policy

Petroleum legislation updated

The Programme for Government commitment to end the issuing of new licences for the exploration for oil and gas in the Irish offshore was given a statutory basis by amending the Petroleum and Other Minerals Development Act 1960 through the Climate Action and Low Carbon Development (Amendment) Act 2021. Existing authorisations will not be affected by these changes and will be able to continue to apply to progress through the licensing stages towards production. Any applications for follow-on authorisations or applications to conduct activity in the Irish offshore under existing authorisations, will remain subject to Ministerial consent, and will continue to be required to meet environmental, technical and financial standards as appropriate.

ObSERVE II

The Aerial Project of the ObSERVE Phase 2 project began in June 2021, with a survey of marine mammals and birds in the Irish maritime area. The working group, comprising officials from a

number of government departments and agencies, which drives the delivery of project is chaired by the DECC.

Draft Policy Statement on Geothermal Energy

The Department published a Draft Policy Statement on Geothermal Energy for public consultation on 28 December, 2021. The development of a Draft Policy Statement was highlighted as an action in the Roadmap for Geothermal Energy published in November 2020. Advances in technology, proven over the past decade, mean that geothermal energy can now play a significant role in our transition to a carbon neutral and circular economy. The publication of the Draft Policy Statement will raise awareness of the exciting potential of this renewable energy and will be an important step in addressing the barriers to the development of geothermal energy in Ireland.

Observations on the Draft Policy Statement can be submitted by email to: GSPD@decc.gov.ie until 1 March 2022. All submissions will be considered in finalising the Policy Statement.

Draft Policy Statement on Mineral Exploration and Mining

In July 2021, a Draft Policy Statement on Mineral Exploration and Mining was published. During the course of the public consultation which closed on 15 October 2021, the acceptance of communities of mining operations and the provision of information that is easily understood, emerged as key considerations. These issues will be taken forward by the Department with the help of an Advisory Group on Mineral Exploration and Mining, which will be established shortly and will draw on as broad a range of views as possible.

The draft policy statement will be considered by Government in the coming months and aims to establish a clear and sustainable policy framework that supports our communities, our environment, our climate and our mineral exploration and mining sector. Maintaining and improving the robust regulatory framework that applies to prospecting and mining activities in Ireland is a core element of the draft policy statement. The document also highlights the role of minerals in our everyday lives and the critical role that they will play in our transition to net zero emissions by 2050. The draft policy recognises that we need to repair, reuse and recycle more minerals and metals, but that this alone will not supply the types and quantities of minerals required to decarbonise our energy through solar power, renewable wind energy and batteries. Relying solely on minerals sourced outside Ireland and the EU risks supporting their development in parts of the world where less stringent environmental and human rights standards apply, as well as risking our ability to secure the minerals required to make the green and digital transitions a reality.

3. Progress in reducing greenhouse gas emissions in accordance with agreed national sectoral plans and 2030 targets, and support for undertaking emissions monitoring at a regional and local authority level

EU Emissions Trading System (ETS)

All EU member states implement carbon pricing through the EU Emissions Trading System (ETS) and Ireland is also one of eleven member states to have economy-wide pricing through the ETS and a separate domestic carbon tax applied to sectors not included in the ETS. In its approach to decarbonising, the EU has split GHG emissions into two categories, namely the Emissions Trading System (ETS) and the non-ETS. Emissions from electricity generation and

large industry in the ETS are subject to EU-wide targets which require that emissions from these sectors must be reduced by 43% by 2030, relative to 2005 levels.

Within the ETS, participants are required to purchase allowances for every tonne of emissions, with the amount of these allowances declining over time to ensure the required reduction of 43% in GHG emissions is achieved at EU-level. Emissions from all other sectors, including agriculture, transport, buildings, and light industry are covered by the EU Effort Sharing Regulation. This established binding annual GHG emission targets for member states for the period 2021–2030.

Under the EU Green Deal, the targets for the ETS and non-ETS sectors will be revised upwards in order to achieve the commitment, at EU level, to reach an economy-wide 2030 reduction in emissions of at least 55%, compared to 1990 levels. Legislative proposals to implement these targets were published in July 2021 and these are currently being negotiated at EU level.

As part of the EU's 'Fit for 55' legislative package, the European Commission has proposed further revisions to the EU ETS; changes to the Energy Taxation Directive to align the taxation of energy products with EU energy and climate policies and to promote clean technologies; and a new carbon border adjustment mechanism that would place a carbon price on imports of certain goods from outside the EU, in order to encourage EU partners to raise their climate ambition and reduce the risk of carbon leakage.

The latest emissions data for Ireland can be found on the EPA website here. The attached Excel document (Annex 2) from SEAI includes worksheets that detail overall energy-related CO2 emissions, split by sector.

4. Progress in achieving good air quality for all urban and rural areas in the Region and incorporating the objectives of the EU Environmental Noise Directive

Ambient Air Quality Monitoring Programme (AAMP)

Monitoring of ambient air quality in Ireland is carried out by the EPA. The AAMP has undergone a significant upgrade in recent years and has expanded the network of stations nationwide from 29 to 97; 31 stations being installed in the Southern Region.

The monitoring stations collect air quality data for a range of pollutants in order to provide information to the public and to ensure air quality is within the EU limit values. All stations and data are available at https://airquality.ie/

Life Emerald Project

While Ireland has traditionally focused on measurements from monitoring stations to assess air quality, there is a need to provide more local air quality information throughout the country. The intention is that the information generated through monitoring, will be augmented by a newly developed modelling and forecasting capability, which will provide an ongoing air quality forecast service to the public.

This work is being developed as part of a new EU LIFE funded project called LIFE EMERALD, which commenced in January 2021. By 2024, this modelling project will deliver a national air quality forecast, a near real-time nowcast, historical modelled maps along with multiple awareness raising and citizen engagement elements.

Ecosystems Monitoring System

The monitoring of negative impacts of air pollution upon ecosystems based on a network of sites that is representative of their freshwater, natural and semi-natural habitats and forest ecosystem types, taking a cost-effective and risk-based approach. The initial stage of development of the network has been completed and working with key stakeholder's, additional work will be undertaken to identify the most appropriate monitoring site across the country.

Noise Action Plans

Local Authorities (LAs) are required under SI No 549 of 2018, which implements the Environmental Noise Directive (END), to report progress each year on the implementation of their Noise Action Plans (NAPs). Compliance among LAs across the Southern Regional Assembly with this requirement varied in year 2 of Round 3. The EPA reviewed the NAPs and supplied feedback to the LAs including on areas where improvements were considered warranted. Measures implemented include the introduction of sustainable transport measures principally pedestrianisation and various initiatives to encourage walking and cycling, speed limit reductions and pavement rehabilitation.

5. The role of digitalisation in enhancing urban and rural regeneration, supporting development of a network of co-working/remote working hubs and smart cities, towns and villages in the Region, including delivery of the national broadband plan and future communications networks

Status of National Broadband Plan rollout – January 2022

The National Broadband Plan (NBP) aims to ensure that every home, school and business in Ireland - regardless of how remote or rural - has access to high-speed broadband. This is being achieved through a combination of:

- commercial investment across Ireland; and
- a State intervention in those areas where commercial operators acting alone are unlikely to invest. These are primarily rural areas.

The NBP State-led Intervention is being delivered by National Broadband Ireland (NBI) under a contract to roll out a high-speed and future-proofed broadband network within the Intervention Area, which covers 1.1 million people living and working in the over 554,000 premises, including almost 100,000 businesses and farms, along with 679 schools.

Design work is complete or ongoing in target townlands in every county in Ireland, with almost 294,000 premises surveyed or where a survey is underway as of 21 January 2022. This survey work is feeding into detailed designs for each deployment area.

Since the NBI connected the first premises in January 2021, the project has continued to extend across the country. NBI confirmed that as of 21 January 2022 over 54,000 premises are available for order and pre-order across 21 counties including the Southern region - Clare, Cork, Kerry, Kildare, Limerick, Waterford, Wexford in addition to Cavan, Galway, Carlow, Kilkenny, Laois, Leitrim, Louth, Mayo, Monaghan, Roscommon, Sligo, Tipperary, Westmeath, and Wicklow.

Bringing connectivity to remote rural locations is central to promoting regional development and Broadband Connection Points (BCPs) represent an important delivery in the early stages of the NBP by providing high speed broadband in every county in advance of the roll out of the fibre to the home network.

454 BCPs have been deployed, with the objective of providing a community-based high speed broadband service prior to the deployment of the main NBP fibre deployment. This figure includes 268 publicly accessible sites of which 255 are connected with high-speed broadband service through a service provider contract with Vodafone which is managed by the Department of Rural and Community Development for publicly available sites. These BCPs are locations of community importance such as community centres, parish halls and schools. They have been specifically selected by the local authorities so that they can provide public Wi-Fi and other facilities to support mini digital/enterprise hubs to the local community in advance of the main NBP deployment.

This figure also includes 186 primary school BCPs, of which 99 are connected, that are being provided with high-speed broadband for educational use through service provider contracts managed by the Department of Education and Skills.

As of 25 January 2022, there were 453 BCPs installed (185 schools and 268 public). The breakdown by county for the BCPs installed in the Southern region is as follows:

County	**School BCPs**	**Public BCPs**	**Total**
Carlow	3	7	10
Clare	10	7	17
Cork	15	21	36
Kerry	9	10	19
Kilkenny	5	7	12
Limerick	11	13	24
Tipperary	10	19	29
Waterford	5	4	9
Wexford	1	9	10
Totals	69	97	166

Clare, Kerry, Kilkenny, Waterford and Wexford have all their planned public BCPs installed. Further information on the BCP rollout can be found here.

Government and NBI have recently agreed to accelerate the rollout of high-speed broadband to some 679 primary schools across the State, ensuring that all schools across the State will have the necessary infrastructure to carry out their critical day to day educational activities unimpeded by poor broadband.

Since NBI commenced work in 2020:

- 6,000,000+ metres of cable have been installed.
- 25,000+ Poles have been remediated or newly installed in the field.
- 152,000+ Premises submitted to Openeir for Make Ready work to be completed.
- 250 Section 254 applications have been submitted across all 31 Local Authorities with 154 approved so far.
- 38 Deployment Area (DA) designs have been approved by the Department.
- Over 154,000 Premises (45 DAs) are under build or build completed across 26 counties.
- 6 DAs where build is fully completed with 4 more DA's nearing completion.

- 3 Island DAs with build underway.
- 26 Local Exchange sites with Nokia Equipment installed and ready for network connectivity.
- Almost 54,500 Premises are available to Order or Pre-order across 21 counties, including 3 Islands off the coast of Donegal.
- Over 34,000 premises have been passed.
- Almost 6,000 connections have been completed across 11 counties.
- 454 BCPs have been installed in community buildings and schools.
- 50 Retail Service Providers are contracted with 34 onboarded.

The Programme for Government has committed to seek to accelerate the roll out of the National Broadband Plan. The Department is working with NBI to agree a Remedial Plan which will recalibrate the targets for 2022 and beyond to take account of the knock-on effects of the Covid-19 pandemic and other delays to the Programme. The focus is to continue to build momentum, catch up on the delays experienced and plan for acceleration.

6.Please outline any progress made by agencies that operate under the aegis of your department, in supporting the objectives of the RSES which are relevant to that agency

6.1 Bord na Mona

Progress in implementation of the Climate Action Plan including decarbonising our energy system, decarbonising buildings and decarbonising the transport sector.
Bord na Móna has developed and currently operates the 42MW windfarm at Bruckana (Tipperary/Kilkenny border). Bord na Móna continue to examine potential sites for renewable energy projects across the country and within the Southern Region.

Progress in reducing greenhouse gas emissions in accordance with agreed national sectoral plans and 2030 targets, and support for undertaking emissions monitoring at a regional and local authority level.
Bord na Móna through AES, now trading as Bord na Móna Recycling, were the first waste collection company outside the major urban areas to develop segregated collections for household and commercial waste. Bord na Móna continues to provide segregated collections (for onward recycling/recovery) of organic, dry recyclables, glass, construction & demolition waste, and residuals in specific areas within the Region. Bord na Móna, in conjunction with Sabrina Integrated Services (SIS) redeveloped the former Littleton briquette factory into Ireland's first plastic film recycling facility.

Progress in reducing greenhouse gas emissions in accordance with agreed national sectoral plans and 2030 targets, and support for undertaking emissions monitoring at a regional and local authority level.
Although not technically within Bord na Móna's statutory remit, Bord na Móna is actively developing renewable energy projects, has exited peat harvesting and is working at locking up & sequestering carbon on its peatlands by the managed rewetting of cutaway bogs (including the monitoring of GHG).

Progress in protecting biodiversity and natural heritage and achieving improved conservation status of protected species and habitats in the Region.
Bord na Móna has recently announced the cessation of peat production on all of their bogs. Peat had been extracted from these Bord na Móna bogs under Integrated Pollution Control (IPC) licences issued and administered by the Environmental Protection Agency. As part of Condition-10 of this licence, decommissioning and rehabilitation must be carried out when industrial peat production ceases. In line with Bord na Móna's accelerated decarbonisation strategy, and the availability of government funding, the company has also committed to ambitious enhanced peatland decommissioning, rehabilitation and restoration measures, targeting up to 33,000 hectares in over 80 Bord na Móna bogs, including a limited number of bogs in the Southern Region. This work is supported by government via the Enhanced Decommission, Restoration and Rehabilitation Scheme (EDRRS) for former industrial peatlands. EDRSS has been designed and implemented to optimise ecosystem service benefits of peatland rehabilitation and restoration, particularly carbon storage and reducing carbon emissions. In addition, EDRRS will also benefit biodiversity and water (water quality and catchment management), as well as providing space for local communities and people to enjoy the outdoors.

6.2 ComReg

Progress in implementation of the Climate Action Plan including decarbonising our energy system, decarbonising buildings and decarbonising the transport sector.
Smart Grids are efficient utility network systems that typically use digital automation technology for monitoring, control, and analysis within the supply chain. In 2019 ComReg assigned radio spectrum rights of use specifically for the provision of Smart Grid during the 400 MHz Award process[2], acknowledging their key role as an enabler in the reduction of GHG emissions. Several studies have estimated the carbon reductions from using Smart Grids - e.g., the Electrical Power Research Institute ('EPRI') has estimated that Smart Grid-enabled electrical distribution could reduce electrical energy consumption by 5-10% and carbon dioxide emissions by 13-25%.[3] The Sustainable Energy Authority of Ireland ('SEAI') estimated that by 2050, Smart Grids will see an accumulated reduction in energy related CO2 emissions of 250 million.[4]

Progress in reducing greenhouse gas emissions in accordance with agreed national sectoral plans and 2030 targets, and support for undertaking emissions monitoring at a regional and local authority level.
In December 2019, ComReg launched a Call for Inputs (CFI) 'Connectivity and Decarbonisation'[5] to better understand the electronic communications sector's relationship with climate change, including how the sector can assist in facilitating decarbonisation across the economy, how the sector can reduce its own carbon footprint and how it can adapt to a changing environment. The four use cases identified in the CFI were: transport (e.g., traffic optimisation), agriculture (e.g., precision farming), electricity (e.g., Smart Grids) and industry (e.g., Machine to machine – M2M, and IoT). The responses underlined efficiency benefits made possible by Very High-Capacity Networks (VHCN) roll out, e.g., fibre to the home networks.

ComReg has carefully considered the responses received in order to inform its own strategy, to shape a number of key projects and commitments, and to facilitate discussions with a range of stakeholders, including operators and other Irish agencies. The insights from the CFI have also informed ComReg's contribution to national strategy and debate surrounding electronic communications. ComReg presented the findings of this CFI at the virtual 'Regulatory

[2]ComReg Document 19/99
[3] Smart Grid Utility Management Systems, Report ITU-R SM 2351-2
[4] SEAI Smart Grids Roadmap https://www.seai.ie/publications/Smartgrid-Roadmap.pdf
[5] ComReg Document 19/126

Approaches and Tools to meet the Decarbonization Challenge' conference organized by the Dauphine Club of Regulators and the OECD Network of Economic Regulators (NER) in April 2020. The electronic communications sector needs to consider its own impact on the environment. While other Irish agencies have a direct remit in this area, ComReg is interested in understanding if more can be done to minimise the carbon footprint of the electronic communications sector.

For the Q4 2021 'Confidence and Awareness' consumer survey, for the first time ComReg included questions relating to sustainability, aimed at capturing attitudes towards mobile service providers' environmental impact (e.g., carbon footprint) and sustainability concerns for mobile handsets.

In addition, ComReg is actively contributing to the work of the Sustainability Working Group at BEREC (Body of European Regulators for Electronic Communications), composed of experts from Electronic Communications National Regulatory Authorities (NRAs) across Europe. ComReg has been at the forefront of the work of the group up to this point, participating in workshops and sharing our experiences with our colleagues from across Member States. The group is currently finalizing a report on the impact of the digital sector on the environment, due for public consultation in Q1 2022.

*The role of digitalisation in enhancing urban and rural regeneration, supporting development of a network of co-working/remote working hubs and smart cities, towns and villages in the Region, including delivery of the national broadband plan and future communications networks***.**
The National Broadband Plan (NBP) is the government's initiative to deliver high speed broadband services to all premises in Ireland. This will be delivered through investment by commercial enterprises coupled with intervention by the State in those parts of the country where private companies have no plans to invest. While ComReg is not responsible for the NBP, as the sector specific NRA, ComReg makes itself available to assist policymakers to design state interventions that complement the market and regulation. Over the coming period, ComReg will monitor access by National Broadband Ireland (NBI) to Eir's physical infrastructure assets to help contribute to the successful and timely rollout of the NBP. ComReg will also consider NBI's impact when carrying out its market analyses. In addition, ComReg also continues to provide technical advice to DECC in matters relating to NBI's role and State Aid generally where ComReg has relevant expertise.

The National Adaptation Framework (NAF) falls under the government's Climate Action policies, with regards to communication networks being considered as critical infrastructure. With regards to Climate Change Adaption, in 2021 ComReg launched a project in the Network Operations Unit (NOU). The proposed study will assess vulnerabilities in the communications sector regarding climate change and identify adaptation actions for climate resilience.

6.3 EirGrid

Progress in implementation of the Climate Action Plan including decarbonising our energy system, decarbonising buildings and decarbonising the transport sector.
Renewable generation accounted for 43% of all electricity consumed in Ireland during 2020, as EirGrid works to facilitate increased amounts of renewable energy on the grid at any one time. Statistics compiled by EirGrid, operator of the national electricity grid, show that the use of renewable electricity jumped from 36% in 2019 to 43% last year. Wind generation accounted for most of the renewables, along with small amounts of hydro, bio energy, ocean energy and "renewable combined heat and power".

Progress in accelerating transition to low carbon and circular economy and society, for more sustainable management of natural resources, and realising blue growth and bioeconomy opportunities.
Renewable generation accounted for 43% of all electricity consumed in Ireland during 2020, as EirGrid works to facilitate increased amounts of renewable energy on the grid at any one time. Statistics compiled by EirGrid, operator of the national electricity grid, show that the use of renewable electricity jumped from 36% in 2019 to 43% last year. Wind generation accounted for most of the renewables, along with small amounts of hydro, bio energy, ocean energy and "renewable combined heat and power".

Please outline any progress made by agencies that operate under the aegis of your Department, in supporting the objectives of the RSES which are relevant to that agency.

- RPO 219 - Renewable generation accounted for 43% of all electricity consumed in Ireland during 2020, as EirGrid works to facilitate increased amounts of renewable energy on the grid at any one time. Statistics compiled by EirGrid, operator of the national electricity grid, show that the use of renewable electricity jumped from 36% in 2019 to 43% last year. Wind generation accounted for most of the renewables, along with small amounts of hydro, bio energy, ocean energy and "renewable combined heat and power".
- RPO 220 No information – I-SEM continues to operate.
- RPO 221 No information
- RPO 222 EirGrid continues to install additional transformer capacity and increased circuit capacity in line with its Transmission Development Plan. 2021-2029
- RPO 223 - EirGrid submitted a planning application in July 2021 for the Celtic Interconnector following technical assessments and feedback from local stakeholders.

Please provide details of any policy initiatives/developments that have been finalised or are in preparatory stages that support the objectives of the RSES.
EirGrid unveiled the Shaping Our Electricity Future roadmap, a blueprint for radically transforming the country's electricity grid in November 2021. EirGrid was asked by the Government to transform the electricity system in anticipation of a future without coal, oil, peat and ultimately one with net zero emissions. Specifically, EirGrid must redevelop the grid to manage the vast majority of Ireland's electricity coming from renewable sources by 2030. The Shaping Our Electricity Future roadmap is the result of a comprehensive 14-week consultation across all sectors of society and two years of research by industry experts and tens of millions of technical simulations. It provides an outline of the key developments needed from a networks, engagement, operations, and market perspective to support a secure transition to at least 70% renewables on the electricity grid by 2030. This is an important step on the journey towards up to 80% renewables target, which will present opportunities for further renewable generators, and ultimately, net zero by 2050. The plan comprises 40 new grid infrastructure projects, representing a total investment of over €1 billion. This is on top of an existing €2.2 billion programme of grid infrastructure projects which the EAP have already engaged with communities on and which they have funding for.

Please provide a summary of the funding programmes administered by your Department (or agency under the aegis of your Department), over the last two years, which have been awarded within the Southern Region with the following details requested.

Funding Programme: Clashavoon Dunmanway Community Benefit Fund
County Project Name and Description: Cork. EirGrid, the national electricity grid operator has awarded community groups and not-for-profit organisations near the new Clashavoon Dunmanway electricity line a total of €600,000 in funding. The Community Benefit Fund was

opened for applications last July following the completion of works on the new 110 kV electricity line. The line connects two substations at Clashavoon and Dunmanway with the circuit successfully energised in September 2020. A total of 36 projects from Dunmanway, Aghinagh, Carrigadrohid, Kilmurry, Rusheen, Macroom, Tirelton, Kilmichael and Coppeen West were successful in the application process. The successful projects include the development of community and sports facilities, funding for youth facilities, along with heritage, older persons, and enterprise initiatives.
Amount Awarded (€): 600,000
Stage of Project: Construction

Funding Programme: Laois-Kilkenny reinforcement scheme
County Project Name and Description: Kilkenny. The Community Benefit Fund has an initial €204,600 available for community groups to apply for, and this workshop, facilitated by external community consultant John Warren, will provide information on key elements needed for the application process. The €204,600 available represents 40 percent of the overall fund which opened for applications in November.
Amount Awarded (€): €204,600
Stage of Project: Construction

6.4 Environmental Protection Agency (EPA)

Progress in implementation of the Climate Action Plan including decarbonising our energy system, decarbonising buildings and decarbonising the transport sector.
The EPA's own Environmental Policy Statement recognises that we occupy a unique position in respect of care for the environment and states that "Consequently, we are committed to incorporating good environmental management and practice into our everyday activities. The EPA aims to minimise the environmental impact of our own activities to achieve continual environmental improvement, to prevent pollution, to measure and reduce our carbon footprint and adapt to climate change and to encourage environmental awareness within our organisation." Influences on the strategic direction for greening the EPA include the 2020 Programme for Government, Ireland's Climate Action Plan (Irelands 2030 Energy Efficiency & Carbon), Targets for Public Buildings, EPA's 2021 – 2016 strategy development, the leadership of Senior Management and staff.

The EPA have an active Green Team since 2007 which is chaired by the Director of Office of Communications & Corporate Services. The major highlights to date include:

- a 50% reduction in energy demand since 2006 and achievement of the 2020 government efficiency target ahead of time
- a 54% reduction in water usage in a nine-year period since 2010
- a 17% reduction in municipal waste and 23% reduction in mixed recyclables in an eight-year period.

In keeping with the commitment to lead by example, the EPA achieved certification to the international standard (ISO 14001:2015) in 2011. The EPA continues to maintain an Environmental Management System (EMS), to help us control our impact on the environment from our activities and facilities.

In the EPA's Wexford, Cork, and Kilkenny offices which are within the Southern RSES area we undertook detailed energy audits in 2021 that will inform future actions focused on decarbonising EPA's buildings and achieving energy efficiencies as outlined in the Climate Action and National Energy Efficiency Action Plans. Several building upgrades are underway or completed including:

- Upgrade to the 240kW Biomass Boiler System
- Electric Vehicle charge point infrastructure has been installed in all EPA buildings.
- Upgrade to internal lighting to LED in some areas of our buildings with plans to roll this out to across all buildings in 2023, with anticipated reductions in lighting energy of up to 78% based on similar projects completed in other EPA buildings.
- Upgrade underway for Building Management Systems (BMS) to help maintain efficiencies to date and to deliver further improvements in building efficiencies.
- EPA building managers took part in SEAI Energy Map training in 2021.
- In 2022 EPA are exploring opportunities to expand our SolarPV installations with a view to further roll outs in 2023.
- EPA aims to maximise resource re-use in its building projects by re-using building components where possible in refurbishment works, using recycled materials (e.g., 100% recycled carpet tiles) and using recycled/re-blended paints.

The EPA has a vehicle management policy in place which promotes the purchase of carbon efficient vehicles in its fleet. This has led to the introduction of five plug in hybrid vehicles and two fully electric vehicles to its fleet.

The EPA has been developing its EV charging infrastructure and now has charging points in all of its buildings. The EPA promotes cycling to work and provides secure bicycle parking and showers for cyclists.

Progress in accelerating transition to low carbon and circular economy and society, for more sustainable management of natural resources, and realising blue growth and bioeconomy opportunities.
The EPA active promotes re-use within its buildings. Long standing processes are in place for the re-use of furniture, stationary and other such consumables within the agency. Where re-use is not possible internally, the EPA actively seeks re-use outlets outside of the agency. It has partnered with the Community Reuse Network and the Re-Discovery Centre to identify re-use outlets. The EPA uses Green Public Procurement in all of its procurement and has delivered GPP training to all of its relevant staff.

Progress in reducing greenhouse gas emissions in accordance with agreed national sectoral plans and 2030 targets, and support for undertaking emissions monitoring at a regional and local authority level.
The EPA exceeded the national energy reduction target of 33% set out under the National Energy Efficiency Action Plan by achieving a 50% reduction in its energy use up to 2020. The EPA use a variety of energy sources to power and heat its buildings. Sources include biomass, natural gas, thermal solar, Photovoltaic (PV), Bio-petroleum gas (Bio-LPG), kerosene and electricity (air-to-water heat pumps). Electricity is now purchased from 100% renewable sources. Diesel is used to power standby generators. Ireland's Climate Action Plan includes ambitious reductions and changes in energy use by way of a decarbonisation pathway and as such the EPA is well placed to continue its energy and carbon reduction with further building improvements planned for lighting upgrades with energy efficient LED, expansion of Solar PV and a continued focus on its carbon emissions. The EPA have commenced planning to identify actions that will help to achieve the 2030 targets for Carbon and Energy reductions. A number of projects including LED Lighting, Heating and SolarPV upgrades are already well underway.

6.5 ESB

ESB's role in the low carbon transition
On 14 February 2022, ESB announced its new strategy entitled "Driven to make a difference: Net Zero by 2040". In the strategy, ESB has focussed its resources around delivering low carbon electricity to customers. The strategy identifies three Strategic Objectives, delivery of a Decarbonised Electricity, Resilient Infrastructure and Empowered Customers supported by four foundational capabilities Empowered People, becoming Digital and Data Driven, maintaining Financial Strength and being Sustainable and Socially Responsible.

The following sections summarise what the various businesses of ESB are doing to support the low carbon transition.

ESB Networks (ESBN)
ESBN is at the centre of the low carbon transition. Ireland has substantial electrification potential which would enable low carbon electricity to displace fossil fuels in sectors such as transport and heat. Working with EirGrid as TSO, ESB Networks can support a significant increase in the share of low carbon electricity in final electricity demand and a significant increase share of electricity in final energy demand, the form up from the current 40% to c80% in 2030 in line with the Government's Climate Action Plane and the latter up from the modest 20% figure today.

- ESB Networks has connected more than 4GW of wind generation and is in the process of connecting new solar and wind generation from recent Government support scheme auctions. ESBN will also play a significant role in connecting offshore wind. Alongside connecting renewables, ESB Networks is also enabling customers with micro or mini generation to sell excess power back to the grid as well as facilitating energy communities. All of this will contribute to meeting the 80% renewable electricity target by 2030, in an efficient and timely manner
- ESB Networks is rolling out smart meters which include the meter assets and all the backend IT Systems to support customers engaging in the energy transition. To date over 600K smart meters have been rolled out across Ireland. ESB Networks has put in place investment plans to support the increasing demand occasioned by low carbon electrification (e.g., electric vehicles and heat pumps).
- ESB Networks is transforming its role as Distribution System Operator to enable maximum efficient use of available generation and flexible demand through a new National Network Local Connections program and at the same time seeking to foster internal and external innovations in areas such as flexibility and non-wires solutions.
- With increasing electrification, the quality, condition and performance of the network becomes more and more important. ESB Networks is undertaking a project to increase the resilience and performance of the network and has initiated the National Network Local Connection programme which will bring a focus to local network enablement and operation as well ensuring a national perspective.

ESB Customer Solutions
This unit comprises ESB's customer facing contestable activities in a way that ensures they can best serve current and future customer requirements.

- Electric Ireland is a key customer facing brand and serves more than 1.4m customers on the Island. In addition to consistently proving excellent value and customer service, Electric Ireland is working with customers to provide them with low carbon technologies. There are already offerings for customers who wish to complete energy efficiency measures and install smart home technology, small solar panels and batteries. The roll out of smart meters will be a key enabler of utilising variable renewables through more flexible demand. Electric Ireland has a significant program of work ongoing in this area.

- ESB Customer Solutions has established Electric Ireland Superhomes as a joint venture with Tipperary Energy Agency. Superhomes is a One Stop Shop which looks after all key stages of a home energy retrofit. Superhomes end to end service includes initial home survey, full retrofit design, approved contractor procurement and supervision as well as SEAI grant funding management. They aim to retrofit 35,000 homes by 2030; 250 homes requiring a capital investment of €12.5 million in 2022 with 600 homes in 2023 at an additional €30 million capital investment and ramping up year on year thereafter.
- ESB Smart Energy Services (SES) offers businesses managed energy services through a partnership approach which leverages cutting-edge technology and funding solutions to reduce energy consumption and costs for the industrial and commercial sectors. SES works with businesses across Ireland and the UK in areas such as energy efficient lighting, battery storage, transport, and low carbon heating solutions. At the end of 2020, SES will have delivered €150m in savings for its customers. SES will look to play a leading role in helping business in Ireland reduce their energy requirements and their carbon footprint.
- ESB eCars was established in 2010 to roll out the public charging infrastructure for electric vehicles (EVs) across Ireland and to support the introduction and demand for electric vehicles nationally. eCars operates and maintains approximately 1,350 public charge points across the island of Ireland. These are available for electric vehicles and are found nationwide in locations such as on-street, shopping centres, vehicle parks etc. In addition, eCars has over 130 Rapid/Fast Chargers located in London and Coventry and has just begun a partnership with Birmingham City Council to install almost 400 charge points in the city. eCars is currently undertaking a €20m programme expand and enhance the charging network across Ireland which includes €10m funding from the Irish Government's Climate Action Fund, to help meet the expected growth of electric vehicles in the coming years.

ESB Generation and Trading (GT)

ESB GT manages and trades ESB's generation assets on the Island of Ireland and GB. ESB has had generation assets in Ireland since the building of Ardnacrusha and has been operating in the UK for 25 years. During this time, the generation fleet has seen and will continue to see significant change. CO2 emissions from GT's thermal generation plants in 2019 are 58% lower than 2005 and the carbon intensity has reduced by 37% to 422 g/kWh. ESB GT has a strategic objective to be net carbon neutral by 2040.

- At the end of 2019, ESB GT has 884MW of renewable capacity comprising hydro and wind generation. GT's strategy is to have 5GW of renewable generation by 2030. This will involve significant effort by GT and will also involve many joint venture partnerships. GT already works on this basis with Bord Na Mona, Coillte and others in Ireland and with players like EDF in GB. In the coming years, GT will work with Parkwind to deliver the Oriel offshore wind farm. In Early 2021, ESB GT launched the Green Atlantic project which will transform the Moneypoint site on the west coast into an energy hub for offshore wind and green hydrogen.
- ESB GT is developing a significant batter energy storage portfolio and has more than five projects under development in Ireland including what will be one of the biggest battery storage projects in Europe.
- GT retains a significant fleet of dispatchable thermal plant. The vast majority of this is gas fired; this capacity will play a significant role in achieving Ireland's 70% renewable electricity by 2030 target. The existing fleet is being made much more flexible to accommodate the variable nature of wind generation while still providing a full system backup to wind. This capacity remains the backbone of the electricity out to 2030 at least.
- As part of its long-term strategy, ESB GT is planning for the electricity system after 2030, it is exploring the role flexibility services will play, and it is examining how a close to

zero carbon electricity system can be achieved. This involves the role that green hydrogen from renewable electricity, gas and CCS might play in the energy system and consideration of what role electricity and gas system sectoral coupling might play. ESB GT is developing a grid stabilisation project at Moneypoint and is making a €50m investment in a synchronous compensator due for commercial operation in 2022. This is a large generator and flywheel that will provide short-circuit power and inertia for stable operation of the grid while also supplying and absorbing reactive power which controls voltage levels on the network.

- A key strategic objective of GT is to maximise the use of existing infrastructure through the use of hybrid connections for offshore and onshore wind farms and for solar farms. This will allow existing grid connections at large thermal power stations to be used for wind and solar when the renewable resources are available and for dispatchable generation when the renewable resources are not available. This complementary dual use of exist network assets will reduce the scale of onshore networks assets required to enable the transition with a corresponding reduction is cost and price from what it would otherwise be.

6.6 Inland Fisheries Ireland

- Signed up to SEAI's partnership programme.
- 2030 target of 33.33% has been exceeded 44.5% has been achieved. (Energy Partner confirmed this but not official until 14.5.21.)
- Energy Performance Officer Appointed.
- Climate Action Portal completed.
- Established a National Green Team Network.
- Four PV Systems completed to date (total capacity 130 kW).
- Four EV Charging Points installed to date and 3 more underway.
- Electric vehicles rolled out to IFI bases – total of 13 on fleet. Board approval to extend by a further 19.
- High Resolution Energy Monitoring Software installed at 2 properties.
- Water Harvesting Pilot Project successfully completed.
- Building Fabric Upgrades completed and ongoing at 8 IFI properties.
- Researched all facilities KVA(MIC) and reduced loads where possible. Ongoing monitoring.
- Root and Branch building fabric analysis ongoing for all IFI properties – building comprehensive energy database to provide robust evidence base for future works.
- Green procurement training ongoing.
- Eco driving training rolled out to over 300 staff.
- Training of current energy team ongoing.
- Energy Policy drafted.
- Strategy Action Plan for workplace engagement drafted.
- Energy MAP diagnostic document at advanced stage with energy partner.
- Submissions made to the Climate Action Plan.

6.7 National Oil Reserves Agency (NORA)

National Oil Reserves Agency (NORA) continues to pursue its energy saving targets through participation in SEAI's system for Energy Monitoring and Reporting. In 2020 NORA has met its Public Body Energy Management obligations set out in S.I. No. 426/2014. In December 2019 NORA moved its head office to an LEED accredited designed building with a BER rating of B1.

NORA is responsible for the administration of Ireland's Biofuels Obligation Scheme (BOS) and

for the assessment of compliance of obligated parties with the provisions of Article 7(a) of the Fuel Quality Directive (FQD) as set out in S.I. 160 (2017).

The Agency works closely on an ongoing basis with all key stakeholders, in particular,

- the Department of the Environment, Climate and Communications.
- the Department of Transport.
- the downstream Oil and Biofuels industries.
- all parties obligated under legislation associated with the BOS, the EU Renewable Energy Directive (RED) and the Fuel Quality Directive (FQD).

- in the development and implementation of key policies promoting the use and further development of renewable fuels in transport and the reduction of carbon emissions and promoting high levels of compliance with prevailing legislation

As part of NORA's remit as set out under National Oil Reserves Agency (Amendment) and Provision of Central Treasury Services Act 2020, NORA makes a significant financial contribution to the Climate Action Fund on an ongoing and annual basis. In 2020, NORA contributed €28 million to the Climate Action Fund. In 2021, a further €96 million was contributed by NORA to the Climate Action Fund.

For the period 2021 – 2025, NORA expects to contribute a total of c. €400 million to the Climate Action Fund.

6.8 Sustainable Energy Authority of Ireland (SEAI)

Progress in implementation of the Climate Action Plan including decarbonising our energy system, decarbonising buildings and decarbonising the transport sector.

Please see attached Excel sheet (Annex 2) from SEAI – it includes worksheets that detail:

- Overall energy-related CO_2 emissions, split by fuel types
- Transport energy-related CO_2 emissions, split by fuel types
- Residential and Services (mainly buildings) energy-related CO_2 emissions

Additionally, the attached "SEAI Achievements 2021" PDF document (Annex 1) provides details of SEAI activity in support of the Climate Action Plan targets, including:

- Home Energy Upgrades
- Building Energy Ratings
- Public Sector
- Energy Efficiency Obligation Scheme

Progress in accelerating transition to low carbon and circular economy and society, for more sustainable management of natural resources, and realising blue growth and bioeconomy opportunities.

Please see attached Excel sheet from SEAI – it includes worksheets that detail:

- Renewable energy by type

The attached "SEAI Achievements 2021" PDF document provides details of SEAI activity in support of the Climate Action Plan targets, including:

- Communities
- Schools and Education

- Electric Vehicles
- Business Supports
- Large industry

Progress in reducing greenhouse gas emissions in accordance with agreed national sectoral plans and 2030 targets, and support for undertaking emissions monitoring at a regional and local authority level.

Please see attached Excel sheet from SEAI – it includes worksheets that detail:

- Overall energy-related CO2 emissions, split by sector

Additionally, SEAI is developing a local authority climate action plan (LA-CAP) dashboard for launch in late Q1-2022. This will provide details of wind capacity, solar capacity, BER, EV investment, etc., at the local authority level.

Please outline any progress made by agencies that operate under the aegis of your Department, in supporting the objectives of the RSES which are relevant to that agency.

SEAI is developing a local authority climate action plan (LA-CAP) dashboard for launch in late Q1-2022 that will provide details of wind capacity, solar capacity, BER, EV investment, etc., at the local authority level.

7.Please provide details of any policy initiatives/developments that have been finalised or are in preparatory stages that support the objectives of the RSES

7.1 Review of the National Adaptation Framework

The current National Adaptation Framework (NAF) was published in 2018. A primary objective of the NAF is to bring a clear and strong focus to both the challenges and the opportunities of transitioning to a climate resilient future, and the importance of a positively focussed and cost-effective national transition agenda. The NAF sets out Ireland's strategy for the application of adaptation measures across Government sectors and the local authority sector to reduce the vulnerability of the State to the negative effects of climate change and also to avail of any positive effects that may occur.

Action 435 of CAP 2021 and the provisions of the Climate Action and Low Carbon Development Act (the Climate Act) require that a review of the NAF be undertaken in 2022. Under CAP 2021, the Department has also committed to launch a public consultation on the NAF Review by end Q1 2022.

As part of the NAF review, the current governance structure set out in NAF will be examined, particularly in light of 2021 amendments to the Climate Act. The review of the NAF will also examine key developments at national, EU and international level that have arisen since the original NAF was published including:

- The role of the CCAC since 2017 and its recommendations on adaptation to the Minister and Government.
- Ensuring consistency in how adaptation is managed in the climate action plan to best support implementation at national level.

- Possibilities arising from legislative changes in the Climate Action and Low Carbon Development (Amendment) Act 2021.
- Lessons learned from the development of sectoral plans,
- A review of the existing sectors and thematic areas for action.
- Potential updates to sectoral guidance on adaptation.
- Lessons learned from the publication of local adaptation strategies
- Changes in governance and monitoring on climate action at national and local level since 2017.
- Overcoming existing barriers to adaptation action.
- Improvements in climate modelling information and in adaptation information in general made since 2017 particularly in terms of attribution of climate change impacts.
- The publication of a new EU Adaptation Strategy in 2021.
- Developments in adaptation research at national and international level since 2017 and establishing new national adaptation research priorities.
- The increased focus on adaptation at international level.

Following completion of the review, a report on the NAF review to be submitted to the Minister by Q3 2022.

7.2 EU Just Transition Fund

The EU Just Transition Fund is a newly established fund under the 2021-2027 programming round, operating under Regulation (EU) 2021/1056) within the framework of EU Cohesion policy. The Fund seeks to address the adverse effects of the climate transition by supporting the most affected territories and workers concerned and to promote a balanced socio-economic transition.

Ireland is set to receive up to €84.5 million from the EU Just Transition Fund over the period to 2027. The Government will complement this funding with Exchequer resources. The governance and management of expenditure under the Fund must comply with the EU JTF Regulation and the EU Common Provisions Regulation.

The EU Just Transition Fund (JTF) is Pillar 1 of the European Green Deal Just Transition Mechanism. Investments under the Just Transition Fund may be complemented by a combination of grants and loans to private sector entities under a dedicated window of the EU's InvestEU instrument (Pillar 2) or through a specific Public Sector Loan Facility managed by the European Investment Bank (Pillar 3).

Ireland must prepare a Territorial Just Transition Plan and accompanying Operational Programme for approval by the European Commission to secure access to the EU Just Transition Fund. This plan will set out Ireland's proposed investment priorities as well as targeted sectors and regions. The Minister for the Environment, Climate and Communications has appointed the Eastern and Midland Regional Assembly (EMRA) as managing authority for the EU JTF and DECC and EMRA are developing the Territorial Just Transition Plan and Operational Programme.

The draft Territorial Just Transition Plan has had regard to the 2020 European Semester recommendations of the European Commission on the scope and territorial coverage for the EU JTF, the Structural Reform Support Programme consultancy undertaken during 2021 to support the development of the Territorial Plan, and the reports and recommendations of the Just Transition Commissioner for the Midlands region. The draft Plan is also aligned with the territorial coverage of the national Just Transition Fund. It provisionally identifies East Galway,

North Tipperary, Longford, Laois, Offaly, Westmeath, West Kildare and Roscommon as the functional territory to be targeted.

7.3 Retrofit Schemes

The SEAI has a number of schemes in place to support homeowners to upgrade their properties including: the Better Energy Homes Scheme; Warmer Homes Scheme; the Community Energy Grant Scheme, the One Stop Shop Development Scheme and the Solar PV Scheme. Since 2000, SEAI schemes have supported over 465,000 homeowners to upgrade their homes to some extent, representing nearly one home in four across the country. Government supports in the form of SEAI grant schemes will continue to be a central element of the Government's strategy to encourage and support homeowners to retrofit their homes. This will also drive the development of the network of One Stop Shops (OSSs). These are being enhanced and improved to ensure alignment with our national targets and attractiveness to homeowners.

The flagship development is the new Home Energy Upgrade Scheme. This focuses on the development and expansion of the OSS market, as well as the delivery of B2 retrofits with heat pumps. This scheme also facilitates continuous, year-round working and multi-year planning, which has long been identified as a crucial requirement by the supply chain and homeowners. This is a transformative development to turn the retrofit sector into an "always on" sector of the economy. To support the Home Energy Upgrade Scheme, the SEAI has developed a registration process for OSSs as well as multi-annual contract frameworks. The scheme offers increased grant levels of up to 50% of the cost of a typical B2 home energy upgrade with a heat pump (up from the current level of 30-35%).

Grant supports (under the Better Energy Homes Scheme) for homeowners that want to take a step-by-step approach to upgrading their homes have also been significantly increased. For instance, the grant for heat pumps has increased from €3,500 to €6,500 and the rate for external wall insulation has increased from €6,000 to €8,000 for a detached house. These figures specifically relate to grant amounts for this step-by-step approach.

Grants for cavity wall and attic insulation will more than triple, as part of the government's response to the current exceptionally high energy prices. For instance, in the case of a semi-detached home, the attic insulation grant will increase from €400 to €1,300 and the cavity wall insulation grant will increase from €400 to €1,200. These are highly cost-effective upgrade measures that can be deployed rapidly and at scale this year. It is expected that these works will pay back in 1-2 years in most houses. The new grant rates will cover approximately 80% of the typical cost of these measures and will be available to all homeowners.

Retrofit Funding

€267 million (of which €202m is funded from carbon tax receipts) has been allocated for SEAI residential and community retrofit schemes in 2022, including €118 million funding for SEAI schemes supporting those in energy poverty.

The 2022 allocation will be used to:

- Support 27,000 home energy upgrades including over 8,600 homes to a Building Energy Rating (BER) of B2 and over 4,800 free home upgrades under the SEAI energy poverty schemes.
- Significantly increase monthly completions and emissions reductions under the Warmer Homes scheme and reduce waiting times.

- Launch the new Home Energy Upgrade Scheme to drive the delivery of B2 home retrofits with heat pumps and facilitate year-round working.
- Provide continued support to the Department and implementation of the design elements and administration of the Energy Efficiency Obligation Scheme.
- Support the development and implementation of the Residential Retrofit Loan Guarantee Scheme.
- Introduce initiatives to ensure that the required number of BER assessors are in place.
- Continue to increase awareness and generate demand for home energy upgrades including through national campaigns and community based social marketing initiatives.

In addition to the above, €85 million has been provided to the Department of Housing, Local Government and Heritage to support the retrofitting of local authority homes.

Other Actions

The Department is also working with other key stakeholders to progress initiatives to further support the delivery of Climate Action Plan and Fit for 55 package objectives relating to retrofit including: -

- Encouraging the further development of the supply chain to help and ensure that we have the required number of appropriately skilled workers necessary to meet our needs.
- Developing guidance and standards to facilitate upgrades on a wider scale. This includes the revision of the main building energy upgrade standards S.R. 54 Code of Practice for the energy efficient retrofit of dwellings. Work is also substantially advanced on producing a new guidance document to facilitate the retrofit of traditionally built buildings – which account for up to 1 building in 6 in Ireland.
- Supporting the continued growth of the SEAI's Sustainable Energy Community Network to over 1,500 communities by 2030.
- Ireland is also engaging with the EU Commission and other member states in the process of negotiating the Recast of Energy Efficiency Directive (EED) and the Energy Performance of Buildings Directive. The outcome from these processes will further support climate action and energy efficiency objectives and drive further action and investment – resulting in more upgraded homes and buildings and more career opportunities in the green economy nationwide.

In developing the new Energy Efficiency Obligation Scheme (EEOS), to commence in Q1 2022, the Scheme is being redesigned so that, in addition to achieving a share of its Article 7 Target, it will also more closely align with the commitments of the Programme for Government, Climate Action Plan and National Retrofit Plan, and thus better support the delivery of Ireland's broader energy and climate ambition and targets. This will include new, more ambitious requirements for residential energy savings under the scheme, leading to a refocusing of obligated parties' efforts, away from supporting single, shallow energy efficiency measures towards deeper, more significant retrofits. The redesigned EEOS is to be underpinned by new legislation due to be signed by the Minister in the coming weeks.

7.4 Clean Air Strategy

The Clean Air Strategy is currently being finalised. It will outline how we will enhance and protect the quality of the air that we breathe and realise the full environmental and health

benefits of cleaner air. The Strategy sets out a pathway based on a comprehensive cross-Government programme of policies and measures that will tackle all sources of air pollution.

A key priority under the plan is to establish a regional approach to air enforcement. Local authorities have responsibility for enforcement across a range of environmental areas this regional approach will support the local authorities in their enforcement role and enhance regulation and improve the effectiveness of our enforcement systems.

Other priorities include:

- Increase ambition in addressing all sources of air pollution;
- Ensure the integration of clean air considerations into policy development across Government;
- Increase the evidence base that will help us to continue to evolve our understanding of the sources of pollution in order to address them more effectively;
- Promote and increase awareness of the importance of clean air; and,
- Ensure effective oversight and cross-sectoral action to reduce emissions.

7.5 Solid Fuel Regulations

The first regulation of a solid fuel was introduced in Dublin in September 1990. As a result of its success in improving air quality and reducing health impacts, the regulations have been gradually extended to cover a total of 41 urban areas nationwide. In September 2020, 13 new low smoke zones were introduced, extending the existing Solid Fuel Regulations to all conurbations with a population in excess of 10,000. 5 new zones are located in the Southern region.

All designated Low Smoke Zones can be viewed using the interactive map here.

The current solid fuel regulations have been very successful in reducing air pollution within Low Smoke Zones. However, in light of additional data from our enhanced National Ambient Air Monitoring Network and emerging research, it is clear that a more comprehensive approach is required to reduce air pollution emissions attributed to the use of solid fuels in the residential sector. To ensure a high standard of air quality in all areas we are now developing new solid fuel regulations for Ireland that will;

- broaden the regulation of solid fuels to apply across the entire state
- increase the range of solid fuels to be regulated
- support enhanced enforcement

The Department are progressing in the drafting of new Solid Fuel Regulations for Ireland which will come into effect from September 2022.

7.6 Urban Transport-Related Air Pollution (UTRAP)

The Urban Transport Related Air Pollution Working Group (UTRAP) was formed in autumn 2019, to consider and address rising concerns about the level of transport-generated air pollution. An Interim Recommendations report was finalised in 2020 which included measures to address transport related air pollution in urban areas and recommendations on how to further develop an evidence-based national policy framework within which local authorities could address future exceedances.

The work of the group is also complemented by the Five Cities Demand Management Study which included Cork and Waterford. As part of the study, measures were reviewed in light of international best practice and national stakeholder engagement in order to assess their impact

in reducing emissions, tackling congestion, improving air quality, and improving the overall urban environment of the five cities. The study was published in two phases to inform the direction of complementary demand management policy measures at a local and national level.

This study will feed into the final recommendations of the UTRAP report which is expected in Q3 of 2022.

7.7 National Air Pollution Control Programme

Ireland submitted an update to the National Air Pollution Control Programme (NAPCP) to the EU in 2021. The NAPCP includes:

- An overview of the current outlook for compliance with NEC targets for each pollutant
- Projections of relevant pollutant emissions to 2030,
- Policy options, measures and actions across sectors but in particular in the residential, transport, agricultural and energy sectors aimed at reducing emissions of the five specified air pollutants.

7.8 Health Risks of Environmental Noise Pollution

Minister Ryan has signed regulations for Noise health risk assessments to be used to estimate and communicate the risks to health of exposure to noise pollution in Ireland.

The WHO environmental noise guidelines (WHO Europe, 2018) provide exposure response functions for health outcomes, including annoyance and sleep disturbance, as well as risk ratios for cardiovascular health outcomes. These provide the basis for quantifying the number of people suffering from specific health effects due to noise.

The range and magnitude of negative health impacts of noise in Europe are significant, with many suffering effects such as annoyance, sleep disturbance, ischaemic heart disease, mortality due to ischaemic heart disease and even learning impairments in children. People in urban areas are most badly affected, and the main source contributing to negative health effects is road traffic noise.

These health risk assessments can also be used to estimate the health benefits of changes in exposure resulting from the introduction of policies, mitigation measures in Noise Action Plans or other initiatives. Results will quantify the concrete health effects of noise in Ireland and will be easily understood by the public and other stakeholders.

8.Please provide a summary of the funding programmes administered by your Department (or agency under the aegis of your Department), over the last two years, which have been awarded within the Southern Region with the following details requested

Overview of Climate Action Fund (CAF)

The Climate Action Fund (CAF) was established on a statutory basis, with effect from 1 August 2020, on the commencement of the National Oil Reserves Agency (Amendment) and Provision of Treasury Services Act, 2020. A key objective of the Fund is to provide support for projects, initiatives and research that contribute to the achievement of Ireland's climate and energy

targets, that increase climate resilience and GHG removals in the State and for projects and initiatives in regions of the State, and within sectors of the economy, impacted by the transition to a low carbon economy. Support may also be provided for certain nature-based projects that enhance biodiversity and which also contribute to climate action.

As set out in the NDP 1, at least €500 million is expected to accrue to fund over the period to 2027 ensuring that substantial funding will be available to fund a series of projects, initiatives, and research.

To date, funding from the Climate Action Fund has been committed as follows:

Climate Action Fund First Call

In 2018, approval in principle issued for 7 projects valued at almost €77 million. This support is expected to leverage total investments of €300 million. Four of these projects are in delivery with the remaining three continuing to progress through the project validation stage. Of these seven, the projects relevant in whole, or in part, to the Southern Assembly Region are set out in Table 1.

Creative Climate Action

Creative Ireland, in collaboration with DECC, are delivering Creative Climate Action, a competitive fund of €2 million supported by the Climate Action Fund and the Creative Ireland Programme. Creative Climate Action will fund projects up to the end of 2022 that can meaningfully connect people with the profound changes that are happening in our environment, society and economy arising from climate change, and can transform that connection into behaviour change or climate action. The contribution from the Climate Action Fund is €1 million. The approved projects address a range of climate matters including sustainable farming, energy efficiency, GHG reduction and sustainable consumption. There is a mix of local authority-led projects and projects led by community groups, collectives and other organisations. A list of successful projects relevant, in whole or in part, to the Southern Assembly region is included in Table 2.

Community Climate Action Programme

The Climate Action Fund Community Climate Action Programme is a national programme that was launched by DECC on 10 November 2021. Under this programme €60 million from the Climate Action Fund will be invested in community climate action projects and initiatives, as well as capacity building, over the next three years. The overall aim of this Programme is to support and empower communities to shape and build low carbon, sustainable communities in a coherent way to contribute to national climate and energy targets.

Phase 1 involves the allocation of an initial €30 million over an 18-month period for two strands of the Programme. Under Strand 1 €24 million is being provided to all local authorities to support communities, large and small, rural and urban, to build low carbon communities in a considered and structured way. This strand is currently being finalised with the local authorities.

Under Strand 2 of the Community Climate Action Programme a total of €6 million will be provided to build community capacity in relation to climate action. €1 million of this has already been allocated to the Creative Climate Action Fund, and the remaining €5 million has been allocated for an open call for projects and initiatives that facilitate community climate action through education, capacity building and learning by doing, which is being run by Pobal on behalf of the Department. Applications are now closed and are being assessed.

Table 1 – Climate Action Fund-First Call

Lead Applicant	Project Name and County	Overview	Amount Awarded	Status
3CEA (Three Counties Energy Agency)	**Driving HGV efficiency into Brexit** 3CEA is a non-profit, independent energy agency working primarily in Carlow, Kilkenny and Wexford	Supporting the transport sector in reducing reduce fuel consumption and emissions from vehicles. Over a two-year period, telematics equipment will be installed in over 1,000 heavy goods vehicles and appropriate training for the drivers will be provided. Through continuous monitoring and positive reinforcement of driving behaviour performance, at least a 10% fuel efficiency is expected to accrue. Depending on project results, it may be scaled further by private industry.	Up to €1.37 million	In Delivery
ESB	**ESB – ecars** **(Nationwide including the Southern region)**	This project moved to delivery stage was ESB e-cars in September 2019, with the CAF committing up to €10 million, leveraging a further €10 million from ESB. This project will install new modern electric vehicle chargers across the country as well as upgrade the existing charging network.	up to €10 million	In Delivery
Irish Rail	**Irish Rail – Hybrid Railcars** **(Nationwide including the Southern region-** pilot phase included the	In May 2020, Irish Rail received approval to proceed with a project testing hybrid drive technology on intercity railcars, with support from the Climate Action Fund. When at full scale, this project will support the	Up to €15 million including a pilot phase valued at €1.12m.	The pilot phase of this project is in delivery

	retrofit and trial of a new transmission in operation between Limerick and Limerick Junction)	transition of Irish Rail's intercity fleet to hybrid drive technology. Trains will switch to electric only mode in major urban centres, with the electricity generated during regenerative braking and periods of diesel operation in the open countryside.		
Road Management Office (RMO)	**Local Authority Public Lighting Energy Efficiency Project** **(Nationwide including the Southern region)**	Retrofitting 210,000 non-LED Local Authority public lights to high efficiency LED Lanterns. The project will run in 3 distinct phases, coinciding with three regions – Southwest led by Cork County Council, East led by Kilkenny County Council and Northwest led by Mayo County Council.	Up to €17.5 million	Final Approval Pending
Gas Networks Ireland (GNI)	**Zero Emissions Gas (GRAZE Gas)** **Cork**	The GRAZE Gas project aims to support the installation of the first transmission connected Central Grid Injection (CGI) facility for renewable gas and a grant scheme to support circa 74 compressed natural gas vehicles. The GRAZE Gas project will be located in Munster with the CGI facility being installed in **Mitchelstown**.	Up to €8.47 million	Final Approval Pending

Table 2 – Creative Climate Action - Approved Projects. Status-*In Progress*

Lead Applicant	Project Name and County	Overview	Amount Awarded
Asylum Productions	The Callan Energy Store: An alternative, non-commercial premises for the exchange of big ideas. Kilkenny	Asylum Productions and Loosysmokes aerial circus company, in partnership with the Callan Community Energy Company, will open a pop-up Energy Store in the heart of Callan, Kilkenny for the month of May 2022. Using their 'on street shop front' model of community engagement, this space will be the focal point for free community workshops, events and activities, bringing expert technologists in the fields of wind, solar and hydro-electric energy, together with radical thinkers & doers, inventors and makers in the field of theatre and street arts.	€ 46,700
Ailbhe Gerrard, Brookfield Farm	Field Exchange Tipperary	*Field Exchange* is a project which centres on the idea of agri-culture – linking art, food and agriculture and bringing artists, farmers, scientists, experts and the public together in Brookfield Farm, Tipperary. The aim is to integrate regenerative agriculture, creativity and gathering to combat climate change, linking production, consumption and individual farmers' actions. *Field Exchange* will present two significant art works addressing climate change which will bring art out of the gallery, into rural Ireland, linking artistic response to climate change with practical mitigation ideas. The project includes 12 knowledge sharing events over 12 weeks on regenerative agriculture topics.	€ 199,491
Waterford City and County Council	ACT Waterford - Activating Communities to target Climate Change Waterford	Five different communities in Waterford City and County will be engaged with themes of climate change: transport, domestic energy, green spaces and consumption, aligning with WCCC's aim to make the city a decarbonised zone. Facilitators will work with these communities to try to understand where they are on climate change action. The community will consider the particular barriers to action and work with creatives / designers to explore solutions. A variety of design and artistic media will be used, and the creative output will be shared with the community through public exhibition and performance working with various existing cultural events.	€ 155,000

Laura-Kate Howells, Essentially Eco.	Stories of Change. Kerry and Clare	*Stories of Change* is an intergenerational, creative vehicle that poses daunting questions on climate change but more importantly, answers them by showcasing local solutions to the climate crisis through the visual medium of photos, the art of storytelling, and the gift of food. A team of environmental educators, sustainable chefs and professional photographers will tour four Irish counties with five identified partners. Their mission is to bring the community together to showcase and celebrate people leading locally such as local food growers, energy projects etc. through the medium of photo exhibitions, communal feasts and environmental workshops created by the locals for locals. Donegal, Kerry, Clare and Galway	€ 99,167
Limerick County Council	Discovering Decarbonisation, Decarbonising Together, Limerick	*Decarbonising Together* is a collaboration between communities in Limerick and the arts, culture and creative sectors, conceived as a framework to enable community-led innovation in Limerick's decarbonisation mission. Five community groups, identified through an expression of interest shared via the Limerick PPN network, will be invited to first examine decarbonisation and Limerick's Decarbonisation Plan, identify an aspect of decarbonisation that matters to them and then work with a creative partner, through a range of creative outputs, to explore and enable behaviour change towards decarbonisation in their day to day lives and activities.	€ 118,889.50
Mol Teic (t/a Dingle Creativity and Innovation Hub)	Corca Dhuibhne Inbhuanaithe 2030 - A Creative Imagining Kerry	Under the auspices of Corca Dhuibhne/ Dingle Peninsula 2030, the partners will creatively address solutions to support the transition to environmentally and economically sustainable farming on the Dingle Peninsula and beyond. A creative practitioner will imagine a low carbon farming future for the peninsula, supporting the sector on its transition journey to a new paradigm. Barriers inhibiting farmers from becoming more sustainable will be addressed through the medium of a creative lens facilitated by an Embedded Artist working specifically with farmers in the local area.	€ 180,660

Cork City Council	The KinShip Project Cork	*KinShip* will use artistic and cultural methods to engage the public on climate action through a programme sited at Tramore Valley Park, a 170-acre park developed on a reclaimed landfill site in Cork City. Over a 17-month programme of artist residencies and creative learning activities centred on citizen agency and an architecturally designed, sustainable 'eco-lab' structure, the project will nurture and develop a kin-like sense of connection, modelling 'care' as a civic responsibility to the future of urban land use.	€ 110,790