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REGIONAL RENEWABLE ENERGY STRATEGY (RRES): METHODOLOGY FOR MEETING NATIONAL TARGETS

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FOREWORD

Under the aegis of the Government's Accelerating Renewable Electricity Taskforce, and in response to the action outlined in the Climate Action Plan to "*Publish a Roadmap for the development of the Regional Renewable Electricity Strategies"*, the Department of Climate, Energy and Environment initiated the development of a methodology to assist regional assemblies as part of their preparation of Regional Renewable Energy Strategies. This *Regional Renewable Energy Strategy (RRES): Methodology for Meeting National Targets* was developed with support from Department of Climate, Energy and Environment, the Department of Housing, Local Government and Heritage, and the Sustainable Energy Authority of Ireland. The Regional Assemblies were consulted and kept informed throughout the process, with the methodology reflecting a nationally coordinated approach. RPS Tetra Tech were appointed to provide assistance in this process.

The first revision of the National Planning Framework includes the introduction of regional renewable electricity capacity allocations for onshore wind and solar PV generation, to achieve the national targets set out in the Climate Action Plan 2024. These allocations will be integrated into the statutory Regional Spatial and Economic Strategies, which will, in turn, inform city and county development plans and will lead to the identification of areas available for onshore wind and solar PV development, and areas which may not be appropriate for such development.

This Methodology specifically addresses point (i) '*meet national targets'* of Section 29(1)(e) of the Planning and Development Act 2024 regarding the statutory components of Regional Renewable Energy Strategies, which are to form part of wider revision of the Regional Spatial and Economic Strategies.

Aligned with national statutory policy objectives, the methodology and guidance set out herein provides a comprehensive, robust and evidence-based approach to the integration of the regional renewable electricity capacity allocations into the Regional Renewable Energy Strategies.

This evidence-based approach defines for the Regional Assemblies, a structured basis to identify Target Power Capacity Allocations for each Local Authority within their administrative area. These allocations will then inform the development of renewable energy strategies that are aligned with national climate and energy ambitions, and associated targets. This will provide direction to the Local Authorities as to how they can maximise their renewable energy contribution, and provide coherence across the national, regional, and local planning tiers, thereby facilitating the accelerated roll-out and deployment of renewable electricity infrastructure required to meet our national ambitions and priorities, as set out in the national Climate Action Plan and the Accelerating Infrastructure Report and Action Plan and National Planning Framework.

The appendices accompanying this methodology form an important element of the outlined approach. They provide detailed technical guidance, supporting data and evidence to assist the Regional Assemblies in applying the methodology in a consistent, informed and transparent manner, and in ensuring the effective and evidence-based allocation of local authority target power capacities.

1 AIMS & OVERVIEW

Under Section 29(1)(e) of the Planning and Development Act 2024[1], it is stipulated that each Regional Spatial and Economic Strategy (RSES) shall, amongst other requirements, make provision for a strategy relating to onshore renewable energy to:

(i) Meet national targets,

(ii) Identify and facilitate electricity grid infrastructure, including upgrade projects and support infrastructure,

(iii) Make provision for energy security, and

(iv) Promote steps for coordination and cooperation between public bodies.

This methodology provides a consistent approach that aligns national, regional, and local planning tiers with the delivery of national electricity targets to deliver 8 gigawatts (GW) of solar photovoltaics (PV) and 9 GW of onshore wind energy, as set out in the Climate Action Plan (CAP) 2024[2], and the Regional Renewable Electricity Capacity Allocations (see **Figure 1-1**), as set out in Table 9.1 the first revision of the National Planning Framework[3] (NPF), in a manner that is integrated and aligned with wider planning, environmental and societal considerations.

As set out in the revised NPF, each Region must plan for sufficient wind and solar energy development in order to achieve the regional renewable electricity capacity allocations outlined in Table 9.1, taking into account factors influencing delivery including attrition rates and changes to energised capacity levels, (in addition to current installed energised capacity), in order to facilitate, at a minimum the 2030 national renewable electricity generation targets.

Region	Energised capacity 2023 (MW)	Additional Renewable Power Capacity Allocations (MW)	Total % of National Share in 2030	Energised Capacity 2023 (MW)	Additional Renewable Power Capacity Allocations (MW)	Total % of National Share in 2030
	Onshore Wind			Solar PV		
Eastern and Midlands	284	1,966	25%	306	3,294	45%
Northern and Western	1,761	1,389	35%	0.3	959	12%
Southern	2,622	978	40%	138	3,302	43%
Total	**4,667**	**4,333**		**445**	**7,555**	

Figure 1-1. Regional Renewable Electricity Capacity Allocations set out in the revised National Planning Framework Table 9.1.

It is expected, therefore, that the assignment of sub-regional renewable electricity capacity allocations for Local Authorities will be a principal element of a Regional Renewable Energy Strategy (RRES), which will form part of the long-term strategic planning and economic framework for the sustainable development of each region and be incorporated into the content of any revised Regional Spatial and Economic Strategy (RSES). The wider RRES will also support the achievement of international, European, and national obligations relating to renewable energy and the matters as set out below.

The development of a RRES by each Regional Assembly will, by making provision for the points listed above, facilitate a regional distribution of renewable technologies and associated enabling infrastructure,

[1] Planning and Development Act 2024

[2] A CAP is a whole-of-Government plan that is required to be updated on an annual basis, with all relevant Departments and Agencies feeding into its development.

[3] National Planning Framework First Revision – April 2025 - The National Planning Framework

while supporting the electricity carbon budget programme and the 75% cut in emissions[4] within the electricity sector by 2030, ultimately enabling the achievement of the State's "*national climate objective*" - so as to reduce the extent of further global warming, pursue and achieve, by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.

The aim of this document is to specifically address point (i) '*meet national targets'* of Section 29(1)(e) of the Planning and Development Act 2024[1]. While this document does not specifically address point (ii) to (iv) of Section 29(1)(e), addressing these points will be essential to the development of an informed and coordinated strategy that is aligned and consistent with national policy. Making provision for energy security, the uninterrupted availability of energy at an affordable price, and facilitating grid infrastructure will ensure that these strategies both support the accelerated deployment of renewable energy development and enable tangible benefits for the public.

This document provides guidance to the Regional Assemblies in developing and agreeing robust, coordinated, and sustainable onshore renewable electricity capacity allocations for each of the Local Authorities, which will directly inform subsequent spatial designations by planning authorities as part of City/County Development Plans (CDPs), within their respective administrative areas, so that collectively the national renewable electricity targets and regional renewable electricity capacity allocations can be met.

The RRES, forming part of the wider RSES, will not formally spatially designate or allocate where within Planning Authority administrative areas renewable electricity capacity may be developed. Acting solely as a decision support tool, the identification of potentially developable land through this methodology is undertaken only to inform the allocation of Local Authority renewable electricity capacity allocations.

The statutory designation of lands for renewable energy development is to be undertaken as part of the CDP process (as adopted by the Elected members of the Local Authority), which may incorporate a Local Authority Renewable Energy Strategy (LARES) or Wind Energy Strategy. As such, following the completion and adoption of the RSES by their respective Regional Assembly, each individual Planning Authority will determine which land areas are most and least suited for grid-scale renewable electricity development.

The Local Authorities, as constituent members of each Regional Assembly, will be a key stakeholder the in decision-making on the local level capacity allocations and should take an active role in the process. Each Regional Assembly should engage with representatives from each of the relevant Local Authorities in the stages of the RRES methodology to ensure that the final allocations are understood and can be agreed.

The RRES, forming part of the wider RSES, will undergo statutory iterative environmental assessments, including Strategic Environmental Assessment (SEA), Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA). The RRES, as a component of the RSES, will also undergo statutory public consultation and will be adopted by the Elected Members of the Regional Assembly. The methodology set out hereunder should be appropriately integrated into those processes, across all methodology steps.

It is important that each RSES, and the associated RRES prepared in accordance with Section 29(1)(e) of the Act[1], is evidence-based and results in consistent and co-ordinated outputs across each Regional Assembly. Additionally, they should be based on standardised processes and language to be fit for communication to a range of stakeholders (i.e. the public, industry, non-governmental organisations (NGOs) and national and local government bodies) and demonstrate alignment with the national renewable electricity targets.

1.1 Policy Context & Sectoral Requirements

The Climate Action and Low Carbon Development (Amendment) Act 2021[5] enshrines the National Climate Objective to pursue and achieve, by no later than the end of 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy. This Act frames Ireland's legally binding climate ambition to deliver a reduction in greenhouse gas (GHG) emissions of 51 per cent (%) by 2030 (compared to 2018 levels); placing the country on a trajectory to achieving climate neutrality no later than the end of 2050. Our statutory National Climate Objective and 2030 GHG emissions reduction target

[4] gov.ie - Climate Action Plan 2024

[5] Climate Action and Low Carbon Development (Amendment) Act 2021

are aligned with Ireland's obligations under the Paris Agreement and with the European Union's (EU) objective to reduce GHG emissions by at least 55% by 2030 compared to 1990 levels, and to achieve climate neutrality by 2050.

Ireland's emission reduction targets are supported in their delivery through enhanced climate governance and reporting frameworks, as well as annual CAPs, carbon budgets[6] and sectoral emission ceilings[7]. The carbon budgets and sectoral emissions ceilings introduce more urgent and sector-specific emissions reduction targets within the broader pathway to the respective 51% reduction and net-zero objectives for 2030 and 2050.

To meet the GHG emission targets, the decarbonisation of the electricity sector is vital. CAP 2024[4] states that the electricity sector (primarily power generation) is Ireland's third largest source of emissions (after agriculture and transport), representing 14.4% of total emissions in 2022 (9.7 Megatonnes (MT) carbon dioxide equivalent (CO2(eq)). Moreover, the decarbonisation of other sectors, including transport, heating, and industry, relies to a significant degree on electrification.

The electricity sector had a sectoral emissions ceiling of 40 $MtCO_{2(eq)}$. for the first carbon budget period (2021-2025)[4].The CAP 2024 stated that 49% of the first carbon budget had been used in the first two years. To meet the first carbon budget, the electricity sector requires a decarbonisation rate of 17.3% per annum in the period 2023-2025[4]. For context, the decarbonisation rate between 2018 and 2022 was 1.4% per annum[4]. At the time of writing overall performance against the first carbon budget is to be determined. The electricity sector has an emissions ceiling of 20 $MtCO_{2(eq)}$ for the second budgetary (2026-2030). As such, transformational policies, measures, and actions, along with societal change, are required to meet the electricity sector's sectoral emissions ceiling.

The Intergovernmental Panel on Climate Change (IPCC) identified, in their Climate Change 2023: Synthesis Report[8] that wind and solar power as being key mitigation options: increasingly cost effective; generally supported by the public; and feasible to deploy at scale in the near term. In addition, CAP 2024**Error! Bookmark not defined.** states that a renewables-led system is at the core of Ireland's approach to radically reduce emissions in the electricity sector, as well as protect our energy security through the use of indigenous energy as enshrined in the Government's Energy Security Package[9]. CAP 2024 sets out a plan to accelerate and increase the deployment of renewable energy to replace fossil fuels, and increase the proportion of renewable electricity to 80% by 2030, by achieving the following targets;

- 9 GW onshore wind energy, 8 GW solar PV and at least 5 GW of offshore wind energy by 2030 (and an additional 2 GW offshore wind energy for green hydrogen production).

To support the delivery of these targets, CAP 2024 sets out a framework for renewable energy development to be delivered through a plan-led and competitive framework that encourages public participation and delivers strong community benefits. In order to achieve this and accelerate renewable electricity generation, CAP 2024 sets out the following measures:

- Publication of the revised Local Authority Renewable Energy Strategy (LARES) Methodology (currently being developed); the revised Wind Energy Development Guidelines (currently being developed);
- Have regard to the interaction between the planning and grid consenting systems and the overall timeframe for permitting; deliver a streamlined electricity generation grid connection policy and process; and remove barriers for installation of renewables and flexible technologies, without the need to build new grid, including hybrid (wind/solar/storage) connections and private wires;
- Align the relevant constituent elements of the planning and permitting system to support accelerated renewable energy development, supported by national policy and associated methodologies to

[6] A carbon budget represents the total amount of emissions, measured in tonnes of CO_2 equivalent, which may be emitted by a country or region during a specific time-period.

[7] Sectoral emissions ceilings set out the maximum amount of GHG emissions that are permitted in different sectors of the economy during a carbon budgetary period.

[8] IPCC 2023, Climate Change Synthesis Report

[9] gov - Energy Security in Ireland to 2030 (www.gov.ie)

inform regional and local planning policies (see Section 1.3.1 below for further detail in terms of regional and county level implementation); and

- Oblige all relevant public bodies to carry out their functions in a manner which supports the achievement of the renewable electricity targets.

Building upon and intended to be read in conjunction with CAP 2024, CAP 2025[10] sets out additional actions to reach climate targets and clarifies that the regional renewable electricity capacity allocations "*are the minimum required for wind and solar generation to meet the 2030 emissions reductions in the electricity sector and further capacity may be required beyond 2030 to reach net zero by 2050".*

1.2 Member State Obligations under the recast Renewable Energy Directive

The EU Renewable Energy Directive (2018/2001/EU) (RED)[11] entered into force in December 2018, as part of the Clean Energy for all Europeans Package (CEP)[12]. It is aimed at keeping the EU a global leader in the growth of renewables, and, more broadly, helping it to meet its emissions reduction commitments under the Paris Agreement[13].

In October 2023, RED III (2023/2413)[14] was published, raising the collective target for the share of energy from renewable sources in the EU's energy mix from at least 32% to at least 42.5% by 2030. Beyond that mandatory level, the Directive states that Member States (MSs) should collectively endeavour to achieve an overall Union renewable energy target of 45%, in line with the REPowerEU[15] Plan.

To support the delivery of this target, RED III stipulates that MSs should support the faster deployment of renewable energy projects by carrying out a coordinated mapping for the deployment of renewable energy and related infrastructure in their territory in coordination with local and regional authorities.

Of note, under Article 15b of the Directive, MSs are required to identify the land, surface, sub-surface and sea or inland water areas necessary for the installation of renewable energy plants and related infrastructure in order to meet at least their national contributions towards the revised overall renewable energy target for 2030 and in support of reaching the objective of climate neutrality by 2050 at the latest.

In meeting this requirement, MSs may use or build upon existing spatial planning documents for the purpose of identifying those areas but must ensure that such areas reflect their estimated trajectories and total planned installed capacity and should identify specific areas for the different types of renewable energy technology provided for in their integrated national energy and climate plans.

Additionally, Article 15c of the Directive requires MS's to ensure that competent authorities identify at least one Renewable Acceleration Area (RAA), which must be a "sub-set" of areas identified under the national territory mapping exercise. These areas should be particularly suitable for the purpose of developing renewable energy projects, differentiating between types of technology, on the basis that the deployment of the specific type of renewable energy source is not expected to have a significant environmental impact. While retaining the discretion to decide on the size of renewables acceleration areas, MSs are to ensure that the combined size of those areas is significant and that they contribute to the achievement of the overall objectives of the Directive.

[10] Climate Action Plan 2025

[11] Renewable Energy Directive (europa.eu)

[12] Clean Energy for all Europeans Package (europa.eu)

[13] The Paris Agreement | UNFCCC

[14] Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652 (europa.eu)

[15] REPowerEU

1.3 The spatial plan-led approach to onshore renewable electricity development

In response to RED III, and building on findings from the 2023 National Land Use Review – Phase 1[16], and as stated in CAP 24, a plan-led approach to onshore renewable electricity development is considered necessary to ensure that Ireland's 2030 national renewable electricity generation targets are successfully achieved in a timely manner, whilst delivering a regional balance of the distribution of renewable technologies and associated infrastructure. This approach is predicated on all relevant public bodies carrying out their functions in a manner which supports accelerated renewable energy development and in accordance with the principles of proper planning and sustainable development.

1.3.1 Regional Assembly and Local Authority Obligations

The Planning and Development Act 2024[1] provides a new and updated legislative framework for the proper spatial planning and sustainable development across national, regional and local levels; and ensures that the planning system is focused on, supporting and regulating development on both land and within the maritime area. The Act aims to provide a planning system which can deliver infrastructure, enhance natural assets and amenities, and preserve, protect, and improve the quality of the environment; delivered through a plan-led, consistent system based on an integrated hierarchy of plan-making across all tiers of the planning hierarchy.

Following the commencement of the relevant provisions of the Act; not later than six months after said commencement, a Regional Assembly shall commence a review of any RSES for its region for the time being in force. In terms of the requirements for each RSES, the following should be noted:

- Under Section 28(3) of the Act, each RSES shall be in accordance with:
    a) the principles of proper planning and sustainable development, and
    b) the economic policies and objectives of the Government.
- Under Section 28(5) of the Act, each RSES shall be materially consistent with:
    a) the National Planning Framework,
    b) the National Marine Planning Framework, and
    c) any relevant National Planning Policies and Measures
- Under Section 29(e) of the Act, as described above, each RSES shall, as part of its content, make provision for a strategy relating to onshore renewable energy.
- Under Section 29(f) of the Act, each RSES shall, as part of its content, make provision for a strategy relating to climate change adaptation and mitigation that is consistent with national policies and measures.
- Under Section 29(m) of the Act, each RSES shall, as part of its content, make provision for a strategy relating to landscape and landscape character that coordinates the categorisation of landscapes, in terms of their capacity to absorb particular types of development, across the region so as to ensure a consistent approach to the protection of the landscape.

The NPF is the long-term, 20-year strategy for the spatial development of Ireland to promote a better quality of life for all, with sustainable economic growth and an environment of the highest quality as key underlying principles. The NPF reflects the policy to provide for a strengthened plan-led system based on an integrated hierarchy of plan-making. The first revision of the NPF[17], published in April 2025, includes the provision of a range of regional renewable electricity capacity allocations (see Figure 1-1 above). These allocations have been set in order to facilitate the accelerated roll-out and implementation of renewable electricity infrastructure for onshore wind and solar generation development required to achieve the national targets set out in the CAP 2024.

[16] Land Use Review – Phase 1

[17] National Planning Framework First Revision – April 2025

The Regional Renewable Electricity Capacity Allocations establish what each Regional Assembly must plan for, in order to facilitate the 2030 national renewable electricity generation targets. The NPF stipulates that these allocations are to be integrated into each RSES and associated RRES in addition to being translated to county-level targets, to inform CDPs.

Based on the regional renewable capacity allocations and share of national target set out in the NPF, the total renewable electricity capacity each Regional Assembly is required to plan for is set out in **Figure 1-2**.

Regional Assembly	National Renewable Electricity Target	Total % of National Share	Regional Renewable Electricity Capacity Allocation	National Renewable Electricity Target	Total % of National Share	Regional Renewable Electricity Capacity Allocation
	Onshore Wind			Solar PV		
Eastern & Midland	9,000 MW	25%	2,250 MW	8,000 MW	45%	3,600 MW
Northern & Western		35%	3,150 MW		12%	960 MW
Southern		40%	3,600 MW		43%	3,440 MW

Figure 1-2. Regional Renewable Electricity Capacity Allocation based on the first revised National Planning Framework[18]

Furthermore, the NPF includes several National Policy Objectives (NPOs) which set a pathway for regional and local planning and sustainable development policy. In terms of the NPOs relevant to the development of a RRES, the following should be noted in particular:

- NPO 70 – *Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a zero-carbon economy by 2050.*
- NPO 71 - *Support the development and upgrading of the national electricity grid infrastructure, including supporting the delivery of renewable electricity generating development.*
- NPO 74 – *Each Regional Assembly must plan, through their Regional Spatial and Economic Strategy, for the delivery of the regional renewable electricity capacity allocations indicated for onshore wind and solar …, and identify allocations for each of the local authorities, based on the best available scientific evidence and in accordance with legislative requirements, in order to meet the overall national target.*

In terms of Local Authority obligations, the following should be noted:

- Upon commencement of Section 42(8) of the Planning and Development Act 2024, in reviewing a development plan, or making a development or a variation to a development plan, the Act stipulates that a planning authority shall, amongst other items, ensure the proper planning and sustainable development of the areas to which the development plan relates and ensure that the development plan is materially consistent with the revised NPF; where the planning authority is a coastal planning authority, with the National Marine Planning framework; ensure material consistency with the RSES for the region within which the planning authority's functional areas is located (incorporating a renewable energy strategy as stipulated under Section 29(1)(e) and as described above in section 1) and any relevant National Planning Policies and Measures; take account of any relevant National Planning Policy Guidance.
- Under Sections 44(1) and 44(2)(c) of the Act, a planning authority shall prepare a strategy for the sustainable development and regeneration of the functional area of the planning authority, and shall set out objectives relating to, amongst others, the provision or facilitation of the provision of energy generation infrastructure and facilities, including for the generation of renewable energy.

[18] Figures represent total installed capacity, including both currently energised capacity and that additional capacity, which needs to be planned for and that each Regional Assembly are to plan to achieve by 2030. These figures are calculated using following equation: 2030 National Renewable Electricity Target x Total % of National Share in 2030 (e.g. 9,000 * 0.25 = 2,250).

- NPO 75 of the first revision of the NPF states that "*Local Authorities shall plan for the delivery of Target Power Capacity (MW) allocations consistent with the relevant Regional Spatial and Economic Strategy, through their City and County Development Plans"*.

1.4 Scope RRES Methodology for Meeting National Targets

As described in Sections 1 and 1.3.1 above, following the commencement of the relevant provisions of the Planning and Development Act 2024[1], each Regional Assembly shall make provision within the revised RSES for a strategy relating to onshore renewable energy.

In order to meet the national targets and plan for the delivery of the regional renewable electricity capacity allocations, within each RRES the Regional Assemblies should consider how new grid-scale onshore wind energy and solar PV generation capacity can be spatially distributed among the Local Authorities in their respective administrative areas, in the most balanced and strategic manner that integrates with wider planning and climate policies for the region.

This methodology offers guidance on how each RRES should consider, amongst its other requirements, where and how the regional renewable electricity capacity allocations will be achieved and translated into county-level targets, taking into account social, economic, and environmental factors.

By developing RRESs, the regions will be taking a direct role in guiding actions at Local Authority level, including how grid-scale onshore wind energy and solar PV strategies (and related policies and objectives) at Local Authority level need to align with mandated national targets and the necessary timeframe in order to meet national targets; and thus inform the Local Authority strategy for the sustainable development and regeneration of the functional area to be incorporated into the Development Plan, as described above in Section 1.3.1.

As part of the wider provisions of the RSES, it is proposed that the following regional planning steps be undertaken in the development of each RRES:

- A regional resource assessment, including identifying current installed renewable electricity capacity; and review of extant/existing planning permissions for renewable electricity projects;
- A co-ordinated approach between the spatial planning for renewables (at a regional and local level) and the strategic planning of electricity grid infrastructure development;
- A geospatial assessment of the region (using GIS mapping) to identify the environmental sensitivities and resource capacity potential;
- A review of landscape assessments and policies available at local authority level, to enable a regional perspective on landscape sensitivity for renewable energy;
- Consideration of the socio-economic opportunities that could arise from renewable development and the implementation of the national Climate Action Plan, and support wider regional planning goals (See Appendix D);
- Consultation and engagement with relevant key stakeholders;
- Consider how all new onshore wind energy development and solar PV projects can contribute to protecting and enhancing biodiversity, including maintaining and strengthening existing natural habitats and improving degraded habitats where relevant; and
- Establishment of a monitoring and reporting process to support the assessment of progress on the delivery of the regional renewable electricity capacity allocations on a regular basis by the Regional Assemblies.

In order to streamline the development of these RRESs enabling an evidence-based and consistent approach to be applied in an efficient timeframe, the Regional Assemblies have jointly developed this methodology for meeting the national targets which sets out steps to be undertaken as part of the development of a strategy relating to onshore renewable energy. These steps incorporate the proposed regional planning implementation steps as set out above; feedback from stakeholder consultation; as well as a benchmarking exercise.

An overview of these regional planning implementation steps, and a more detailed description of the sub-steps, are set out in Section 2.

2 RRES METHODOLOGY FOR MEETING NATIONAL TARGETS

An overview of the six steps to be undertaken in a sequential manner when seeking to meet the national targets as part of the wider development of a RRES to support the development of the 2030 grid-scale onshore wind and solar PV energy national targets is set out below in **Figure 2.1**. Further detail on each step is set out in Sections 2.1 to 2.6 below.

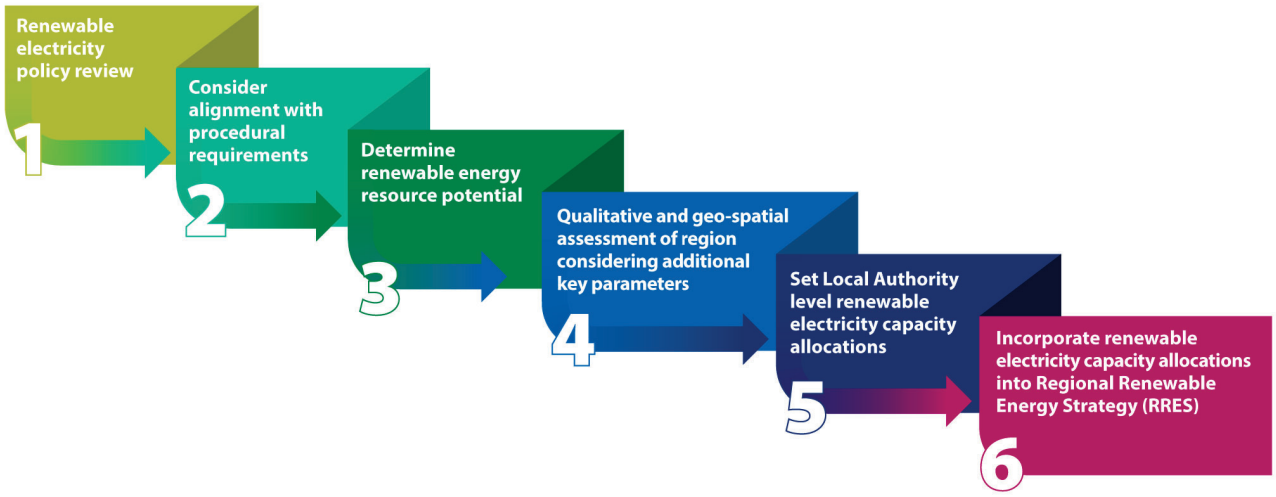

Figure 2-1. Six steps to be undertaken in meeting the national renewable electricity targets.

2.1 Step 1 – Renewable Energy Policy Review

The first step to be undertaken when developing a RRES is to undertake a review of all relevant renewable electricity legislation, regulation, policies, and guidance at international, European, national, regional and local level. The aim of this review is to provide context to key stakeholders on current and emerging policy drivers as well as identify opportunities to synergise with the revision of the regional and neighbouring jurisdiction's RSES.

To support undertaking this step, please see the Appendix A which sets out the key relevant renewable energy legislation and policy for consideration.

2.2 Step 2 - Consider Alignment with Environmental Assessments of wider RSES

The second step is to initiate ongoing environmental assessments which should inform the preparation of the RRES and wider RSES (i.e. SEA, AA, and SFRA). It should be noted that whilst environmental assessments are outlined in Step 2, these should be iterative and be ongoing throughout each step of the methodology, recognising the RRES as part of the wider RSES and environmental assessments thereof.

It is anticipated that the RRES will be formally adopted by each Regional Assembly as part of their overall process of updating their RSES. In this case, the SEA, AA and SFRA processes undertaken for the RSES will inform the RRES, thereby fulfilling legal requirements and enabling a holistic review of renewable energy related policies alongside other spatial planning considerations.

In line with the SEA: Guidelines for Regional Assemblies and Planning Authorities (2022)[19], the iterative nature of the SEA process will form a central component of the preparation of each RSES and there should be integration between the iterative procedures of preparing the Environmental Report and of each draft RSES, so that the drafting of each RRES (which will form part of the wider RSES) is informed by environmental considerations from the outset through to its finalisation.

The stages in undertaking the wider RSES and associated environmental assessments are shown in **Figure 2.2**[20].

Figure 2-2. The key stages in undertaking the RSES and associated environmental assessments.

2.3 Steps 3 – 5: Overall methodology to meet regional renewable energy capacity allocations and develop Local Authority-level renewable energy capacity allocations

Steps 3, 4 and 5 form the core methodology to support Regional Assemblies in meeting the national renewable electricity targets, plan for the regional renewable electricity capacity allocations, as well as developing Local Authority-level renewable electricity capacity allocations.

These steps flow together and comprise the assessment of the regional baseline and the gap to the renewable electricity capacity allocations for both onshore wind energy development and grid-scale solar PV; followed by a further qualitative and geo-spatial assessment of each region considering additional key parameters (i.e. key stakeholder views; technology-specific resource quality; grid/infrastructural constraints and facilitators; socio-economic considerations; landscape sensitivities; heritage, biodiversity and environmental protection) in order to identify sufficient theoretical areas (in kilometres squared (km^2)) for renewable electricity development within the region, and ultimately within Local Authority boundaries.

The translation of the regional renewable electricity capacity allocations to each Local Authority, as part of the development of the wider strategy, will be directly informed by all statutory iterative environmental assessments, including, SFRA, AA and SEA processes, and the strategic environmental protection objectives therein, as per **Figure 2.2** above.

[19] Strategic Environmental Assessment: Guidelines for Regional Assemblies and Planning Authorities (www.gov.ie)

[20] Eastern & Midland Regional Assembly Regional Spatial and Economic Strategy (RSES) - Eastern & Midland Regional Assembly (emra.ie)

These areas of theoretical development potential identified at Local Authority level are converted into Local Authority-level capacity generation allocations (MW) through the consistent application of **Capacity Intensity Factors (MW per km^2)** and **Project Delivery Rates (%)** that align with the national targets.

- **Capacity Intensity Factors (CIF) (MW per km^2)** is an assumed rate of energised capacity over a square kilometre if that land was devoted to the renewable energy technology in question. It is measured in megawatts (MW) per kilometre squared (km^2).

  Note: The following Capacity Intensity Factors should be used for this exercise:

  - Wind: 15 MW/km^2
  - Solar Photovoltaic (PV): 50 MW/km^2

  These CIFs have been developed based on the Sustainable Energy Authority of Ireland (SEAI) research, which was based on data on existing projects, previous research, and industry reports. Commercial considerations and design trends in technology were also taken into account.

- **Project Delivery Rates (PDR) (%)** is an assumed percentage of success for converting land that is theoretically available (based on high-level mapping exercises) into an operational renewable electricity project. It is based on an assessment of cumulative probability of previous projects and informs the likelihood of a given land area, ultimately and successfully, converting into an operational grid-scale onshore wind or solar PV development. This rate accounts for attrition at all stages of project delivery, including land availability, planning consent, grid connection, power purchase auction/ agreement and project funding.

  Note: A PDR of 15% for both onshore wind and solar should be used PV for the Step 3 exercise.

  This PDR was developed by the SEAI, based on practical experience from historical project development.

In cases where it may be suitable to vary the CIF and PDR on a regional or local basis; any proposed changes should be agreed in advance between the Department of Climate, Energy and the Environment (DCEE), the Department of Housing, Local Government and Heritage (DHLGH) and each Regional Assembly in order to ensure that the proposed CIF and PDR remain consistent and aligned with the achievement of the national targets.

In order to align with and meet the national targets, Regional Assemblies may need to apply an iterative process, integrated with the environmental assessment processes of the wider plan making process, between Steps 4 and 5 in order to identify sufficient land area (km^2).

An outline and a detailed description of how these steps link together is set out below in **Figure 2.3**. Further detail on Steps 3 to 5 is outlined in Sections 2.3.1 to 2.3.3 below.

Step 3 should be read in conjunction with **Appendix C: Step 3 Technical Handbook** which provides detailed guidance on determining the renewable electricity resource potential of the region.

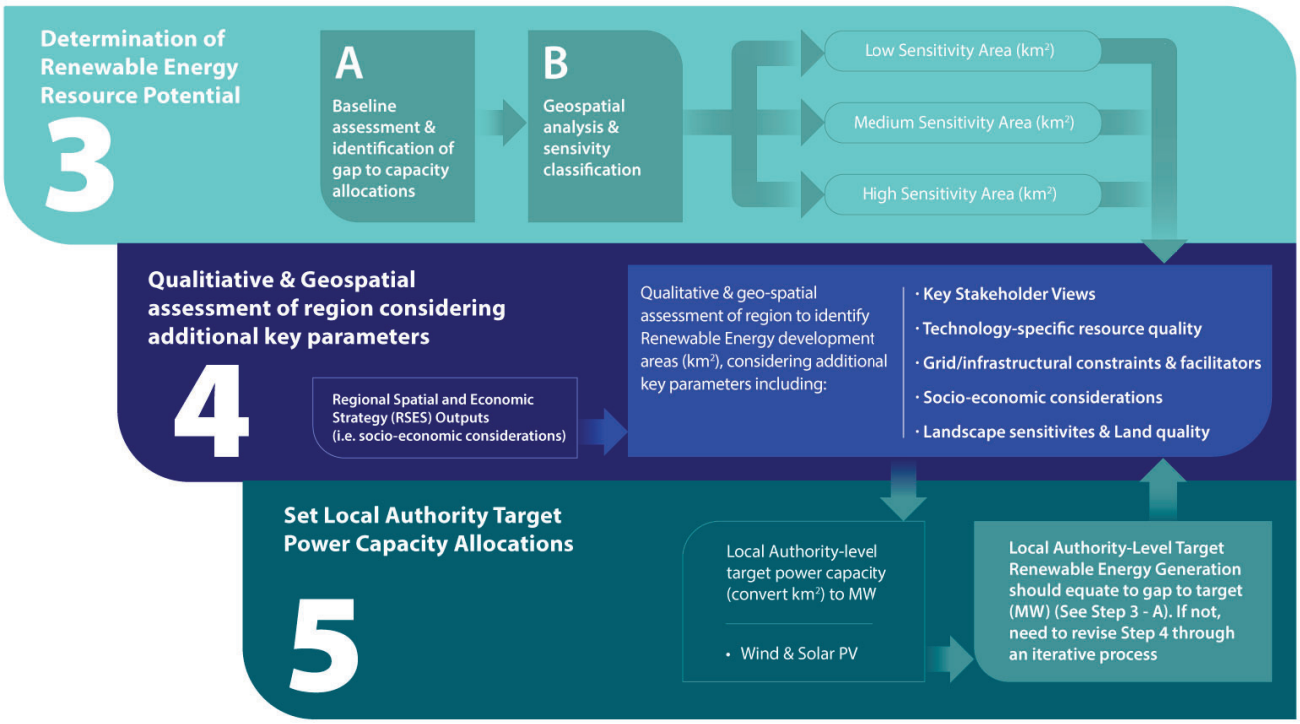

Figure 2-3. Detailed description of Steps 3 to 5.

2.3.1 Step 3 - Determine renewable electricity resource potential

The third step to be undertaken in developing a RRES is the determination of renewable electricity resource potential within the region. The aim of this step is to spatially identify key areas (km^2) within the region where there are potential renewable electricity resources in a manner consistent with proper planning and sustainable development.

There are two phases to this process:

Phase A. Baseline assessment and identification of renewable electricity 'Gap to Capacity Allocations'.

Phase B. A geospatial analysis and sensitivity classification.

Phase A. Baseline assessment and identification of renewable electricity 'Gap to Capacity Allocations'.

Phase A involves undertaking a **Baseline Assessment** of the installed renewable electricity capacity (measured in megawatts (MW)) within the region and then identifying the remaining **Gap to Capacity Allocation** in order to achieve the regional '% of National Share in 2030' as set out in the First Revised NPF[21], which is aligned with the 2030 National Targets set out in the CAP 2025.

Phase A has five stages:

Stage 1. Examine the latest year baseline based on existing installed renewable electricity capacity;

Stage 2. Review the 2030 national targets and regional renewable electricity capacity allocations as set out in the national CAP and first revised NPF respectively;

Stage 3. Identify the 'Gap to Capacity Allocation' by calculating the required additional electricity generation needed to reach the regional renewable electricity capacity allocations;

Stage 4. Convert the Gap to Capacity Allocation into Minimum Land Area required to meet the Gap to Capacity Allocation; and

[21] National Planning Framework First Revision – April 2025 - The National Planning Framework (Page 135)

Stage 5. Convert the minimum land area required into Total Theoretical Land Area needed to be identified to achieve the Gap to Capacity Allocation.

Further technical guidance and links to resources to support Regional Assemblies in undertaking Phase A is set out in **Appendix C: Step 3 Technical Handbook**.

Phase B. A geospatial analysis and sensitivity classification.

Phase B requires undertaking a **quantitative geospatial analysis** of each region in order to spatially identify land areas in order to facilitate sufficient development to meet the renewable electricity Gap to Capacity Allocations, as determined in Phase A.

Firstly, certain physical constraints are identified and excluded from the analysis; the remaining areas within the region are then spatially classified (measured in km^2) into *High, Medium, Low* or *No* sensitivity, based on distance from certain environmental, planning and infrastructural factors. These areas should be then considered for renewable electricity development potential; and then be subsequently aggregated and compared with the total required land-take in order to meet the Gap to Capacity Allocations as determined in Phase A.

An iterative approach within the second Phase analysis (in terms of the quantity of land taken from each sensitivity spatial classification) may need to be undertaken, in order that sufficient areas can be identified within the region, to meet the total required land-take.

The following process should be followed when undertaking Phase B:

Stage 1. Identify the Available Areas[22];

Stage 2. Geospatially classify the remaining areas into *High*, *Medium*, *Low* and *No* sensitivity[23];

Stage 3. Aggregate the total land areas for each sensitivity class;

Stage 4. Compare Phase B outputs with Phase A.

Further technical guidance and links to resources to support Regional Assemblies in undertaking Phase B is set out in **Appendix C: Step 3 Technical Handbook**.

2.3.2 Step 4 – Qualitative and geospatial assessment of the region considering additional parameters

The fourth step to be undertaken in developing a RRES is the qualitative geospatial assessment of the region considering additional parameters, informed by the information generated from the RSES revision. The aim of this step is to build on the Step 3 analysis, taking into account wider consideration of regional and local specific resources, characteristics, constraints and facilitators, prior to the determination of Local Authority-level renewable electricity capacity allocations.

At a regional level, as well as those generated as part of the RSES revision, consideration shall be given to various factors, including but to limited to:

- Key stakeholder views (including relevant Northern Ireland bodies, where appropriate);
- Cumulative Impact and Transboundary issues;
- Technical grid and infrastructural opportunities and constraints;
- Technology-specific resource quality (i.e. wind speeds, solar radiation);
- Landscape sensitivity and policies;

[22] Note: Areas identified through the geoprocessing of Exclusion Criteria that are determined to be unsuitable for renewable electricity development and therefore, should not be considered further for analysis.

[23] Note: Classifying Available Areas based on a defined distance from a specific environmental, infrastructural or planning criterion. For example, 'High' refers to areas in closest proximity to a specified environmental / infrastructural / planning criterion and therefore development within it is deemed to have a potentially high impact. 'No' sensitivity classification refers to areas that fall outside the defined proximity of the associated criteria and therefore development within it is expected not to have any potentially significant impact.

- Iterative alignment with all statutory environmental assessments, the strategic environmental objectives therein and/or other environmental mitigation (i.e. AA);
- Land-Use considerations and opportunities (including multiple land uses and co-location); and
- Socio-economic considerations and opportunities (See Appendix D).

Consideration and balancing of these (and other qualitative) factors will allow for the identification of land areas which are more suitable and less suitable for renewable electricity infrastructure development in the context of 2030 targets. This assessment will result in the identification of a quantum of potentially developable land within a region and ultimately, within a Local Authority-boundary. This will be an iterative process (see Step 5), as it is critical that enough land area is identified within a region so that the Regional Assemblies are able to collectively meet the national renewable electricity targets.

To Note: *The quantum of theoretical land area identified through this process is done to support the allocation of Local Authority target power capacity allocations, and act solely as a decision support tool. The RRES (forming part of the wider RSES) will not spatially designate or allocate where within a Local Authority allocations may be developed. The designation of lands for renewable energy development is to be undertaken as part of the statutory City / County Development Plan (DP) process, which may include a Local Authority Renewable Energy Strategy or Wind Energy Strategy. As such, each Local Authority will determine which land areas are most suited and least suited for grid-scale renewable development, following the completion of the RRES by their respective Regional Assembly.*

2.3.3 Step 5 – Set Local Authority-level target power capacity allocations[10]

The fifth step to be undertaken is setting Local Authority-level target power capacity allocations. The aim of this step is to develop capacity allocations that are achievable, balanced, and align with the national ambitions under the Climate Action and Low Carbon Development Amendment Act 2021 and targets in the CAP 2025 (and any annual revisions), the requirements of the Planning and Development Act 2024 and objectives set out in the first revision of the NPF, specifically National Planning Objective 74.

The process for determining specific Local Authority-level target power capacity allocations is supported by quantifying the areas identified by renewable electricity resource potential, generated through Steps 3 and 4, into Local Authority-level electricity capacity generation (MW) allocations through the application of capacity intensity factors and project delivery rates, as set out in **Appendix C: Step 3 Technical Handbook**.

Using consistent capacity intensity factors and project delivery rates across each Regional Assembly and Local Authority allows for transparency in the methodological approach to ensure all capacity allocations are achievable and balanced, however, there is recognition that in practice these factors will vary at Local Authority and also project level, but at a regional level of analysis it is recommended to use these fixed rates.

To Note: *In cases where it may be suitable to vary the assumed PDR or CIF on a regional or local basis; any proposed changes should be agreed in advance between the Department of Climate, Energy and the Environment (DCEE), the Department of Housing, Local Government and Heritage (DHLGH) and each Regional Assembly in order to ensure that the proposed CIFs or PDR remain consistent and aligned with the achievement of the national targets.*

If, after summing up the overall capacity allocations within the region, it is possible that not enough capacity in MW has been reached to meet their allocated regional capacity allocations, to collectively reach the national targets, a further re-consideration and adjustment of the parameters used in Step 4 may be required in order to meet the regional capacity allocation. There may be a number of iterations required for Step 4, in order to ensure that any potentially varying or competing objectives and priorities of individual Local Authorities in the region are satisfactorily balanced. This will be an iterative process, in line with the ongoing RRES environmental assessments, as summarised in Step 2.

Each Regional Assembly must, as part of this iterative process, collate information on the development pipeline (by way of a review of extant / existing planning permissions) to ensure that, as a minimum, each Local Authority accepts a capacity allocation that protects projects that have planning permission, but are yet to be constructed. This will involve identifying and tabulating, where possible, the proposed megawatt (MW) figure from all relevant planning application documentation, at both Local Authority and An Coimisiún Pleanála level, for each Regional Assembly area.

2.4 Step 6 – Incorporate Capacity Allocations into Regional Renewable Energy Strategy

The sixth step to be undertaken is to integrate the Local Authority target power capacity allocations into the development of the overall RRES itself, which should incorporate an implementation framework to, amongst its requirements, support the delivery of the national targets and regional renewable electricity capacity allocations, and a regular monitoring and evaluation process.

2.4.1 RSES implementation

As described in Section 1.3.1, following the commencement of the relevant provisions of the Planning and Development Act 2024[1]; not later than six months after the publication of a revised or new NPF by the Government, a Regional Assembly shall commence a review of any RSES for its region for the time being in force. As described in Section 1 above, each Regional Assembly shall, amongst other requirements, make provision within the RSES for a strategy relating to onshore renewable energy, a RRES.

Furthermore, as described above in Section 1.3.1., and as stipulated under Section 42(8) of the Planning and Development Act 2024[1], in reviewing a development plan, or making a development or a variation to a development plan, a planning authority shall, amongst other items, ensure the proper planning and sustainable development of the areas to which the development plan relates and ensure that the development plan is materially consistent with the revised NPF; where the planning authority is a coastal planning authority, with the National Marine Planning framework; the RSES for the region within which the planning authority's functional areas is located (incorporating a renewable energy strategy as stipulated under Section 29(1)(e) and as described above in section 1); and any relevant National Planning Policies and Measures, as well as take account of any relevant National Planning Policy Guidance.

Furthermore, under Sections 44(1) and 44(2) of the Planning and Development Act 2024[1], a planning authority shall a prepare a strategy for the sustainable development and regeneration of the functional area of the planning authority, setting out objectives relating to, amongst others, the provision or facilitation of the provision of energy generation infrastructure and facilities, including for the generation of renewable energy.

2.4.2 Monitoring and evaluation process

It is recommended that a regular monitoring and evaluation process be put in place to monitor and evaluate the implementation of the overall RRES and assess progress against the delivery of the national targets, regional renewable electricity capacity allocations, and Local Authority level target power capacity allocations, in line with the requirements under Section 35 of the Planning and Development Act 2024[1].

It is recommended that each Regional Assembly prepare a report monitoring progress implementing and securing the overall objectives of the RRES. This process should take place on a regularly scheduled basis and in alignment with the provision under the Planning and Development Act 2024[1].

The following key performance indicators (KPIs) could be monitored as part of this process:

1. Consumption of renewable electricity (as part of the wider energy strategy whereby consumption of energy is considered alongside the production of energy and renewable electricity);
2. Overall % of capacity allocation installed or operational in each LA area and progress made against renewable electricity capacity allocations (and review upwards if applicable), and any emerging trends with respect to the achievement of the allocation;
3. Review of capacity intensity factors and project delivery rates realised across the Regional Assembly and respective Local Authorities;
4. Impact of strategy objectives.

It should be noted that only suitable, up-to-date, and reliable data which is readily accessible should be used.

Once the KPIs have been defined, the Regional Assemblies should establish robust monitoring systems, that are aligned with existing systems where possible, including those utilised as part of the RSES process (i.e. the Regional Development Monitor (RDM)).

Appendix A – Key Renewable Energy legislation and policy (as at 27th November 2024)

A.1 International Legislation and Policy

A.1.1 The United Nations 2030 Agenda for Sustainable Development

In September 2015, United Nation (UN) Member States (MS) adopted the 2030 Agenda for Sustainable Development ('Transforming our World'). The 2030 Agenda is a plan of action for people, planet and prosperity and applies to both developed and developing countries. The focus of the 2030 Agenda is 17 Sustainable Development Goals (SDGs) that integrate the three indivisible dimensions of sustainable development – economic, social and environmental. These SDGs recognise that ending poverty and other deprivations must go together with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve oceans and forests. Along with the SDGs, there are targets and indicators and the Division of SDGs evaluates the systemwide implementation of the 2030 agenda.

As a European Union (EU) MS and member of the UN, Ireland is a signatory to the UN SDGs and must display a commitment to implementing these global goals. In October 2022, the Department of the Environment, Climate and Communications (DECC) published the second National Implementation Plan for the Sustainable Development Goals 2022-2024 which sets out the objectives, actions, and measures required to increase Ireland's ambition and strengthen implementation structures to achieve the SDGs. These are subsequently heavily reflected throughout the National Planning Framework (NPF) and the Regional Spatial and Economic Strategies (RSES).

Further information can be found here: https://sdgs.un.org/goals

https://www.gov.ie/en/publication/e950f-national-implementation-plan-for-the-sustainable-development-goals-2022-2024/

A.1.2 Paris Agreement

In December 2015, a legally binding global agreement on climate change was agreed under the Paris Agreement by 195 Parties to the United Nations Framework Convention on Climate Change (UNFCCC); representing 95% of global emissions. Through two clearly defined goals, the Paris Agreement strives for progressive and ambitious climate action over time by:

(i) holding global average temperature increase to well below 2°C and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels; and

(ii) increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience.

The Agreement included commitments from all major emitting countries to cut their climate pollution and to strengthen those commitments over time; and provided a pathway for developed nations to assist developing nations in their climate mitigation and adaptation efforts. It also created a framework for the transparent monitoring, reporting, and ratcheting up of countries' individual and collective climate goals.

The ratification of the Agreement by the European Union (EU) triggered its entry into force on 4 November 2016; the same date the Agreement was ratified by Ireland. This legally-binding Agreement, represented a global milestone in international efforts to achieve a peaking of greenhouse gas (GHG) emissions as soon as possible and to achieve net zero emissions by the second half of the century. These efforts are now represented by 188 Nationally Determined Contributions (NDCs) which will increase in ambition over time.

The Paris Agreement will measure the effectiveness of NDCs in achieving the goals of the Agreement via a series of global stocktakes, to be held in five-yearly cycles beginning in 2023. It is anticipated, in line with the principles of the Agreement, that the ambition reflected in each Party's NDC will increase over time. Ireland's contribution to the Paris Agreement will be via the NDC tabled by the EU on behalf of its Member States (MS), which commits the EU as a whole to reduce GHG emissions by at least 40% by 2030, compared with 1990 levels. The Emissions Gap Report 2023 published ahead of COP28 found that significantly more

ambitious and rapid action is required this decade to deliver the emissions reductions required to meet the Paris Agreement goals.

Further information can be found here: https://www.un.org/en/climatechange/paris-agreement

The Emissions Gap report can be found here: https://www.unep.org/resources/emissions-gap-report-2023

A.2 European Legislation and Policy

A.2.1 The European Green Deal

The European Green Deal is the European Union's (EU's) long-term growth strategy which aims to make Europe climate-neutral by 2050 and put renewable energy at the heart of the energy system. As part of the European Green Deal and enshrined in the European Climate Law, the EU has set itself a binding target of achieving climate neutrality by 2050. As an intermediate step towards climate neutrality, the EU raised its 2030 climate ambition, committing to cutting greenhouse gas emissions by at least 55% by 2030 – a target which was increased to 57% at the Conference of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC), also known as COP27 in 2022. The EU is continuing to work on the revision of its climate, energy and transport-related legislation under the so-called 'Fit for 55 package' in order to align current laws with the 2030 and 2050 ambitions.

The European Green Deal focuses on three key principles for a clean energy transition:

(i) ensuring a secure and affordable EU energy supply;

(ii) developing a fully integrated, interconnected, and digitalised EU energy market; and

(iii) prioritising energy efficiency, improving the performance of buildings, and developing a power sector based largely on renewable sources.

The European Commission's (EC's) main objectives to achieve this are:

- Building interconnected energy systems and better integrated grids to support renewable energy sources;
- Promote innovative technologies and modern infrastructure;
- Boost energy efficiency and eco-design of products;
- Decarbonise the gas sector and promote smart integration across sectors;
- Empower consumers and help EU countries to tackle energy poverty;
- Promote EU energy standards and technologies at global level; and
- Develop the full potential of Europe's offshore wind energy.

Further information can be found here: A European Green Deal (europa.eu)

A.2.2 EU Policy Framework for Climate and Energy from 2020 to 2030

European goals and targets to tackle climate and energy have been set out in the form of the European Union (EU) Climate and Energy Packages. The EU 2030 Climate and Energy Framework continues on from the base set out from the preceding 20-20-20 Agreement and sets out EU-wide targets and policy objectives for the period from 2021 to 2030.

The 2030 Climate and Energy framework includes EU-wide targets and policy objectives for the period from 2021 to 2030. As part of the European Green Deal, the Commission proposed in September 2020 to raise the 2030 GHG reduction target, including emissions and removals, to at least 55% compared to 1990. It also looked at the actions required across all sectors, including increased energy efficiency and renewable energy, and started the process of making detailed legislative proposals by July 2021 to implement and achieve the increased ambition. This will enable the EU to move towards a climate-neutral economy and implement its commitments under the Paris Agreement by updating its Nationally Determined Contribution (NDC).

The Framework establishes new targets and measures to make the EU's economy and energy system more competitive, secure and sustainable. It sets out binding targets relating to GHG emissions, renewables and energy efficiency to be met by each Member State (MS) by 2030 of:

- From 40% to at least 55% cut in greenhouse gas emissions (from 1990 levels);

- From 32% to 42.5% share for renewable energy; and
- From 32.5% to 36% improvement in energy efficiency.

A review clause by 2023 allows for a potential upward revision of the EU level target. The agreement on the 2030 framework, specifically the EU domestic GHG reduction target of at least 40%, forms the basis of the EU's contribution to global climate change. The 2020 EU Effort Sharing Decision target commits Ireland to reducing emissions from those sectors that are not covered by the Emissions Trading Scheme (ETS) (e.g., agriculture, transport, residential, non-energy intensive industry, commercial services and waste) to 20% below 2005 levels. This regulation was amended in 2023, and the emission reduction target was subsequently updated to 40% below 2005 levels.

Further information can be found here: 2030 climate & energy framework (europa.eu)

Further information on Effort Sharing can be found here: https://climate.ec.europa.eu/eu-action/effort-sharing-member-states-emission-targets/effort-sharing-2021-2030-targets-and-flexibilities_en#:~:text=The%202023%20revision%20of%20the%20Effort%20Sharing%20Regulation%20amended%20the,in%20the%20years%202023%2D2030.

A.2.3 'Fit for 55' Package

The 'Fit for 55' package is a suite of proposals to update, revise, and create a supportive EU legislative framework; enabling the EU to comply with European climate law and achieve its legal obligation of reducing EU emissions by 55% by 2030.

The headline targets include a reduction in EU Emission Trading System (ETS) emissions by 62% (relative to 2005) by 2030 and a reduction in emissions covered by the Effort Sharing Regulation of 40% relative to 2005 by 2030 EU-wide. The target for Irish emissions in that sector is a reduction of 42%. In addition, in the Land Use, Land Use Change, and Forestry (LULUCF) sector, Ireland's target is to reduce net emissions by 0.626 $MtCO_{2eq}$ by 2030, relative to the baseline average of emissions in 2016, 2017 and 2018[24]. These targets are relatively consistent with the reductions in emissions that should arise from Ireland's new national targets, although the EU targets allow for more flexibility between sectors.

Further information can be found here: https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition/

A.2.4 Renewable Energy Directive (2018/2001/EU)

The EU Renewable Energy Directive (2018/2001/EU) (RED)[25] entered into force in December 2018, as part of the Clean Energy for all Europeans Package (CEP)[26]. It is aimed at keeping the EU a global leader in the growth of renewables, and, more broadly, helping it to meet its emissions reduction commitments under the Paris Agreement[27].

In October 2023, RED III (2023/2413)[28] was published, raising the collective target for the share of energy from renewable sources in the EU's energy mix from at least 32% to at least 42.5% by 2030.There is a requirement for RED III to be transposed into national legislation, for it to have effect in Ireland. Beyond that mandatory level, the Directive states that Member States (MSs) should collectively endeavour to achieve an overall Union renewable energy (RE) target of 45%, in line with the REPowerEU Plan.

[24] gov.ie - Climate Action Plan 2024

[25] Renewable energy directive (europa.eu)

[26] Clean energy for all Europeans package (europa.eu)

[27] The Paris Agreement | UNFCCC

[28] Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652 (europa.eu)

To support the delivery of this target, RED III stipulates that MSs should support the faster deployment of RE projects by carrying out a coordinated mapping for the deployment of RE and related infrastructure in their territory in coordination with local and regional authorities. Under the Directive[14]:

- As per Article 15b, by 21 May 2025, MSs shall identify the land, surface, sub-surface and sea or inland water areas necessary for the installation of renewable energy plants and related infrastructure in order to meet at least their national contributions towards the revised overall renewable energy target for 2030 and in support of reaching the objective of climate neutrality by 2050 at the latest.
- MSs may use existing spatial planning documents for the purpose of identifying those areas and shall ensure coordination among all the relevant national, regional, and local authorities and entities, including network operators, in the mapping of the necessary areas, where appropriate.
- MSs should ensure that such areas reflect their estimated trajectories and total planned installed capacity and should identify specific areas for the different types of RE technology provided for in their integrated national energy and climate plans.
    - The identification of the required land, surface, sub-surface, and sea or inland water areas should take into consideration in particular the availability of energy from renewable sources and the potential offered by the different land and sea areas for RE production of the different types of technology, the projected demand for energy, taking into account energy and system efficiency, overall and in the different regions of the MS, and the availability of relevant energy infrastructure, storage, and other flexibility tools bearing in mind the capacity needed to cater for the increasing amount of RE, as well as environmental sensitivity.
- As per Article 15c, by 21 February 2026, MSs shall designate, as a sub-set of those areas noted above, specific land (including surfaces and sub-surfaces) and sea or inland water areas as renewables acceleration areas for one or more RE sources. Those areas should be particularly suitable for the purpose of developing RE projects, differentiating between types of technology, on the basis that the deployment of the specific type of RE source is not expected to have a significant environmental impact.
- While retaining the discretion to decide on the size of renewables acceleration areas, MSs shall aim to ensure that the combined size of those areas is significant and that they contribute to the achievement of the objectives of the Directive.

Further information on RED III can be found here: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023L2413&qid=1699364355105

A.2.5 REPowerEU Plan

The REPowerEU Plan, presented by the EC in May 2022, is focused on rapidly reducing the EU's reliance on Russian fossil fuels by progressing the clean energy transition and fostering increased collaboration throughout and across MSs to create a more resilient European energy system. REPowerEU builds on the 'Fit for 55' package by putting forward additional actions to save energy through reducing demand and consumption; diversifying energy sources and supplies; accelerating fossil fuel substitution; and improving investment frameworks facilitating reforms, faster permitting, and innovation.

Central to the Plan and highlighting the urgency placed on the clean energy transition by the Commission, is the proposal to increase the renewable energy generation targets outlined in the Renewable Energy Directive (RED II) from 40% up to 45% by 2030, bringing 1,236 Gigawatts (GW) of renewable energy on stream by 2030 and publishing an EU Solar Energy Strategy.

REPowerEU also recognises that wind energy, particularly offshore wind energy where the EU is a global leader, represents a significant opportunity for the EU as resources are typically stable, abundant, and public acceptance is higher. REPowerEU recognises the large-scale nature of offshore wind projects and their strategic importance to the energy supply and security of the EU. The Plan seeks to support efforts from MS to pool their public resources via the Important Projects of Common European Interest (IPCEI) process, particularly where they are focused on breakthrough technologies and innovations along the wind and solar energy value chains.

A key risk identified by REPowerEU is the renewable energy generation supply chains and their potential vulnerability. The Plan recognises that to ensure that wind and solar energy can be maximised and deployed

as quickly as possible; supply chains need to be strengthened. Achieving the REPowerEU goals and overcoming supply chain issues will require diversifying the supply of renewable energy equipment and of critical raw materials, reducing sectoral dependencies, and expanding the EU's clean energy technology manufacturing capacity. Slow and complex permitting processes are also identified by REPowerEU as a key obstacle to unleashing the renewables revolution and undermining the competitiveness of the renewables industry in Europe. To overcome this obstacle and help MS exploit all possibilities for acceleration within the current legislative framework, the EC presents a Recommendation on Permitting.

There is also recognition at European level that while most EU targets and objectives require cross-border coordination and collaboration, implementation of many of the measures remains within the control of the individual MS. As such, REPowerEU recognises that achieving its targets will require reforms and investments commensurate with each MS's available resources and local context. To address this, the EC has published a suite of Country-Specific Recommendations which relate to permitting and calls on the MS to adopt and implement these alongside the RED III as a matter of urgency. The Recommendation proposes measures which streamline procedures at national level, addresses ambiguities in the application of EU legislation, and sets out good practices for MS such as pursuing participatory approaches involving local and regional authorities who would have access to the necessary resources which facilitate the timely realisation of locally adapted investments. The Plan has identified National Energy and Climate Plans (NECPs) as key in delivering the REPowerEU objectives as they play a crucial role in enhancing investor confidence, investment predictability, and provide a good framework for planning and encouraging the reduction of fossil fuels.

Further info can be found here: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en

A.2.6 EU Solar Energy Strategy (COM(2022)221)

In line with EU renewable energy ambitions, an EU Solar Energy Strategy (COM (2022)221) has been published which has set a target of developing over 320 GW of newly installed solar photovoltaic (PV), almost twice the capacity that currently exists, by 2025, and almost 600 GW by 2030. The Strategy aims to accelerate solar energy deployment within the EU, ensuring access to sustainable solar energy and promoting international cooperation in the field of solar power. The strategy identifies barriers and challenges in the solar energy sector and outlines three initiatives to overcome them: the European Solar Rooftops Initiative; the EU large-scale skills partnership; and the EU Solar PV Industry Alliance.

Further information can be found here: EU Solar Energy Strategy Initiative details (europa.eu)

A.2.7 Governance of the Energy Union and Climate Action (EU) Regulation 2018/1999

To help the EU reach its 2030 climate and energy targets, this Regulation sets common rules for planning, reporting and monitoring in order to ensure that EU planning and reporting are synchronised with the ambition cycles under the Paris Agreement. Under this Regulation, EU Member States develop integrated National Energy and Climate Plans (NECPs) based on a common template, covering the five dimensions of the Energy Union:

1. Decarbonisation (greenhouse gas reduction and renewables);
2. Energy security;
3. Energy efficiency;
4. Internal energy market; and
5. Research, innovation and competitiveness

MS had to submit their 2021-2030 draft Plans by the end of 2018 and final Plans by the end of 2019. The EC has assessed these both at EU and MS level. MS needed to update their NECPs by the end of June 2023 in a draft form and by 30 June 2024 in a final form in order to reflect an increased ambition. Until then, MS can adapt national policies and measures at any time, provided such changes are included in the biennial integrated national energy and climate progress reports to the Commission.

Further information can be found here: https://climate.ec.europa.eu/eu-action/climate-strategies-targets/progress-made-cutting-emissions/governance-energy-union-and-climate-action_en

A.2.8 European Commission Public Consultation on Reform of Electricity Market to Support a Clean and Affordable Energy Transition

In January 2023, the EC launched a public consultation on the reform of the EU's electricity market design to better protect consumers from excessive price volatility, support their access to secure energy from clean sources, and make the market more resilient. The consultation focused on four main areas:

1. Making electricity bills less dependent on short-term fossil fuel prices, and boosting the deployment of renewables;
2. Improving market functioning to ensure security of supply, and fully utilise alternatives to gas, such as storage and demand response;
3. Enhancing consumer protection and empowerment; and
4. Improving market transparency, surveillance and integrity.

Ireland's summary response was as follows:

Ireland is part of the cross-jurisdictional Single Electricity Market of Ireland and Northern Ireland, which operates a small, shared, island power system that is reliant on the availability of a very high proportion of intermittent variable renewable electricity, limited interconnection, and impacted significantly and routinely by cross-border considerations. These factors distinguish the Irish electricity system from other Member States (MS) that are part of the vast continental synchronous system. Such unalterable physical characteristics impact how the system operates physically and how market participants consider investment decisions. These factors inform our views on the most appropriate market design for Ireland. Ireland welcomes the consultation and the priority placed by the EC and MS on improving the efficiency of the electricity market and optimising the market to ensure best value for consumers who have been materially impacted by recent price shocks. Delivering the benefit of renewable electricity to consumers should be a guiding principle in all measures considered by the EC at this time. Ireland's priority is achieving a secure transition to our 2030 objective of integrating 80% renewables into our power system. Ireland fully supports the EC's ambition to utilise the market to accelerate renewables deployment – we view this as a critical enabler to almost doubling the volume of renewable electricity in Ireland from 40% today to 80% in the next seven years. Ireland agrees that utilising long-term instruments to incentivise renewables, embedding investor certainty and integrating technologies that enable flexibility through a competitive electricity market will be critical to achieving this transformation. Ireland is pioneering the integration of large volumes of intermittent variable renewables with low variable costs into the power system and is instructive for decarbonising economies all over the world. It shows the great potential Europe has to lead this agenda. However, it also highlights the importance of market signals and incentives that enable investment in modern, low-emitting, renewable-gas ready conventional generation and other enabling technologies. In Ireland's view, the Capacity Remuneration Mechanism (CRM) is essential to operating an 80% renewable power system. Other European countries are likely to soon face similar experiences and Ireland believes all efforts should be made to streamline and reduce or remove barriers to efficient capacity mechanisms. This is critical to energy security and to maintaining public confidence in the decarbonisation agenda.

Further information can be found here: https://www.gov.ie/pdf/?file=https://assets.gov.ie/247481/9fc7cd4e-b01e-414a-a28e-44405d7ce372.pdf#page=null

A.2.9 EU Nature Restoration Law

The Nature Restoration Law, a key element of the EU Biodiversity Strategy for 2030, is a comprehensive legislative initiative aimed at revitalising Europe's natural ecosystems. It sets binding targets to restore degraded ecosystems, particularly those with the most potential to remove and store carbon, to improve climate resilience, and prevent and reduce the impact of natural disasters.

This Law seeks to restore ecosystems, habitats and species across the EU's land and sea areas in order to enable the long-term and sustained recovery of biodiverse and resilient nature; contribute to achieving the EU's climate mitigation and climate adaptation objectives; and meet international nature and biodiversity commitments. Through habitat restoration, pollution control and sustainable land and sea management, aligned with a set of binding targets and obligations for specific habitats and species, this Law seeks to protect and enhance Europe's natural heritage. The overarching objective of the legislation is to ensure MSs put in place effective and area-based restoration measures in order to reach the ecosystem-specific targets

and adopt recovery measures that will cover at least 20% of the EU's land and sea areas by 2030, and all ecosystems in need of restoration by 2050. This means that national governments will have to quantify and map out areas that are to be restored, describe restoration measures, and outline timescales and financing requirements.

The Law calls for responsible land use practises and for a balance between conversation efforts and other human activities, encouraging stakeholders to consider the ecological implications and innovate in ways that support both biodiversity and broader climate goals. In line this with, it requires that the development of national restoration plans must be coordinated with the mapping of those areas required to meet national contributions towards 2030 renewable energy targets.

To accommodate the relationship between land allocations required to achieve European RE targets and the ambitious spatial targets under the new EU Nature Restoration law, which in the Irish context is particularly borne out in former industrial peatlands areas; the European Council added an article providing that the planning, construction, and operation of renewable electricity power plants, their connection to the grid and the related grid itself and storage assets, are presumed to have an overriding public interest. This means that they would benefit from a derogation to the obligations of continuous improvement and non-deterioration. In addition, MSs would be able to exempt these projects from the obligation to demonstrate that no less damaging alternative solutions are available, if a Strategic Environmental Assessment (SEA) has been carried out. To secure the alignment with the Renewable Energy Directive (RED), MSs may also restrict in the application of these exemptions in accordance with the priorities set in their national integrated energy and climate plans[29].

Further information can be found here: The EU #NatureRestoration Law

A.2.10 EU Energy Performance of Buildings Directive (EPBD)

The revised Energy Performance of Buildings Directive (EPBD) (EU/2024/1275) entered into force in EU countries in May 2024; aiming to contribute to the objective of reducing GHG in the building sector by 2030 compared to 2015, and achieving a decarbonised, zero-emission building stock by 2050. EU Directives must be transposed into national legislation by individual Member States, before they can be said to be in force in a particular country.

The revised EPBD works hand in hand with other European Green Deal policies, such as the revised Renewable Energy Directive (RED) and the Alternatives Fuels Infrastructure Regulations.

From a RE perspective, the revised EPBD includes measures such as:

- Increased deployment of solar technologies on all new buildings and certain existing non-residential buildings where technically and economically feasible, and ensuring that new buildings are solar-ready (fit to host solar installations);
- A gradual phase-out of boilers powered by fossil fuels, starting with the end of subsidies to stand-alone boilers powered by fossil fuels from 1 January 2025; and
- Further roll-out of recharging points for electric vehicles in buildings, removing barriers to their installation, enabling smart charging and introducing measures for bike parking in buildings.

Further information can be found here: Energy Performance of Buildings Directive

A.2.11 Alternative Fuels Infrastructure Regulation

In the context of the 'Fit for 55' package, the revised Alternative Fuels Infrastructure Regulation became applicable in April 2024.

The specific objectives of the Regulation are:

- To ensure minimum infrastructure to support the required uptake of alternative fuel vehicles across all transport modes and in all EU Member States (MSs) to meet the EU's climate objectives;
- To ensure full interoperability of the infrastructure; and

[29] gov.ie - National Energy and Climate Plan (NECP) 2021-2030

- To ensure comprehensive user information and adequate payment options at alternative fuels infrastructure.

The Regulation sets a number of mandatory national targets for the deployment of alternative fuels infrastructure in the EU, including:

- For publicly available electric recharging infrastructure for light duty road vehicles (cars and vans), the Regulation sets out mandatory national fleet-based targets;
    - E.g. for every battery electric light duty vehicle, a total power output of at least 1.3 kW must be provided through publicly accessible recharging stations, while for every plug-in hybrid light-duty vehicle, a total power output of at least 0.8 kW must be provided.
- The Regulation also sets out distance-based targets for light duty and heavy-duty road vehicles on the Trans-European Transport Network (TEN-T) core and comprehensive network; and
- EU Member States (MSs) are required to ensure a number of recharging stations are in place for heavy-duty vehicles in urban nodes and in safe and secure parking.

Further information can be found here: Alternative Fuels Infrastructure - European Commission

A.3 National Legislation, Regulations and Policy

A.3.1 Legislative Acts and Regulations

A.3.1.1 Planning & Development (Strategic Infrastructure) Act 2006 (as amended)

Since 2007, this Act, which amends the Planning and Development Act 2000, provides generally for applications for permission/approval for specified private and public strategic infrastructure development to be made directly to An Bord Pleanála. Strategic infrastructure developments are those listed in the 7th Schedule to the 2000 Act as amended. Certain proposed renewable energy developments, by reason of their size and nature, must be determined by An Bord Pleanála. These also generally relate to major energy, transport, environmental and health infrastructure.

Further information can be found here: https://www.irishstatutebook.ie/eli/2006/act/27/

A.3.1.2 Energy (Biofuel Obligations & Miscellaneous Provisions) Act 2010

The Energy (Biofuel Obligation and Miscellaneous Provisions) Act 2010, which entered into force in July 2010, is a significant piece of legislation as it obliges fuel suppliers in Ireland to sell a specified amount of biofuels (i.e. fuels derived from sustainable sources) each year. This obligation supports Ireland in reducing its carbon emissions and developing its biofuel production capacity.

Further information can be found here: https://www.irishstatutebook.ie/eli/2010/act/11/enacted/en/html

A.3.1.3 Planning and Development (Amendment) Act 2010

The Planning and Development Act, 2000 (as amended) forms the foundation of planning in Ireland. It covers a huge range of planning-related issues and combines a wide range of different legislation into one place. The principal regulations supporting this Act are the Planning and Development Regulations 2001, as amended. The Act requires that Development Plans include objectives to promote sustainable settlement and transportation strategies, including reducing energy demand, reducing anthropogenic greenhouse gas (GHG) emissions, and addressing the necessity of adapting to climate change. The Planning Regulations include planning exemptions for specified micro-renewable energy technologies for domestic, industrial, commercial, agricultural and certain other specified developments.

The Planning and Development (Amendment) Act 2010 (section 10(2)(n)) requires that Development Plans include objectives for 'the promotion of sustainable settlement and transportation strategies in urban and rural areas including the promotion of measures to:

i. Reduce energy demand in response to the likelihood of increases in energy and other costs due to long-term decline in non-renewable resources; and

ii. Reduce anthropogenic GHG emissions and address the necessity of adaptation to climate change, taking account of the Local Authority Climate Action Plan (LACAP) (within the meaning of Section 14B of the Climate Action and Low Carbon Development Act 2015), where such a Plan has been made for the area in question; in particular, having regard to location, layout and design of new development'.

Such objectives ensure that climate action is provided for in Development Plans. In addition, LACAPs, when adopted, will have to be taken into consideration in Development Plans.

Further information can be found here: https://www.gov.ie/en/publication/c0ac2-planning-legislation-primary-legislation/

A.3.1.4 Planning and Development Act 2024

The Planning and Development Act 2000 underwent a 'complete fitness check' in order to identify reforms to deliver key infrastructure in housing, transport and renewable energy. The identified reforms have been set out in the Planning and Development Act 2024[30]; the aim of which is to revise, extend and consolidate planning legislation in order to provide for the proper planning and sustainable development of urban and rural areas.

The Planning and Development Act 2024[30] (the Act) provides a new and updated legislative framework for the proper spatial planning and sustainable development across national, regional and local levels and ensures that the planning system is focused on both supporting and where appropriate, regulating development on both land and within the maritime area. The Act aims to provide a planning system which can deliver infrastructure, enhance natural assets and amenities, and preserve, protect, and improve the quality of the environment; delivered through a plan-led, consistent system based on an integrated hierarchy of plan-making across all tiers of the planning hierarchy, consisting of:

- A National Planning Framework (NPF);
- Three Regional Assembly Regional Spatial and Economic Strategies (RSESs);
- 31 Local Authority (LA) Development Plans; and
- Area plans as mandated or required by planning authorities.

With respect to the Regional Assemblies, following enactment of the Act; not later than six months after the publication of a revised or new NPF by the Government, a Regional Assembly shall commence a review of any RSES for its region for the time being in force[Error! Bookmark not defined.]. In terms of renewable energy (RE), the following should be noted:

- Under section 29(1)(e) of the Act, it is stipulated that each RSES shall, amongst other requirements, make provision for a strategy relating to onshore renewable energy to:
  - (v) Meet national targets,
  - (vi) Identify and facilitate electricity grid infrastructure, including upgrade projects and support infrastructure,
  - (vii) Make provision for energy security, and
  - (viii) Promote steps for coordination and cooperation between public bodies.
- The development of a Regional Renewable Energy Strategy (RRES) by each Regional Assembly will, by making provision for the points listed above, deliver a regional balance of the distribution of renewable technologies and associated enabling infrastructure, while supporting the electricity carbon budget programme and the 75% cut in emissions within the electricity sector by 2030, ultimately enabling the achievement of national climate objective of a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050.

With respect to the LAs; in terms of RE, the following should be noted:

- Under section 42(8), in reviewing a Development Plan, or making a development or a variation to a Development Plan, the Act stipulates that a planning authority shall, amongst other items, ensure the

[30] Planning and Development Act 2024

proper planning and sustainable development of the areas to which the Development Plan relates and ensure that the development plan is materially consistent with the draft first revised NPF; where the planning authority is a coastal planning authority, with the National Marine Planning framework; the RSES for the region within which the planning authority's functional areas is located (incorporating a RRES as stipulated under section 29(1)(e) (as described above) and any relevant National Planning Policies and Measures, as well as take account of any relevant National Planning Policy Guidance.

- Under sections 44(1) and 44(2) of the Act, a planning authority shall prepare a strategy for the sustainable development and regeneration of the functional area of the planning authority, setting out objectives relating to, amongst others, the provision or facilitation of the provision of energy generation infrastructure and facilities, including for the generation of renewable energy.

Further information can be found here: Planning and Development Act 2024

A.3.1.5 Climate Action and Low Carbon Development (Amendment) Act 2021

The Climate Action and Low Carbon Development Act 2015, as amended, by the Climate Action and Low Carbon Development (Amendment) Act 2021, enshrines the National Climate Objective to pursue and achieve, by no later than the end of 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy. The 2015 Act, as amended, frames Ireland's legally binding climate ambition to delivering a reduction in greenhouse gas (GHG) emissions of 51% by 2030. This will place the country on a trajectory to achieving climate neutrality no later than the end of 2050. These legislative requirements are further enhanced in the Climate Action Plans (CAPs) 2019, 2021, 2023, 2024 and 2025.

Under the second iteration of the Renewable Energy Directive (RED II) (also a component of the EU Climate and Energy Package 2008), Ireland was required to achieve 16% of its total final energy consumption from renewable energy sources by 2020. The 16% target was broken down by category as follows:

Energy Category	% of Total Final Consumption (TFC)
Electricity	40%
Heat	12%
Transport	10%

The 2021 Act provides the first two five-year carbon budgets proposed by the Climate Change Advisory Council. These budgets should equate to a total reduction of 51% over the period to 2030, relative to a baseline of 2018. From 2021 these carbon budgets have called for an annual reduction of 4.8% in energy related CO_2 emissions.

To meet the emission targets, the decarbonisation of the electricity generation sector is vital as electricity accounted for 17% of Ireland's GHG emissions in 2018 (equating to 10.6 Metric tonnes (Mt) carbon dioxide equivalent (CO_{2eq})). Total Irish electricity demand over the next ten years is forecast to grow by between 19% and 50%. In the high energy demand scenario outlined in the programme for government, electricity demand will almost double by 2030.

CAPs 2019, 2021,2023 and 2024 provide a detailed framework for taking decisive action to achieve the emission reduction targets of the Carbon Budgets. In addition, section 14B of the Climate Action and Low Carbon Development Act 2015 (as amended by section 16 of the Climate Action and Low Carbon Development (Amendment) Act 2021 stipulates that each Local Authority (LA) prepares a LA Climate Action Plan (LACAP), specifying the adaptation and mitigation measures to be adopted by the LA. LACAPs further enhance local authorities' ability to lead, engage, coordinate, and become agents of change in response to the ongoing climate change crisis; they also represent a new opportunity to embed climate mitigation in LA spatial planning. The mitigation dimension of climate action focuses on GHG emissions reduction, including energy use and efficiency, fossil and renewable energy supply, transportation, settlement patterns, consumption, and agriculture.

Further information can be found here: https://www.oireachtas.ie/en/bills/bill/2021/39/

A.3.1.6 The Planning and Development Act 2000 (Exempted Development) (No. 3) Regulations 2022 and the supporting Planning and Development (Solar Safeguarding Zone) Regulations 2022

These regulations combine to provide updated provisions regarding planning exemptions for rooftop solar installations. The regulations assist with bringing Ireland into line with the EU's Solar Rooftops Initiative by making permitting procedures for installing solar energy development on rooftops shorter and simpler. The regulations support a target of installing up to 380 MW (approximately 1 million solar panels) of microgeneration capacity as part of Ireland's overall solar targets under the government's CAP. This would generate over 300 GWh of renewable electricity per annum, with the potential to abate 1.4 million tonnes of carbon dioxide equivalent (CO_{2eq}) over the lifetime of the installations. The regulations will also support the rollout of small-scale generation and act as an enabler for the Small-Scale Generation Support Scheme (SSG). Following a public consultation on proposed High-Level Design features of a Small-Scale Generation Support Scheme in 2022, Government approved the High-Level Design of the Small-Scale Renewable Electricity Support Scheme (SRESS) on 23 June 2023.

Further information can be found here: https://www.gov.ie/en/publication/00203-solar-planning-exemptions/

A.3.1.7 General Scheme of the Heat (Networks and Miscellaneous Provisions) Bill 2024

District heating and cooling in Ireland is at a very low level and is estimated at most at about 0.8% of heat consumption[29]. In order to comply with EU directives and our sectoral emissions ceilings, Ireland has set out a very ambitious target under CAP 2024[24] to deliver district heating of up to 2.7 terawatt per hr (TWh) by 2030. Meeting the CAP targets will require a very significant and immediate scale up and acceleration of projects.

In November 2024, the government approved the General Scheme of the Heat (Networks and Miscellaneous Provisions) Bill 2024. The development of this legislation will pave the way for the growth of a district heating industry in Ireland that would be highly efficient and low carbon, helping us to meet our national and international climate targets. Importantly, it would also establish a regulatory model that ensures price protection for large and small heat network consumers.

Further information can be found here: gov.ie - New Heat Bill paves the way for district heating nationwide

A.3.2 Executive Frameworks and Policies

A.3.2.1 National Planning Frameworks and Strategies

National Landscape Strategy for Ireland 2015-2025

The National Landscape Strategy was developed to ensure compliance with the Council of Europe's European Landscape Convention (ELC) in 2004. This obliged Ireland to implement policy changes and objectives concerning the management, protection and planning of the landscape. It provides a high level policy framework to achieve balance between the management, planning and protection of the landscape by way of supporting actions. It is proposed to produce a National Landscape Character Assessment and a National Landscape Map for Ireland, which will inform, and be informed by, lower tier landscape character assessments, which should in turn be used in planning policy formulation and decision making: the principle objective is to ensure consistency in the categorisation of Landscape types and associated policies across county boundaries.

Further information can be found here: https://www.gov.ie/en/publication/8a59b-national-landscape-strategy/

Project Ireland 2040 (National Planning Framework 2018 & National Development Plan 2018-2027)

Project Ireland 2040 sets out a shared vision for coordinated planning and investment, linking national spatial development priorities and enhancement of our Infrastructure, and comprises the National Planning Framework – Ireland 2040 Our Plan (NPF) and the National Development Plan (NDP) 2018-2027. These documents are at the top of the spatial planning hierarchy in Ireland and are the Government's high-level plan for the future of sustainable development in Ireland.

First revised National Planning Framework (NPF) 2025[31]

The first revision of the NPF, published in April 2025, sets out the overarching policy and planning strategy for the social, economic, and cultural development of Ireland to 2040 and reflects the policy to provide for a strengthened plan-led system based on an integrated hierarchy of plan-making. These policies are structured under National Policy Objectives (NPOs) which set a pathway for regional and local planning and sustainable development policy. In terms of the NPOs relevant to the development of a RRES, the following should be noted:

- National Planning Objective 70 – *Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a zero-carbon economy by 2050.*
- National Planning Objective 71 - *Support the development and upgrading of the national electricity grid infrastructure, including supporting the delivery of renewable electricity generating development.*
- National Planning Objective 74 – *Each Regional Assembly must plan, through their Regional Spatial and Economic Strategy, for the delivery of the regional renewable electricity capacity allocations indicated for onshore wind and solar …, and identify allocations for each of the local authorities, based on the best available scientific evidence and in accordance with legislative requirements, in order to meet the overall national target.*

In terms of Local Authority obligations, the following should be noted:

- NPO 75 of the first revision of the NPF states that "*Local Authorities shall plan for the delivery of Target Power Capacity (MW) allocations consistent with the relevant Regional Spatial and Economic Strategy, through their City and County Development Plans"*.
- Upon commencement of Section 42(8) of the Planning and Development Act 2024, in reviewing a development plan, or making a development or a variation to a development plan, the Act stipulates that a planning authority shall, amongst other items, ensure the proper planning and sustainable development of the areas to which the development plan relates and ensure that the development plan is materially consistent with the NPF; where the planning authority is a coastal planning authority, with the National Marine Planning framework; the RSES for the region within which the planning authority's functional areas is located (incorporating a renewable energy strategy as stipulated under Section 29(1)(e) and as described above in section 1); and any relevant National Planning Policies and Measures, as well as take account of any relevant National Planning Policy Guidance.
- Under Sections 44(1) and 44(2) of the Act, a planning authority shall prepare a strategy for the sustainable development and regeneration of the functional area of the planning authority, setting out objectives relating to, amongst others, the provision or facilitation of the provision of energy generation infrastructure and facilities, including for the generation of renewable energy.

National Development Plan (NDP) 2018 - 2027

The NDP 2021-2030 sets out the ten-year capital programme to 2030 (with a spending of €165 billion), and supports economic, social, environmental, and cultural development across the country under Project Ireland 2040. The NDP was revised in 2021 and commits to increasing the share of renewable energy electricity to 80% by 2030. This investment in renewable electricity sources is complemented by measures outlined in the NDP to reduce energy demand. It also commits to the creation of a Microgeneration Support Scheme, whose main aim is to incentivise citizens and businesses to produce and consume their own electricity.

A strategic investment priority of the NDP is research, particularly energy research, to accelerate the diversification away from fossil fuels to renewable energy such as wind and solar. It also outlines investment towards the electricity transmission and distribution grid to enable a higher percentage of variable wind and solar renewables onto the grid, supporting the security of electricity supply and meeting rising electricity demand. These investments are intended to enable fundamental and systemic change to greenhouse gas emissions on a national level. The NDP includes 'climate action' as one of its Strategic Investment Priorities (SIPs). The NDP advises that new energy systems and transmission grids will be necessary for a more

[31] National Planning Framework First Revision – April 2025

distributed, renewables-focused energy generation system; harnessing both the considerable onshore and offshore potential from energy sources such as wind, wave and solar and connecting the richest sources of that energy to the major sources of demand.

The importance of climate action is specifically acknowledged in the NDP, via National Strategic Outcome (NSO) 8, which relates to ensuring a 'Transition to a Low Carbon and Climate Resilient Society', setting out the objective of transitioning by 2050 to a competitive, low-carbon, climate-resilient and environmentally sustainable economy and society. The NDP acknowledges the complexity of the inherently cross-sectoral and integrated nature of the decisions required in such areas as transport, energy, agriculture and the built environment, and recognises that addressing climate change is a unique challenge for public policy. The NDP outlines schemes to support achieving this objective, including:

- A new Renewable Electricity Support Scheme (RESS) to support up to 4,500 megawatts of additional renewable electricity by 2030;
- Energy research funding to accelerate diversification away from fossil fuels to green energy, including wind, wave, solar, biomass, biofuels, biogas and hydrogen;
- A full roll-out of the new Support Scheme for Renewable Heat; and
- The establishment of a Climate Action Fund.

Further information can be found here: gov.ie - National Development Plan 2021-2030 (www.gov.ie)

National Land Use Review

In 2020, the Programme for Government: Our Shared Future[32] committed to a National Land Use Review[33] 'so that optimal land use options inform all relevant government decisions'. Phase 1 of this Review, which was completed in March 2023, led by the Environmental Protection Agency (EPA), focuses on evidence gathering and provides a holistic understanding of current land use patterns to shape future policies and measures.

The Programme for Government 2025: Securing Ireland's Future committed to "Complete the second phase of the Land Use Review, which aims to balance environmental, social and economic consideration." This second phase[34] follows on from the first phase and describes current land use patterns, the various demands on land in delivering on our national environment commitments and particularly in the context of a climate neutral economy in 2050. This will provide the evidence to support the policies, measures and actions which will need to be taken – in the context of the Government's wider economic, social and climate objectives.

Further information can be found here: gov.ie - Land Use Review – Phase 1

Our Rural Future – Rural Development Policy 2021-2025

This policy sets out the framework for development of rural Ireland over the next two years. Policy 26 of this document supports this policy framework by seeking to maximise the resources and strengths in the Green Economy to support employment opportunities for rural communities in areas such as renewable energy. This policy also includes for a 'Just Transition' for rural communities to a sustainable, resilient and climate neutral economy and society which broadly supports renewable infrastructure development in rural areas.

Further information can be found here: https://www.gov.ie/en/publication/4c236-our-rural-future-vision-and-policy-context/

The National Implementation Plan for the Sustainable Development Goals 2022-2024

As a European Union (EU) Member State (MS) and member of the United Nations (UN), Ireland is a signatory to the UN Sustainable Development Goals (SDGs) and must display a commitment to implementing these global goals. In October 2022, the Department of the Environment, Climate and Communications (DECC) published the second National Implementation Plan for the Sustainable Development Goals 2022-2024 which sets out the objectives, actions, and measures required to increase Ireland's ambition and strengthen implementation structures to achieve the SDGs.

The Plan sets out five strategic objectives and 51 actions, with 119 individual measures to increase Ireland's ambition and strengthen implementation structures to achieve the SDGs. It also incorporates 23 external

[32] gov.ie - Programme for Government: Our Shared Future

[33] gov.ie - Land Use Review – Phase 1

[34] Phase 2 of Land Use Review commences

actions from four other National Plans or Strategies which contribute to and are complementary to the objectives of this Plan and which have been included for coherence and reporting purposes.

- Strategic Objective 1: To embed the SDG framework into the work of Government Departments to achieve greater Policy Coherence for Sustainable Development;
- Strategic Objective 2: To integrate the SDGs into LA work to better support the localisation of the SDGs;
- Strategic Objective 3: Greater partnerships for the Goals;
- Strategic Objective 4: To further incorporate the principle of Leave No One Behind into Ireland's Agenda 2030 implementation and reporting mechanisms; and
- Strategic Objective 5: Strong reporting mechanisms.

Further information can be found here: https://www.gov.ie/en/publication/e950f-national-implementation-plan-for-the-sustainable-development-goals-2022-2024/

Development Plans – Guidelines for Planning Authorities (2022)

These Guidelines (revised for the first time since 2007) are intended to be the 'go-to' reference manual for all those who may be involved in the process of producing a county or city Development Plan.

In specific relation to renewable energy, Section 8.1.6 of Chapter 8 (Mandatory Objectives: Climate & Environment – energy related objectives) of the Guidelines describe how, in terms of energy production, transition to a low carbon economy requires a shift from predominantly fossil fuels to predominantly renewable energy sources. Accordingly, pro-active planning for the development and deployment of technologies such as wind, solar, hydro, ocean and bioenergy projects to make use of available resources and generate electricity in appropriate locations is required. Planning authorities should consider the potential contribution that their Development Plan can make towards meeting the targets set out within the Climate Action Plan (CAP) and any revision or update to same with regard to renewable energy and related Government policy.

The Guidelines also emphasise the role of Local Authority Renewable Energy Strategies (LARES) Methodology to inform Development Plans, which can be applied to Development Plans when the framework to set regional and local targets for onshore renewable electricity development is available. This Methodology[35] can support the preparation of more robust, coordinated and consistent RES for their areas. These strategies should inform the Development Plan on how each LA area can contribute to realising overall national targets on renewable energy and climate change mitigation and in particular wind energy production and the potential wind energy resource (in megawatts (MW)). Specific minimum capacity allocations, in this regard, are to be included. In parallel with the above, updated Wind Energy Development Guidelines (WEDGs) are being prepared.

In addition to the promotion of medium to large-scale electricity generating projects, the consideration of regional and local renewable energy strategies and decentralised measures relating to energy production and efficiency will be necessary. For example, a Strategic Energy Zone may be promoted to support the delivery of renewable energy projects. In addition, the use of centralised renewable energy sources contributing to a heat distribution system serving all dwelling units in a district, an area, a development or part of a development, e.g. an apartment block, may prove to be more practicable than providing separate renewable energy for each dwelling individually. Such measures could include district heating systems or combined heat and power (CHP) systems, depending on the scale and nature of the development. Planning authorities may also wish to consider the use of heat mapping to allow for the identification of local waste heat sources which may identify useful connections and co-location between supply and demand for energy, and could link to district heating systems. These energy-related policies and objectives should be integrated into the mandatory objectives of the Development Plan for infrastructure under section 10(2) (b) of the Planning and Development Act 2000, as amended.

Further information can be found here: https://www.gov.ie/en/publication/f9aac-development-plans-guidelines-for-planning-authorities/

[35] Methodology currently under review by the SEAI.

Long-term Strategy on Greenhouse Gas Emissions Reductions

Ireland's current Long-term Strategy on Greenhouse Gas Emissions Reductions, which sets out indicative pathways, beyond 2030, towards achieving carbon neutrality for Ireland by 2050, was published earlier this year. This Strategy builds upon the decarbonisation pathways set by the carbon budgets, sectoral emissions ceilings, and Climate Action Plan 2023, to ensure coherent and effective climate policy.

The Strategy states that accelerating the deployment of wind and solar power is a central pillar of long-term decarbonisation of the electricity system which aligns with Ireland's EU commitments and support for the RePowerEU Plan.

It is also acknowledged that, while growth in renewable energy has been supported by public policies and consumer pressure, the deployment of renewable electricity presents challenges, as production is variable, and electricity is not easily stored as energy. Therefore, Ireland will focus on a variety of actions, as set out in the Climate Action Plan, to increase the flexibility of Ireland's electricity system and enable electricity to be a key enabler in decarbonising other sectors of our economy.

Further information can be found here: gov.ie - Long-term Strategy on Greenhouse Gas Emissions Reductions

National Marine Planning Framework

This Framework outlines the government's vision, objectives and marine planning policies for each marine activity. It is intended as the marine equivalent to the National Planning Framework (NPF). In relation to renewable energy, the Framework commits to the development of offshore renewable energy (ORE) in order to achieve offshore wind targets as stipulated by Climate Action Plan (CAP) 2024. In addition, the Framework supports proposals for infrastructure enabling local use of excess energy generated from emerging marine technology (wave, tidal, floating wind).

Further information can be found here: https://www.gov.ie/en/publication/60e57-national-marine-planning-framework/

A.3.2.2 Regional Planning Frameworks, Strategies and Guidelines

Regional Spatial and Economic Strategies (RSESs)

At the regional level, each of the Regional Assemblies publish a Regional Spatial and Economic Strategy (RSES), which provides the roadmap for effective regional development and supports the delivery of the national policy objectives contained in the National Planning Framework (NPF) at the regional level, and to inform lower-level planning (such as County Development Plans (CDPs)).

The RSES provides a high-level development framework for the three regional assemblies that supports the implementation of the NPF at the regional level. The RSES identifies the key strategic assets, challenges and opportunities of each region and sets out a selection of policies to respond to these. The RSES provides spatial, economic and climate action strategies, as well as metropolitan plans and investment framework for each regional assembly. It is informed by Project Ireland 2040, consultation and engagement processes, and Strategic Environmental Assessment (SEA).

Each regional assembly has outlined their individual policies and supports for renewable energies such as wind and solar and infrastructural supports, the strengthening of the electricity grid, and energy storage plans, all as part of the transition to a low carbon and climate resilient society.

A RSES is a planning and economic framework that considers the future development of a region for a period of not less than 12 years and not more than 20 years. It is made by a Regional Assembly in accordance with the provisions of Chapter III of the Planning and Development Act 2000, as amended. The purpose of a RSES is to support the implementation of the NPF and the economic policies and objectives of the Irish national and local government by providing a long-term strategic planning and economic framework for the development of the region. Each RSES is required to be reviewed every six years. RSESs identify regional assets, opportunities and pressures; and provides appropriate policy responses in the form of regional policies and objectives.

The RSESs currently developed for Ireland are as follows:

- The Eastern and Midland RSES (2019-2031):

  - This RSES is underpinned by three key principles: healthy placemaking; climate action; and economic opportunities and is aligned with 16 Regional Strategic Outcomes (RSOs). In relation to climate action, the RSES focus is the need to enhance climate resilience and accelerate a transition to a low carbon society recognising the role of natural capital and ecosystem services in achieving this; aligning RSO 8 and 9.
- The Northern and Western RSES (2020-2032):
  - This RSES is underpinned by five growth ambitions: vibrant ambition; natural ambition; connected ambition; inclusive ambition; and infrastructure ambition; aligning with two metrics (sustainable growth and a low carbon future).
- The Southern RSES (2020-2032):
  - This RSES is underpinned by 11 strategic aims, including one specifically supporting a low carbon, climate resilient and sustainable society (no. 8).

The Regional Development Monitor (RDM) Hub collates and visualises a range of relevant socio-economic and environmental indicators to present the performance of each of the three regions in terms of achieving the objectives outlined in their respective RSESs, and subsequently allow key stakeholders greater insights into social, economic and environmental trends to overall aid better decision making. The RDM Hub focuses on indicators related to the RSOs of each RSES, along with their appropriate socio-economic and environmental variables, categorised into four key principles:

1. Our People and Places;
2. Our Green and Sustainable Future;
3. Our Region's Economy; and
4. An All-Island Perspective.

The Green and Sustainable Futures principle specifically measures Low Carbon Future & Clean Energy, with a specific indicator for Renewable Energy.

Further information can be found here: https://rdm.geohive.ie/

Under section 29(1)(e) of the Planning and Development Act 2024, it is stipulated that each regional assembly RSES shall specifically make provision for a strategy relating to renewable energy to:

(i) Meet national targets;

(ii) Identify and facilitate electricity grid infrastructure, including upgrade projects and support infrastructure;

(iii) Make provision for energy security; and

(iv) Promote steps for coordination and cooperation between public bodies.

Furthermore, the first revision of the National Planning Framework (NPF) assigns regional renewable electricity generation capacity allocations for grid-scale onshore wind energy and solar photovoltaics (PV) (as set out in Climate Action Plan (CAP) 2024) to the three regional assemblies. The regional assemblies are subsequently required, via the strategy relating to renewable energy, to allocate these capacity allocations to the local authorities in the most equitable and strategic manner, that integrates with wider planning policies for the region, via a regional renewable electricity strategy (RRES).

More information on the Planning and Development Act 2024 can be found here: Planning and Development Act 2024

More information of the first revised NPF can be found here: https://www.npf.ie/

A.3.2.3 County Level Planning Guidance

County Development Plans (CDP)

The City and County Development Plan is the mechanism that seeks to integrate international and European Union (EU) climate agreements and policy, national climate legislation and policy, national and regional planning policies, and community input into an overall strategy for the proper planning and sustainable development of the Local Authority (LA) area.

Under the Planning and Development Act 2000, as amended, Development Plans are required to include objectives that promote sustainable settlement and transportation strategies, including reducing energy demand, reducing anthropogenic greenhouse gas (GHG) emissions, and addressing the necessity of adapting to climate change. Furthermore, under the Climate Action and Low Carbon Development

(Amendment) Act 2021, each LA has been mandated to develop five-year LA Climate Action Plans (LACAPs). The LACAPs are focused on mitigation and adaptation measures, but they also enhance each LA's ability to lead, engage, coordinate, and embed climate mitigation into LA spatial planning.

Supplementing the City and County Development Plans, many local authorities have developed Renewable Energy Strategies (RESs) and Wind Energy Strategies which seek to identify, assess, and utilise the renewable energy potential that exists within a LA area. Many of these RESs have been developed following the LARES, a methodology developed by SEAI to facilitate consistency of approach in the preparation of RES, and assist LAs in developing robust, coordinated and sustainable strategies.

Further information can be found here: https://www.gov.ie/en/publication/1026c-development-plans/ and Methodology-for-Local-Authority-Renewable-Energy-Strategies.pdf (seai.ie)

Under section 42(8) of the Planning and Development Act 2024, in reviewing a Development Plan, or making a development or a variation to a Development Plan, the Act stipulates that a planning authority shall, amongst other items, ensure the proper planning and sustainable development of the areas to which the Development Plan relates and ensure that the Development Plan is materially consistent with the draft first revised National Planning Framework (NPF); where the planning authority is a coastal planning authority, with the National Marine Planning framework; the Regional Spatial and Economic Strategy (RSES) for the region within which the planning authority's functional areas is located (incorporating a renewable energy strategy as stipulated under section 29(1)(e) of the Planning and Development Act 2024, and any relevant National Planning Policies and Measures, as well as take account of any relevant National Planning Policy Guidance.

Furthermore, under sections 44(1) and 44(2) of the Planning and Development Act 2024, a planning authority shall prepare a strategy for the sustainable development and regeneration of the functional area of the planning authority, setting out objectives relating to, amongst others, the provision or facilitation of the provision of energy generation infrastructure and facilities, including for the generation of renewable energy.

More information can be found here: Planning and Development Act 2024

A.3.2.4 National Energy Generation and Security Frameworks and Strategies

National Energy Projections to 2030 (SEAI, 2018)

This report presents an overview of SEAI's 2018 National Energy Projections from 2017 to 2030. It illustrates possible future trends in energy supply and demand relative to EU and national energy targets. The projections are based on the macroeconomic relationships between energy use, economic growth, energy prices and energy policies and measures. The results are underpinned by the Economic and Social Research Institute's (ESRI) latest economic outlook, the most recent energy balances and an assessment of the anticipated impacts of sustainable energy polices, measures and ambitions compiled by SEAI (ESRI, 2017a&b) (SEAI, 2017). Should Ireland fall short of its mandatory European target, it is likely to require the purchase of statistical transfers, as provided for in the EU Renewable Energy Directive (RED).

Further information can be found here: https://www.seai.ie/publications/National-Energy-Projections-to-2030.pdf

All Island Generation Capacity Statement (2019-2028)

This capacity statement was prepared by EirGrid and SONI, the respective transmission system operators for both the Republic of Ireland and Northern Ireland. Interconnectedness is expected to play a key role in securing Ireland's energy supply in the coming years, and this will be defined by the success of a number of strategic transboundary energy projects such as the North-South interconnector, which is proposed the traverse the Ireland and Northern Ireland border. This 10 year plan is updated annually.

Further information can be found here:

2019- 2028: https://www.eirgridgroup.com/site-files/library/EirGrid/EirGrid-Group-All-Island-Generation-Capacity-Statement-2019-2028.pdf

2020-2029: https://www.eirgridgroup.com/site-files/library/EirGrid/All-Island-Generation-Capacity-Statement-2020-2029.pdf

2021-2030: https://www.eirgridgroup.com/site-files/library/EirGrid/208281-All-Island-Generation-Capacity-Statement-LR13A.pdf

2022-2030: https://www.soni.ltd.uk/media/documents/EirGrid_SONI_2022_Generation_Capacity_Statement_2022-2031.pdf

2023-2032: https://cms.eirgrid.ie/sites/default/files/publications/19035-EirGrid-Generation-Capacity-Statement-Combined-2023-V5-Jan-2024.pdf

The National Energy Security Framework (2022)

The National Energy Security Framework, published in April 2022, provides an overarching and comprehensive response to Ireland's energy security needs in the context of the war in Ukraine. The Framework outlines the structures which are in place within Government to manage and monitor energy supplies and sets out the plans which exist to deal with energy security emergencies should they arise. Furthermore, it sets out how the Government will speed up the shift to increased energy efficiency and indigenous renewable energy systems, specifically to 'align all elements of the planning system to fully support accelerated renewable energy development'.

This Framework reiterates the Climate Action Plan (CAP) 2023 target of increasing the share of electricity demand generated from renewable sources in Ireland to up to 80%, without compromising security of electricity supply, reflecting the national target to reduce emissions by 51% by 2030 and to achieve climate neutrality by 2050 at the latest. This commitment is set out in the Framework in Section 7.1 – replacing fossil fuels with renewables and Section 7.3 – diversifying fossil fuel supplies.

The responses set out in the Framework include:

1. Developing a National Policy Statement on Heat, based on the outcomes of the National Heat Study including a key focus on the decarbonisation of our building stock and the development of district heating;
2. Developing proposals for regulatory options to accelerate the phase-out of fossil fuel heating throughout our building stock, including effectively ending the use of fossil fuels for space and water heating in all new buildings with limited exemptions;
3. Accelerating the delivery of home retrofits by implementing the National Retrofit Plan, including by providing supports to homeowners in the private rental and Approved Housing Body sectors and continuing to deliver the Local Authority (LA) Retrofit Programme;
4. Implementing the National Sustainable Mobility Policy as a priority, including establishment of a Leadership Group to drive implementation, and devising a programme of measures for the transport sector to increase energy efficiency and reduce reliance on fossil fuels;
5. Leveraging the successful roll-out of the National Smart Meter Programme by providing electricity customers with access to their data and greater insight into their consumption patterns, thus enabling them to select the most appropriate tariff;
6. Aligning all elements of the planning system to fully support accelerated renewable energy development;
7. Reviewing grid connection arrangements for renewable electricity projects and the development of system services to accelerate the growth in renewable electricity;
8. Expanding the roll-out of renewable microgeneration;
9. Prioritising the development of a hydrogen strategy; and
10. Prioritising the review of security of supply of Ireland's electricity and natural gas systems.

Projects with the highest chance of early delivery and with the greatest impact on carbon emissions should be prioritised. Tools to support this include: the Renewable Electricity Support Scheme (RESS); the potential for privately funded and hybrid connections; and the speedy delivery of market arrangements for zero carbon system services and system flexibility (e.g., battery storage) to support higher levels of renewables output. As of Q3 2023, the majority of the actions in the NESF were completed or are close to completion.

Further information can be found here: https://www.gov.ie/pdf/?file=https://assets.gov.ie/221399/86cb99f5-58e3-4821-bc4c-e1bb1fa706fb.pdf#page=null

Energy Security in Ireland to 2030: Energy Security Package

Energy Security in Ireland to 2030 outlines the national strategy to ensure energy security, while delivering on the commitment to carbon neutrality by 2050. The report, which has 28 actions in total, is a roadmap to ensuring a sustainable, affordable, and secure energy landscape that balances energy risk and resilience against our binding European and domestic energy and climate commitments. It is informed by six pillars of

analysis, including the technical review of the energy security of Ireland's electricity and gas networks carried out by Cambridge Economic Policy Associates (CEPA) (incorporating over 450 consultation responses) and the Independent Review on the Security of Electricity Supply, carried out by former Secretary General of the Department of the Taoiseach, Dermot McCarthy (the McCarthy Report).

The six strands of analysis that underpin the actions set out in this package are as follows:

- The Review of the Energy Security of Ireland's Electricity and Gas networks, the studies by Cambridge Economic Policy Associates (CEPA) to support this, and the 450+ consultation responses to this analysis.
- The Independent Review of the Security of Electricity Supply (the McCarthy Report).
- The conclusion of National Energy Security Framework (NESF).
- The Climate Action Plans (CAPs).
- The 'Summit on Energy Independence: Realising the Opportunities for Ireland', which was hosted by the Government in July 2023.
- Ongoing policy analysis on oil security of supply.

Overall, the in-depth consultation and analysis highlights the vital importance of Ireland's renewable energy policy agenda. It also identifies strategic risks for Ireland within a changing European and international energy context.

Overall, the in-depth consultation and analysis highlights the vital importance of Ireland's renewable energy policy agenda. It also identifies strategic risks for Ireland within a changing European and international energy context. The Energy Security Package sets out a strategic approach to drive a secure transition for Ireland's energy systems in line with its climate objectives to 2030 through:

- Reduced and Responsive Demand.
- A Renewables Led System.
- More Resilient Systems.
- Robust Risk Governance.

Further Information can be found here: gov.ie - Energy Security in Ireland to 2030

A.3.2.5 National Climate Action Strategies and Plans

Energy White Paper, Ireland's Transition to a Low Carbon Energy Future 2015-2030

The Energy White Paper, Ireland's Transition to a Low Carbon Energy Future 2015-2030, sets out a framework to guide policy and the actions that Government intends to take in the energy sector from now up to 2030. It takes into account International and European climate change objectives and agreements, as well as Irish social, economic and employment priorities. The paper made provision for the establishment of a regulatory framework to facilitate the exploration for, and development of, geothermal energy resources.

Irish national policy for 2050 is to work toward a low-carbon society and this is reflected in policy across Government. In 2015 the Government enacted the Climate Action and Low Carbon Development Act 2015, which provides for the approval of plans by the Government in relation to climate change. The Climate Action and Low Carbon Development (Amendment) Act 2021 strengthens the governance framework on climate action. The key aim is that the 'State shall … pursue and achieve, by no later than the end of 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy'.

Ireland has committed to meeting ambitious targets for reducing greenhouse gas (GHG) emissions in the short (2020), medium (2030) and longer term (2050) through a suite of policy documents including the Climate Action Plan (CAP) (2021), National Energy and Climate Plan (NECP) 2021-2030 (2019) and the National Adaptation Framework (2018).

Further information can be found here: https://www.gov.ie/en/publication/550df-the-white-paper-irelands-transition-to-a-low-carbon-energy-future-2015-2030/

National Energy and Climate Plans (NECP): National Renewable Energy Action Plan 2020

The National Energy and Climate Plans (NECPs) were introduced by the Governance of the Energy Union and Climate Action (EU) Regulation 2018/1999, agreed as part of the 'Clean Energy for all Europeans Package' (CEP) which was adopted in 2019. The NECPs outline how each European Union (EU) Member State (MS) intends to address energy efficiency, renewables, greenhouse gas (GHG) emissions reductions, interconnections, and research and innovation.

NECPs are a mandatory requirement of the EU, whereby each EU Member State (MS) sets out its approach to address energy efficiency, renewables, greenhouse gas emissions reductions, interconnections, and research and innovation. Ireland's NECP 2021-2030 was first submitted to the European Commission (EC) in June 2020. This draft NECP considered energy and climate policies developed up to that point, the levels of demographic and economic growth identified in the Project Ireland 2040 process and included all the climate and energy measures set out in the National Development Plan (NDP) 2018-2027.

In July 2024, Ireland's draft updated NECP 2021-2030 was submitted to the EC; outlining Ireland's energy and climate policies in detail for the period from 2021 to 2030 and looking onwards towards 2050. This draft incorporated feedback from the EC on a 2023 draft, as well as feedback from two consultations.

Overall, the NECP states that whilst there are challenges in achieving the ambitious EU targets on GHG emissions, energy efficiency and renewable energy (RE); Ireland is committed to achieving them. Furthermore, despite these challenges, the NECP states that the policies Ireland has implemented to date and the choices Ireland is making as a society to reduce its emissions are working: Ireland's GHG emissions reduced by 6.8% in 2023 with reductions achieved in almost all sectors. This represents the lowest overall level in three decades and is below the 1990 baseline. This has been achieved against the backdrop of a growing economy and population. Emissions data show the largest single year reduction in the energy and agriculture sectors and the lowest level of residential emissions since 1990, while transport emissions were below pre-Covid levels.

Table A1 below sets out the key policies and measures associated with achieving Ireland's RE objectives.

Table A1: NECP 2021-2030 Decarbonisation – Renewable Energy – Objectives, Key Policies and Measures.

Dimension	Objectives	Key Policies & Measures
Decarbonisation - Renewable energy	Ireland has established an objective of achieving a 43% share of RE by 2030. Increase electricity generated from renewable sources to 80%.	- Accelerate the delivery of onshore wind, offshore wind, and solar through a competitive framework to reach 80% of electricity demand from RE by 2030. - Target 6 GW of onshore wind and up to 5 GW of solar by 2025. - Target 9 GW onshore wind, 8 GW solar, and at least 5 GW of offshore wind by 2030. - Support at least 500 MW of local community based RE projects and increased levels of new micro-generation and small-scale generation. - The National Smart Metering Programme will make smart meters available for every home by the end of 2024. - Support the ocean energy research, development and demonstration pathway for emerging marine technologies and associated test infrastructure. - Accelerate the penetration of EVs so that 30% of our private car fleet is switched to electric by 2030, underpinned by policy tools such as vehicle and fuel taxation measures, and a strong carbon tax trajectory. - Increase the proportion of renewable transport fuel in road transport through the renewable transport fuel obligation (RTFO). - No diesel-only purchases for urban public buses from July 2019 onwards. - Develop the alternatively fuelled infrastructure network to support the uptake of zero-and renewable transport fuelled vehicles in line with the Alternative Fuels Infrastructure Regulation. - Target delivery of up to 2.7 TWh of district heating by 2030. - Target delivery of up to 5.7 TWh of indigenously produced biomethane by 2030. - Increase the proportion of heat delivery from renewable sources through the introduction of a Renewable Heat Obligation. - Development of a Heat Policy Statement. - Publication of a Roadmap for the Phase Out of Fossil Fuel Heating Systems

Further information can be found here: gov.ie - National Energy and Climate Plan (NECP) 2021-2030

Third Report & Recommendations of the Citizens' Assembly: How can the State make Ireland a leader in tackling climate change (2018)

This report set out a roadmap for climate action in Ireland, making 13 recommendations in total, including two specific recommendations in relation to renewable energy:

1. The Government should enable, through legislation, the selling back into the grid of electricity from micro-generation at a price which is at least equivalent to the wholesale price; and

2. The Government should encourage communities to develop their own renewable energy projects in order to ensure the greatest possible levels of community ownership and engagement.

Further information can be found here: https://citizensassembly.ie/wp-content/uploads/2023/02/ThirdReportClimate-Change-Report-Final.pdf

DECC Statement of Strategy (2025-2028)

This sets out the Department of Climate, Energy the Environment's (DCEE's) vision, mission and strategic goals over 2025-2028 to achieve a climate neutral Ireland, powered by clean energy, where our environment, society and economy thrive. There are five strategic goals in total, of which are importance in relation to renewable energy (RE):

1. Accelerate climate action and prepare Ireland for the impacts of a changing climate
2. Transform Ireland's energy systems to be sustainable, affordable and secure
3. Protect and enhance our environment and improve the circular and resource-efficient economy
4. Advance our climate, energy and environment objectives through effective EU and international leadership, engagement and collaboration
5. Sustain a high-performing, innovative and inclusive organisation focused on collaboratively delivering our vision and mission

Further information can be found here: Statement of Strategy 2025-2028

Climate Action Plan 2025

By amending the Climate and Low Carbon Development Act 2015, the Climate Action and Low Carbon Development (Amendment) Act 2021 enshrines the National Climate Objective to pursue and achieve, by no later than the end of 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy and places the national Climate Action Plans (CAPs) on a statutory basis and gives an implementation framework for the "national climate objective".

Ireland published its first CAP in June 2019. Following this initial publication, three further CAPs have been established, CAP 2021, CAP 2023 and CAP 2024; each providing detailed plans for taking decisive action to achieve a 51% reduction in overall greenhouse gas (GHG) emissions by 2030 and setting Ireland on a path to reach net-zero emissions by 2050, a target which has been committed to in the Programme for Government.

CAP 2021 added further emphasis on the 'pivotal role' that local authorities play in achieving decarbonisation targets through spatial planning, the provision of public housing, transport infrastructure and the maintenance of biodiversity. CAP 2023 described how the public sector will need to play a leadership role in driving far-reaching climate action across its buildings, transport, waste and energy usage, as well as wider society. The Plan stipulated how local authorities have a key role in the delivery of both climate mitigation and adaptation, as reflected in the provisions of section 14B of the Climate Action and Low Carbon Development Act 2015 (as amended by section 16 of the Climate Action and Low Carbon Development (Amendment) Act 2021, which stipulates that each LA must prepare a LA Climate Action Plan (LACAP), specifying the adaptation and mitigation measures to be adopted by the LA.

CAP 2024 states that the electricity sector (primarily power generation) is Ireland's third largest source of emissions (after agriculture and transport), representing 14.4% of total emissions in 2022 (9.7 Megatonnes (MT) carbon dioxide equivalent ($CO_{2(eq)}$). Moreover, the decarbonisation of other sectors, including transport, heating, and industry, relies to a significant degree on electrification. CAP 2024 builds upon CAP 2023 by refining and updating the measures and actions required to deliver the carbon budgets and sectoral emissions ceilings. The Plan provides a roadmap for taking decisive action to halve Ireland's emissions by 2030 and reach net zero by no later than 2050, as committed to in the Climate Action and Low Carbon Development (Amendment) Act 2021. Amongst the most important measures in CAP 2023 and CAP 2024 is the plan to increase the proportion of renewable electricity to up to 80% by 2030; by achieving the following targets:

- 9 GW onshore wind, 8 GW solar photovoltaics (PV) and at least 5GW of offshore wind by 2030 (and an additional 2GW offshore wind for green hydrogen production).

To support the delivery of these targets, CAP 2024 sets out a framework for renewable energy development to be delivered through a plan-led and competitive framework that encourages public participation and

delivers strong community benefits. In order to achieve this and accelerate renewable electricity generation, CAP 2024 sets out the following measures:

- Publication of the revised Local Authority Renewable Energy Strategy (LARES) Methodology (currently being developed); update the current Wind Energy Development Guidelines (WEDGs) (currently being developed);
- Undertake a public consultation on proposed regional renewable electricity targets, including relevant environmental assessments in the upcoming revision of the draft first revised National Planning Framework (NPF);
- Have regard to the interaction between the planning and grid consenting systems and the overall timeframe for permitting; deliver a streamlined electricity generation grid connection policy and processes; and remove barriers for installation of renewables and flexible technologies, without the need to build new grid, including hybrid (wind/solar/storage) connections and private wires;
- Align the relevant constituent elements of the planning and permitting system to support accelerated renewable energy development, supported by national policy and associated methodologies to inform regional and local planning policies; and
- Oblige all relevant public bodies to carry out their functions in a manner which supports the achievement of the renewable electricity targets.

Climate Action Plan 2025[36], published in April 2025, builds upon CAP 2024 by refining and updating the measures and actions required to deliver the carbon budgets and sectoral emissions ceilings. It contains only new, high-impact actions for delivery in 2025, and it should be read in conjunction with Climate Action Plan 2024.

CAP 25 reiterates the critical importance of the introduction of regional renewable electricity capacity allocations in the revision of the NPF to ensuring that there is a sufficient pipeline of onshore wind and solar energy projects to meet the electricity carbon budget programme. It also notes, that for onshore wind capacity, lifetime extensions and repowering at existing sites will be critical to ensuring that the 80% renewable electricity target is reached.

Further information can be found here: https://www.gov.ie/en/publication/7bd8c-climate-action-plan-2023/ and here https://www.gov.ie/en/publication/79659-climate-action-plan-2024/

A.3.2.6 Local Government Climate Action Strategies and Plans

Delivering Effective Climate Action (DECA) 2030 (CARO, 2021)

Delivering Effective Climate Action (DECA) 2030 is the local government strategy on climate action. It recognises that Local Authorities (LAs) have a key role in the delivery of both climate mitigation and adaptation, by acknowledging how well positioned LAs are in their close relationships with their communities and their already established engagement in climate action measures; and their existing knowledge of the natural and built environments within their functional areas.

DECA 2030 aims to provide a sectoral vision and mission (aligned with the Climate Action Charter) that will help LAs to build on experience and skills to mobilise climate action at a local level. DECA 2030 sets out six high level strategic goals, with each goal addressed through a set of focused objectives. The following goals/objectives relate specifically to renewable energy are:

- Goals 2: this aims to achieve national carbon emission and energy efficiency targets for 2030 and 2050. Objectives (i.e. 2.3) include developing investment strategies for transformative decarbonisation projects. These investment strategies will focus on achieving the maximum levels of emission reductions; and
- Goal 6: aims to achieve a 'just transition' particularly for communities that have been economically disadvantaged by decarbonisation projects.

Further information can be found here: https://www.caro.ie/getattachment/News/Delivering-Effective-Climate-Action-2030/delivering-effective-climate-action-2030.pdf.aspx?lang=en-GB

[36] Climate Action Plan 2025

Climate Action Charter

This Charter commits Local Authorities (LAs) to a number of objectives to address climate change and advocate for climate action and behavioural change among citizens.

Further information can be found here: https://www.gov.ie/en/publication/d914a-local-authority-climate-action-charter/

Local Authority Climate Action Plans

As set out in section 14B of the Climate Action and Low Carbon Development Act 2015 (as amended by section 16 of the Climate Action and Low Carbon Development (Amendment) Act 2021 and as stipulated in Delivering Effective Climate Action (DECA) 2030 (CARO, 2021), each Local Authority (LA) must prepare a LA Climate Action Plan (LACAP), specifying the adaptation and mitigation measures to be adopted by the LA. The LACAPs are focused on mitigation and adaptation measures, but they also enhance each local authorities' ability to lead, engage, coordinate, and embed climate mitigation into LA spatial planning. Each plan will drive the adaptation and mitigation measures required at local level, and define the clear pathway for each LA to:

- Actively translate national climate policy to local circumstances with the prioritisation and acceleration of evidence-based measures;
- Assist in the delivery of the climate neutrality objective at local and community levels; and
- Identify and deliver a Decarbonising Zone (DZ) within the LA area to act as a test bed for a range of climate mitigation, adaptation and biodiversity measures in a specifically defined area through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective.

A DZ is a spatial area identified by the LA, in which a range of climate mitigation, adaptation and biodiversity measures and action owners are identified in order to address local low carbon energy, greenhouse gas (GHG) emissions and climate needs, in order to contribute to national climate action targets. As described above, DZs are a demonstration and test bed of what is possible at local and community levels, to help support and realise national climate ambition. Through a feedback loop of experimentation and evaluation, each DZ should foster a flexible, incremental and community-driven approach to ensure that its objectives can be delivered. The range of projects proposed should be specific to the emissions and climate characteristics of the spatial area covered by the DZ; and identify appropriate project partners and sponsors while embracing a range of technologies and measures including electricity sourcing; heat management; reducing needs for travel and supporting modal shift; enhanced building energy efficiency; carbon sequestration; and energy storage and management systems. Plans for the identified DZ should also consider the economic and social benefits of decarbonising including just transition and health, as well as the co-benefits of climate adaptation.

Further information can be found here: Guidelines for Local Authority Climate Action Plans

https://www.gov.ie/en/publication/f5d51-guidelines-for-local-authority-climate-action-plans/

A.3.2.7 National Sector Specific Strategies and Plans

National Peatlands Strategy 2015-2025

The National Peatlands Strategy (NPS) 2015-2025 was established to provide a long-term framework within which all of the peatlands within the State can be managed responsibly in order to optimise their social, environmental, and economic contribution to the well-being of all Irish generations. The NPS recognises that Ireland's peatlands provide a wide range of benefits and services including through agriculture, carbon storage and sequestration, and land for wind energy development.

The NPS outlines that restoration or rehabilitation of peatlands can be compatible with wind energy installations. Cutaway bogs are identified as having a number of advantages over other categories of land in terms of potential windfarm development of scale, with the appropriate development of such bogs providing a significant contribution for Ireland to meet its renewable energy targets and also to develop an export market for renewable electricity. A mid-term review of the Strategy has been carried out and the actions set out in the National Peatlands Strategy have been updated into a new Implementation Plan, which focuses on refining outstanding actions and prioritising measurable, achievable objectives.

Further information can be found here: https://www.npws.ie/peatlands-and-turf-cutting/peatlands-council/national-peatlands-strategy

National Peatlands Strategy Mid-Term Review and Implementation Plan
https://www.gov.ie/en/publication/2bcf3-national-peatlands-strategy-mid-term-review-and-implementation-plan/

The Forestry Programme 2023-2027

Ireland's forestry policy, in line with the 2023 Climate Action Plan (CAP) seeks to deliver a target of afforestation of 8,000 hectares (ha) per annum. Co-location of renewable energy infrastructure and forestry is well established within the State and the expansion of Ireland's forest cover presents a spatial opportunity for development of infrastructure under the policy framework.

Further information can be found here: https://assets.gov.ie/243779/74976133-b1ae-4b11-b055-b97b2ac67323.pdf

Forestry Programme 2023-2027: https://assets.gov.ie/268252/59e8729c-9e6a-4221-bbc6-d1a5d9fa2f44.pdf

Food Vision 2030

Ireland's agriculture policy has 22 goals grouped under four missions: one of which is a Climate Smart, Environmentally Sustainable Agri-Food Sector.

Further information can be found here: https://www.gov.ie/en/publication/c73a3-food-vision-2030-a-world-leader-in-sustainable-food-systems/#:~:text=Food%20Vision%202030%20The%20Food%20Vision%202030%20Strategy,forestry%20and%20forestry%20processing%20and%20the%20equine%20sector%29.

A.3.2.8 National Technology Specific Plans and Guidelines

Renewable Heat Obligation

Annually, a total of 38% of Ireland's final energy consumption emanates from heat energy, equating to 55,230 GWh. With oil (42%), gas (41%) and solid fuels such as coal (5%) and peat (4%) still the primary sources of heat generation, emissions from the heat sector totalled 12.6 Metric tonnes (Mt) carbon dioxide (CO_2) in 2019. Principally, heat energy is used across four sub-sectors: residential (46%); industry (35%); services (15%); and agriculture and fisheries (4%). While residential demand is the largest consumer of heat energy, usage is expected to decrease with improved energy efficiency.

In 2022, Ireland's renewable energy share in the heat sector was 6.8%, compared to the European Union (EU) average of 22%. While progress is being made, with an increase of half a percentage point on the previous year, significant action is needed to transform our energy sector to a high-renewable, low-carbon system on a pathway to net zero emissions by 2050.

Several policy measures aimed at decarbonising the heat sector have already been implemented. Building regulations have been updated and a share of the energy demand in new buildings now comes from renewable sources. The provision of incentives, such as SEAI's residential and community energy efficiency upgrade schemes, support domestic heat users to increase the energy efficiency of Ireland's housing stock. In addition, the Support Scheme for Renewable Heat offers supports for the adoption of renewable heat systems by non-domestic heat users.

In line with the recent agreement on Sectoral Emissions Ceilings to deliver up to 5.7 TWh of biomethane to further accelerate the reduction of overall economy-wide emissions, the government has agreed to introduce an obligation on the heat sector to include renewable heat by 2024. The obligation will further incentivise suppliers of all fuels in the heat sector to ensure that a certain proportion of the energy supplied is renewable.

The Department of the Environment, Climate and Communications (DECC) has carried out a scoping exercise to develop options for the proposed structure of the scheme. This process included examination of proposed obligation rates, scalability, and costs to the consumer. The Renewable Heat Obligation will be underpinned by a number of technical assessments and extensive stakeholder engagement activities. Consultation on the design of the Renewable Heat Obligation is currently being reviewed.

Further information can be found here: https://www.gov.ie/en/press-release/83757-government-agrees-to-the-introduction-of-an-obligation-on-the-heat-sector-by-2024/

Further information on the Renewable Heat Obligation: https://www.gov.ie/en/publication/7a1f1-renewable-heat-obligation/

Further information on the Support Scheme for Renewable Heat can be found here: https://www.seai.ie/business-and-public-sector/business-grants-and-supports/support-scheme-renewable-heat/

Wind Energy Development Guidelines 2006

Wind energy is currently the largest and cheapest contributing resource of renewable energy in Ireland, and is the second greatest source of electricity generation in Ireland after natural gas. In 2020, wind provided over 86% of Ireland's renewable electricity and 36% of our total electricity demand. Globally, Ireland is one of the leading countries in its use of wind energy and 2nd place worldwide in 2020, after Denmark.

The primary support for wind energy is the new Renewable Electricity Support Scheme (RESS) which will deliver Ireland's target of achieving up to 80% renewable electricity by 2030. To achieve this target set by the 2024 Climate Action Plan (CAP), onshore wind must be increased from 6 Gigawatts (GW) in 2025 to 9 GW by 2030 and offshore wind must be increased by at least 5 GW by 2030.

The Wind Energy Development Guidelines (2006) relate to onshore wind energy developments and were originally issued in 2006, under section 28 of the Planning and Development Act 2000, as amended (the 2000 Act). These Guidelines offer guidance to planning authorities on planning for wind energy through the development plan process and in determining applications for planning permission. The guidelines are also intended to ensure a consistency of approach throughout the country in the identification of suitable locations for wind energy development and the treatment of planning applications for wind energy developments. They set the context for wind energy considerations in these respects and affect future wind energy development proposals.

The Department of Housing, Local Government and Heritage (DHLGH) is currently undertaking a focused review of the 2006 WEDGs. The review is addressing key aspects including noise, setback distance, shadow flicker, community obligation, community dividend and grid connections.

DHLGH, in conjunction with the Department of the Environment, Climate and Communications (DECC) which has policy responsibility for environmental noise matters, has completed work to advance guidance on the noise aspect of the Guidelines.

In addition to work on the noise aspects of the Guidelines, the evolving policy and technical context including the Planning and Development Act 2024 and the revision of the National Planning Framework reinforces the need to ensure that the finalised Guidelines, once issued, are fit for purpose.

Action EL/24/5 of the Climate Action Plan 2024 Annex of Actions contains a commitment to having draft Guidelines prepared by Q1 2025. DHLGH is working on the finalisation and publication of the revised Guidelines in line with this commitment.

When finalised, the revised Guidelines will be issued as a National Planning Statement, subject to the commencement of the relevant provisions of the Planning and Development Act 2024. The 2006 Wind Energy Development Guidelines remain in force, pending the finalisation of the review process.

Further information can be found here: https://www.gov.ie/en/publication/f449e-wind-energy-development-guidelines-2006/

Plan-led Offshore Renewable Energy and Designated Marine Area Plans (DMAPs)

In March 2023, DECC published the Policy Statement on the Framework for Phase Two Offshore Wind, which sets out a plan-led approach to meet Ireland's offshore wind ambitions.

The Future Framework for Offshore Renewable Energy published in May 2024 sets out the key actions necessary for Ireland to take to deliver a potential 20GW of offshore wind by 2040 and 37GW by 2050.

Areas which are identified for Offshore Renewable Energy will be designated according to legislative provisions for Designated Maritime Area Plans (DMAPs) in the Maritime Area Planning (MAP) Act and will guide investment and decision-making. The South Coast Designated Maritime Area Plan for offshore renewable energy (SC-DMAP) is Ireland's first sub-national, forward maritime spatial plan for ORE.

This plan-led approach will ensure that development is managed in a planned, strategic and sustainable way. Importantly, it will provide greater certainty for all maritime users as to where development will be situated.

Further information can be found here:

- gov.ie - Policy Statement on the Framework for Phase Two Offshore Wind
- gov.ie - Future Framework for Offshore Renewable Energy
- gov.ie - The South Coast Designated Maritime Area Plan for Offshore Renewable Energy (SC-DMAP)

Draft Bioenergy Plan (2014)

Bioenergy is energy generated from renewable biomass and it covers a wide range of materials and processes. Potential agriculture bioenergy sources include purpose grown energy crops such as willow, forest thinning, waste material and timber by-products for biomass. Liquid biofuels and biogas can substitute for conventional transport fuels, while solid biomass and biogas can be used for heat/electricity generation as well as transport.

The Draft Bioenergy Plan establishes the broader context for the development of Ireland's bioenergy sector; setting out the policy areas that must be coordinated to support the development of the biomass sector in Ireland. It identified 19 measures to support the sustainable development of the sector; recognising that meeting the demand for biomass from indigenous sources could deliver significant economic and employment benefits. The Plan identifies that an additional bioenergy-focused measure in the heat sector represents the most cost-effective means of meeting a number of different policy goals and recommends the use of an incentive for renewable heat for larger heat users to change to heating solutions that produce heat from renewable sources.

Further information can be found here:
https://www.teagasc.ie/media/website/crops/crops/October_2014_Draft_Bioenergy_Plan.pdf

Biomethane Strategy

The primary objective of the National Biomethane Strategy, published in May 2024, is to deliver on the ambitious target set by the Government as part of the agreement on the sectoral emission ceilings. The ambition is to scale up indigenously produced biomethane by up to 5.7 TWh per annum by 2030[8], which has been increased substantially from an original CAP 2019 target of 1.6 TWh by 2030. The Strategy sets out the necessary policy and regulatory measures, and provides a roadmap that is agri-led and farmer-centric, to developing a biomethane industry of scale in Ireland[37].

Further information on the National Biomethane Strategy can be found here: gov.ie - National Biomethane Strategy

Biofuels Obligation Scheme 2010

Under the EU Renewable Energy Directive (RED III), there is a 14.5% GHG intensity reduction target for transport for 2030 or a 29% renewable energy target; Member States may choose either target. In Ireland, the Biofuels Obligation Scheme was introduced in 2010 to help meet this target, and this is administered by the National Oil Reserves Agency (NORA). It sets out an obligation that suppliers of road transport fuels must include a certain percentage of environmentally sustainable biofuels across their general fuel mix. The scheme works by ensuring that each supplier fulfils their requirements by having the necessary number of biofuel certificates required. This level of obligation has increased over time from an initial rate of 4% to the current rate of 8.69% which means that 8% of motor fuel (typically petrol and diesel) placed on the Irish market are provided from renewable sources. In April 2018, in order to provide certainty to obligated parties, a Biofuels Obligation Scheme Policy Statement was published. A second public consultation was held at the end of 2019 on the proposed increase to the biofuel obligation to 11% (by volume).

Further information can be found here: https://www.gov.ie/en/publication/91f03c-biofuels/

Renewable Electricity Support Scheme (RESS)

The RESS is an auction-based scheme which invites renewable electricity projects (wind, solar etc) to bid for capacity and receive a guaranteed price for the electricity they generate over a period of 15 years; thus providing support to renewable energy projects in Ireland.

During the month of February 2022, onshore wind energy provided 53% of Ireland's electricity demand, the highest monthly proportion on record. The amount of electricity generated by wind in August 2023 was up by

[37] gov.ie - National Biomethane Strategy

71% when compared with August 2022. This success in onshore renewables to date can be attributed both to RESS and its predecessor Renewable Energy Feed-In Tariff (REFIT) schemes.

RESS auctions are held at frequent intervals throughout the lifetime of the scheme, and the auctions are designed in line with trajectory targets identified in Ireland's National Energy and Climate Plan (NECP). A schedule of future RESS auctions is published on an annual basis.

The first RESS auction (RESS 1) took place in 2020 and the second (RESS 2), took place in 2022. The successful projects in RESS 2 were due to be delivered by 2025 at the latest, but after the Minister for the Environment, Climate and Communications became aware of circumstances which were affecting the ability of RESS 2 projects to meet the 2025 delivery date, the final delivery date was pushed out by a year – to end 2026) The RESS 2 projects represent a potential increase of nearly 20% in Ireland's current renewable energy generation capacity. The RESS 3 Auction ran as per the RESS 3 Auction Timetable following the Auction Submission Closing Date on the 15/09/23. It increased Ireland's renewable electricity capacity by another 12%. The RESS 4 Final Auction Results were published on 27/09/2024.[38] The results secure a 20% increase in Ireland's renewable capacity, with enough clean power for almost half a million homes and achieved at lower prices than the previous two auctions.

The fifth onshore RESS auction, RESS 5, will be an important contribution towards Ireland's 2030 renewable electricity target of 80% as set out in Climate Action Plan 2023 (CAP23). CAP23 set a target of 9 GW of onshore wind, 8 GW of solar and at least 5 GW of offshore wind by 2030. Climate Action Plan 2024 (CAP24), which was published in December 2023, set out revised sectoral emission targets consistent with the carbon budgets for the period 2021-2025 and 2026-2030. Delivery of the fifth onshore RESS auction, RESS 5, is one of the key actions for the second carbon budget period (2026-2030) and will therefore represent an important contribution towards Ireland's 2030 renewable electricity targets.

As part of the Climate Action Plan (CAP), RESS auctions support communities through community energy projects and ongoing community benefit funds.

In summary, with a primary focus on cost effectiveness, the RESS delivers a broader range of policy objectives, including:

- Increasing technology diversity by broadening the renewable electricity technology mix;
- Delivering an ambitious renewable electricity policy to 2030; and
- Increasing energy security, energy sustainability and ensuring the cost effectiveness of energy policy.

Further information can be found here: Renewable Electricity Support Scheme (RESS)

Small-Scale Renewable Electricity Support Scheme

The Small-Scale Renewable Electricity Support Scheme (SRESS) supports non-domestic renewable electricity generators above 50kW, and up to 6MW. The scheme will enable community projects, SMEs, and farmers to maximise their participation in the energy transition. SRESS will offer supports for renewable electricity installations which are not as suited to other support measures, such as the utility scale Renewable Electricity Support Scheme (RESS) and the Micro-generation Support Scheme (MSS). Through DECC's continued engagement with Renewable Energy Communities (RECs), there is evidence of significant challenges REC projects faced with the competitive, auction-based nature of Renewable Electricity Support Scheme. Therefore, support for communities will now transition to the non-competitive SRESS.

The first phase of SRESS was launched in July 2023. This sees both SRESS and the MSS providing grant support to larger businesses, farms, public buildings, and communities with grants that support self-consumption solar installations. These non-domestic scheme grants are supporting renewables self-consumers to invest in systems of up to 1MW in size.

The second phase of SRESS opened for applications in January 2025. This phase of the scheme supports community renewable energy projects and SMEs (including farmers) exporting to the grid up to 6 MW through a guaranteed tariff. SRESS is not an auction based and offers a simpler route to market for community projects and SMEs.

[38] EirGrid - RESS 4 Final Auction Results

SRESS is a key building block to deliver on Ireland's solar targets and forms part of the Government's comprehensive enabling framework for Renewables Self-Consumers.

Further information for SRESS can be found at: https://www.gov.ie/en/publication/96110-small-scale-generation/

Further information on the SRESS phase 1 grants can be found at https://www.seai.ie/grants/business-grants/commercial-solar-pv/

Further information for MSS can be found at gov.ie - Micro-generation (www.gov.ie)

Corporate Power Purchase Agreements (CPPAs)

A CPPA is an arrangement whereby a company procures renewable electricity through a direct contractual agreement with a renewable electricity generator at an agreed price for a fixed term. CPPAs help to finance renewable energy projects, as they give generators a guaranteed buyer and revenue stream for the energy they produce, and therefore an important aspect of decarbonising the electricity sector. The CAP sets out actions that may support the uptake of CPPAs, and as such, it is important that these actions are coordinated so that a coherent policy framework for the CPPAs is achieved.

CPPAs supplement the renewable electricity that is supported and paid for by all electricity consumers through interventions such as the Renewable Electricity Support Scheme (RESS). In recent years, there has been increased interest from large energy users globally in directly procuring electricity from renewable generators under the CPPAs.

The Sustainable Energy Authority of Ireland (SEAI) supported the development of a roadmap to help ensure that corporate power procurement contributes effectively and efficiently to delivering on Ireland's climate and renewable energy targets. The roadmap also sets out the expected timeframe for related policy development.

Further information can be found here: https://www.gov.ie/en/publication/a0d2e-renewable-electricity-corporate-power-purchase-agreements-roadmap/

A.3.2.9 Commercial semi-state and industry publications

EirGrid's Grid Development Strategy - Shaping Our Electricity Future

Since 2006, EirGrid has operated and developed the national high voltage electricity grid in Ireland. EirGrid is a state-owned company and is independent from the ESB. They operate the flow of power on the grid and plan for its future, while Electricity Supply Board (ESB) Networks is responsible for carrying out maintenance, repairs and construction on the grid. The grid moves wholesale power around the country by bringing energy from generation stations to heavy industry and high-tech users. The grid also supplies the distribution network operated by ESB Networks that powers every electricity customer in the country.

EirGrid is responsible for making the grid ready to carry 80% of Ireland's electricity from renewable sources by 2030, as set out in the Climate Action Plan (CAP) 2023. This means that the electricity grid will need to carry more power from energy sources that vary depending on the weather. This power will also need to be carried over longer distances. In July 2023, EirGrid published 'Shaping Our Electricity Future Roadmap version 1.1', an update on the previous version published in 2021. This Roadmap is a plan led approach to delivering an electricity system in 2030 which meets Ireland's climate targets; including 80% of electricity demand being met from renewable energy; compliance with Carbon Budgets; and allowing for electricity demand growth.

EirGrid have also published Strategic Framework Documents specific to each Regional Assembly, with one for the Southern Assembly due for publication. These allow EirGrid's current programme of grid development projects to be understood in a regional context, showing the interdependencies of the projects, challenges within the region and how grid development is part of the economic development of the region.

Further information is available here:

- Shaping Our Electricity Future
- Strategic Framework for Grid Development in the Eastern & Midlands Region
- Strategic Framework for Grid Development in the Northern & Western Region

Gas Networks Ireland (GNI) – Pathway to a Net Zero Carbon Network

Gas Networks Ireland (GNI) is a public body fully owned by the State; responsible for supplying, updating and maintaining the Irish natural gas supply system. The gas network generates approximately half of Ireland's electricity and delivers more than 30% of Ireland's primary energy needs. GNI has developed an ambitious *Pathway to a Net Zero Carbon Network*, outlining how the national gas network can transport 100% renewable gas by 2045, thereby playing an essential role in transitioning Ireland to a carbon-neutral economy. The pathway aims to transport 100% renewable gas, with biomethane accounting for one third of the gas on the network and the remaining volume coming from green hydrogen. By the end of the period, the existing national gas network will split into two distinct renewable gas networks.

This means that two types of renewable projects could conceivably connect with the local GNI network:

- **Biomethane facilities** – for example Anaerobic Digestion plants (using agricultural residues or other organic feedstock). The current plan is for GNI to develop central grid injection points at which biomethane would be injected into the gas transmission grid.
- and
- **Renewable hydrogen generation** facilities - it is expected that hydrogen blending will commence either locally and/or via the gas interconnectors and an initial hydrogen cluster will emerge likely involving some repurposing of the existing gas network to distribute indigenous green hydrogen to local large gas consumers.

Further information is available here: Pathway to a Net Zero Carbon Network

All Island Generation Capacity Statement (2019-2028)

This capacity statement was prepared by EirGrid and System Operator for Northern Ireland (SONI): the respective transmission system operators for both the Republic of Ireland and Northern Ireland. Interconnectedness is expected to play a key role in securing Ireland's energy supply in the coming years, and this will be defined by the success of a number of strategic transboundary energy projects such as the North-South interconnector, which is proposed the traverse the Ireland and Northern Ireland border. This 10 year plan is updated annually.

NOTE: EACH RA SHOULD IDENTIFY WHERE THERE ARE ANY PROJECTS LOCATED WITHIN THEIR JURISDICTION.

Further information can be found here:

2019- 2028: https://www.eirgridgroup.com/site-files/library/EirGrid/EirGrid-Group-All-Island-Generation-Capacity-Statement-2019-2028.pdf

2020-2029: https://www.eirgridgroup.com/site-files/library/EirGrid/All-Island-Generation-Capacity-Statement-2020-2029.pdf

2021-2030: https://www.eirgridgroup.com/site-files/library/EirGrid/208281-All-Island-Generation-Capacity-Statement-LR13A.pdf

2022-2030: https://www.soni.ltd.uk/media/documents/EirGrid_SONI_2022_Generation_Capacity_Statement_2022-2031.pdf

2023-2032: https://cms.eirgrid.ie/sites/default/files/publications/19035-EirGrid-Generation-Capacity-Statement-Combined-2023-V5-Jan-2024.pdf

Appendix B – Key data sources and consultees (as at 27th November 2024)

This appendix provides a summary of key data sources to support the implementation of the 2026 six-step Regional Renewable Energy Strategy (RRES) Methodology.

An overview of the six-step RRES Methodology is set out in **Figure B1** below. Specific data sources to support the implementation of each step is set out below in **Table B1**.

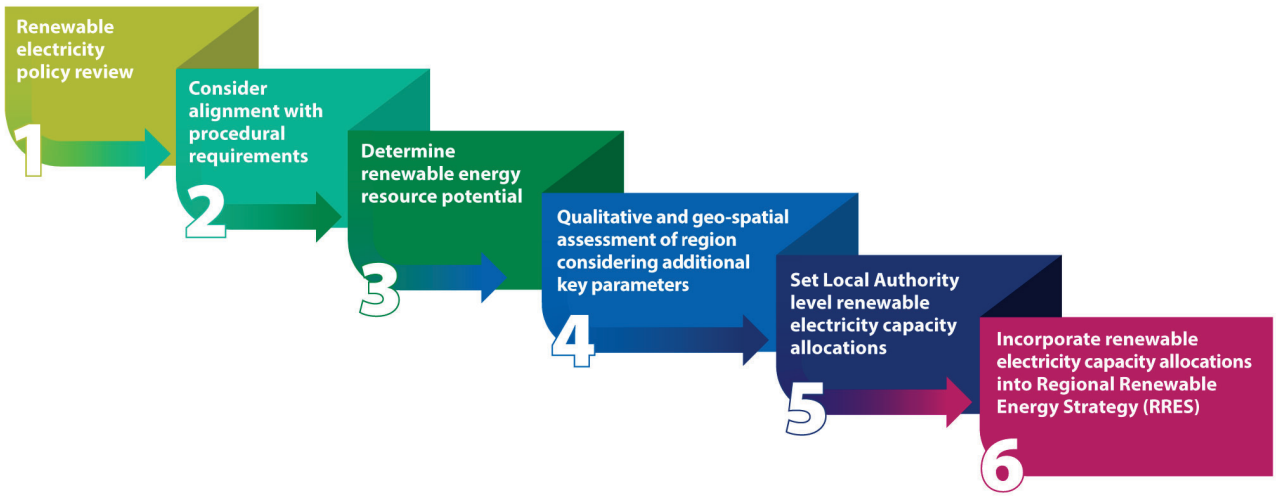

Figure B1. Outline of Six-Step RRES Methodology

Table B1: Key data sources to support the implementation of the 2024 six-step RRES Methodology.

RRES Methodology Step	Type of Data	Key Data Sources	
		Description	Link (if applicable)
Step 1 – Renewable Energy Policy Review	Generic – LARES Resources	See Appendix A	N/A
	Generic - Regional Spatial and Economic Strategies (RSESs)	Northern & Western Regional Assembly RSES (2020-2032)	RSES | Northern and Western Regional Assembly (nwra.ie)
		Eastern & Midlands Regional Assembly RSES (2019 -2031)	Eastern & Midland Regional Assembly Final RSES - Eastern & Midland Regional Assembly (emra.ie)
		Southern Regional Assembly RSES (2020-2032)	Southern Regional Assembly (southernassembly.ie)
Step 2 – Consider procedural requirements & alignment with the CDP	Generic – LARES Resources	See outputs from Step 1 and Step 3	See Appendix C
Step 3 – Determine Renewable Energy Resource Potential	Generic – LARES Resources	Determine renewable energy resource potential	See Appendix C
		Grid Infrastructure – electricity *Since 2006, EirGrid has operated and developed the national high voltage electricity grid in Ireland. EirGrid is a state-owned company and is independent from ESB Networks. EirGrid operates the flow of power on the grid and plan for its future, while ESB Network (ESBN) is responsible for carrying out maintenance, repairs and construction on the grid. The grid moves wholesale power around the country by bringing energy from generation stations to heavy industry and high-tech users. The grid also supplies the distribution network operated by ESBN that powers every electricity customer in the country. Grid connections are provided by Eirgrid and ESB Network under an Enduring Connection Policy (ECP) agreement.*	*Commission for Regulation of Utilities (CRU)* - The Commission for Regulation of Utilities (CRU) sets the policies for customers to connect to the Irish gas and electricity networks. - Based on the CRU's policy directions, the System Operators issue connection offers to generators and storage projects. The electricity network's Transmission System Operator (TSO) for Ireland is EirGrid, the TSO for Northern Ireland is SONI, and the Distribution System Operator (DSO) for Ireland is ESB Networks (ESBN). The gas network's TSO and DSO is Gas Networks Ireland (Bord Gais Eireann). *EirGrid & ESBN* - *Tomorrow's Energy Scenarios 2023*: this explores different scenarios for enabling a cleaner energy system based on renewables: Tomorrow's Energy Scenarios (TES) (eirgrid.ie) - *Shaping our Energy Future (SOEF) version 1.1*: the main objective of this roadmap outlines how EirGrid and SONI can make the grid ready so that 80% of Ireland's and Northern Ireland's electricity can come from renewable sources by 2030: https://www.eirgridgroup.com/the-grid/shaping-our-electricity-f/

RRES Methodology Step	Type of Data	Key Data Sources	
		Description	Link (if applicable)
		In response to binding national and European targets, EirGrid Group began a multi-year programme, "Delivering a Secure, Sustainable Electricity System" (DS3). The aim of this programme was to support meeting the 2020 renewable electricity target through increasing the allowable amount of non-synchronous generation on the Irish power system in a safe and secure manner: https://www.eirgridgroup.com/how-the-grid-works/ds3-programme/. *This programme is built on three pillars, each vital to its success. These are: System Performance; System Policies; and System Tools. Across these three pillars. EirGrid is fundamentally reviewing how they do things across the electricity industry to ensure policies, incentives, standards and tools are fit for purpose in a system with world-leading levels of renewables:* https://www.eirgridgroup.com/site-files/library/EirGrid/DS3-Programme-Brochure.pdf. *See also: Shaping our Electricity Future (2021):* https://www.eirgridgroup.com/site-files/library/EirGrid/Shaping_Our_Electricity_Future_Roadmap.pdf. *ESBN's Our Networks for Net Zero Strategy sets out ESBN's role in supporting the decarbonisation of the electricity system by 2040. It is based on their role in transforming the electricity distribution network that will empower customers to decarbonise their energy consumption; and in their role as Transmission Asset Owner in delivering the ambitious electricity transmission programme:* https://www.esbnetworks.ie/who-we-are/our-strategy	- Strategic Framework for Grid Development in the Northern & Western Region: Strategic Framework for Grid Development in the Northern & Western Region - October 2024 | Eirgrid - Strategic Framework for Grid Development in the Eastern & Midland Region: Strategic Framework for Grid Development in the Eastern & Midlands Region | Eirgrid - *Transmission Development Plan (TDP) 2023*: published annually - This lists the committed projects and projects under development for the enhancement of the Irish transmission network over the coming ten years. Committed projects are those that have received EirGrid capital approval and are in Steps 4-6 of their six-step process of developing the grid. Also included are projects which are in the development stage and those which have not yet received capital approval (Steps 2-3). - *Transmission Development Plan Online Map*: https://eirgrid-ie.maps.arcgis.com/apps/webappviewer/index.html?id=db3b1fce078d493a9fd67d6b5ce4ef8d - *All-Island Ten Year Transmission Forecast Statement (TYTFS) 2021 (published annually):* provides the following information: https://www.eirgridgroup.com/site-files/library/EirGrid/EirGrid-Transmission-Development-Plan-(TDP)-December-2023.pdf - *Network Delivery Portfolio (updated quarterly*): EirGrid is required to publish quarterly updates on the progress of all its transmission infrastructure projects as set out in CRU/20/154, the CRU's PR5 Regulatory Framework, Incentives and Reporting Decision Paper. The NDP provides a quarterly status update on 3 key milestones, EirGrid Capital Approval, Project Agreement with ESB and Energisation for these projects. Project dates and timelines provided in the NDP are based on an unconstrained scenario and are, therefore, indicative in nature and subject to change for a variety of reasons: https://www.eirgrid.ie/grid/grid-reports-and-planning/network-delivery-portfolio - Customers seeking to connect up to 40 MW at a single location should consult ESB Networks Distribution connection information: https://www.esbnetworks.ie/new-connections - Customers seeking to connect over 40 MW at a single location should consult EirGrid Transmission connection information: http://www.eirgridgroup.com/customer-and-industry/becoming-a-customer/ - SEAI community energy resource toolkit – grid connection: Community-Toolkit-Grid-Connection.pdf (seai.ie)

RRES Methodology Step	Type of Data	Key Data Sources	
		Description	Link (if applicable)
		Grid infrastructure - Gas *Gaslink is the TSO of the Irish gas network. A subsidiary of Bord Gais Eireann, it has replaced Bord Gais Networks in the operation, maintenance and development of the Irish gas network. All new connections to the transmission and distribution gas network are the responsibility of Gas Networks Ireland. These connections are managed in conjunction with the CRU.*	*Gaslink* - The Gas Networks Ireland Connections Policy (2018) is a single policy dealing with connections to the transmission and distribution gas networks: https://www.gasnetworks.ie/docs/business/get-connected/Gas-Networks-Ireland-Connections-Policy-Document-Revision-5.0.pdf. The aim of this policy is to provide the connection of new gas customers in an efficient manner. The policy sets out the conditions for the assessment of extensions to the gas networks, including extensions to towns not currently served by natural gas. - Connecting to gas overview (gasnetworks.ie)
		Transportation Infrastructure	Generic Consult the National Transport Office. Airport or aviation authorities, harbour authorities, port companies & public transportation bodies & specifically reference traffic management plans. Airports/airfields/Aerodomes Consult the Geographic Information System of the Commission (GISCO) airport database: https://data.gov.ie/dataset/airfield-areas-osi-national-250k-map-of-Ireland Consult the Irish Aviation Authority (IAA) Air Navigation Obstacles (obstacles related to aerodromes and those across with a height above 100m (includes windfarms)) database: https://www.iaa.ie/commercial-aviation/airspace/air-navigation-obstacles Ports Consult Ireland's marine atlas: https://atlas.marine.ie/#?c=53.6609:-10.7776:7: Ireland's marine atlas. Road & rail Consult transport – geospatial resources: https://www.geohive.ie/pages/bfececfa025642a1946fc2211ef86a29
		Telecommunications Infrastructure (masts)	Consult the Commission for Communications Regulation (ComReg) database: https://siteviewer.comreg.ie/#explore
		Landscape, Visual and Amenity considerations	Review the County Landscape Character Assessments (LCAs) (if available as a subset of the County Development Plan (CDP), and, if undertaking or revising a County LCA, the EPA REFRAME Toolkit.

RRES Methodology Step	Type of Data	Key Data Sources	
		Description	Link (if applicable)
			Review the Protected Views and Prospects subset of the CDP. Review the following maps & data sources: - EPA National Land Cover map: https://www.epa.ie/our-services/monitoring--assessment/assessment/mapping/national-land-cover-map/ - Administrative boundaries (Onshore): http://map.geohive.ie/ - Administrative boundaries (Offshore): https://atlas.marine.ie/#?c=53.9108:-15.9082:6 - Landscape Character Areas - Northern Ireland: https://www.daera-ni.gov.uk/services/regional-landscape-character-areas-map-viewer - Special Amenity Areas: o Howth SAA, https://www.fingal.ie/howth-special-amenity-area-order o Liffey Valley SAA, https://www.fingal.ie/sites/default/files/2019-03/Liffey%20Valley%20map1.pdf o North Bull Island SAA, https://www.dublincity.ie/sites/default/files/2023-03/2020%20Management%20Plan%20for%20North%20Bull%20Island%20Nature%20Reserve%20%281%29.pdf o Bray Head SAA, https://www.wicklow.ie/Portals/0/adam/Content/I46A8jfaW0eI3Wd4pR64AQ/Link/Bray%20Head%20Special%20Area%20Amenity%20Order%202007.pdf - Seascape Character Areas/ Seascape Character Types: https://atlas.marine.ie/arcgis/rest/services/Seascapes/MapServer (Marine Institute) - Failte Ireland: https://data.gov.ie/dataset?q=failte&sort=score+desc%2C+metadata_created+desc - Slopes/DTM (Copernicus): https://land.copernicus.eu/imagery-in-situ/eu-dem/eu-dem-v1.1?tab=download - Corine Land cover: Republic of Ireland: https://gis.epa.ie/GetData/Download and EU Wide Map Viewer and Data Download: https://land.copernicus.eu/pan-european/corine-land-cover/clc2018?tab=mapview - LIDAR: Map Viewer & Data Download: https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=b7c4b0e763964070ad69bf8c1572c9f5 and WMS, available under Groundwater:

RRES Methodology Step	Type of Data	Key Data Sources	
		Description	Link (if applicable)
			https://secure.dccae.gov.ie/arcgis/rest/services/Groundwater/LIDAR_Coverage_GSI_Phase2/ImageServer - Extractive Industries Register (EPA): https://gis.epa.ie/GetData/Download - Geological Heritage Areas (GSI): https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx - Bedrock Geology (GSI): https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx
		Heritage Aspects: Archaeology & Built Heritage	Review the CDP for reference to the development plan policy and any priority areas identified – including Architectural Conservation Areas, Protected Structures, UNESCO World Heritage Sites (both in Ireland and Northern Ireland), sites listed on the Records of Monuments and Places (RMP) and the Sites and Monuments Register - for the LA's approach to developing a sensitive and proactive way to protecting and managing heritage. Architectural Conservation Areas (Local Authorities): https://heritagemaps.ie/WebApps/HeritageMaps/index.html; https://data.gov.ie/ ; http://map.geohive.ie/ Review the baseline data on the Historic Environment Viewer Refer to the DHLGH Heritage Links for updated information on baseline datasets and policies. Refer to World Heritage Ireland for updated information on UNESCO World Heritage sites. Refer to the Heritage Council's National Heritage Data Sets and Metadata Refer to the Heritage Council's Heritage Maps Viewer
		Heritage Aspects: Natural Heritage, Biodiversity, Flora and Fauna	Review the County/City Biodiversity Action Plan for policy for the LA's approach to protecting and restoring biodiversity natural heritage and for information on sites of biodiversity importance at the county/city level The NPWS datasets for baseline data on biodiversity of national importance are available through the NPWS Viewer Maps and Data including: Refer to Flora Protection Order Sites. Refer to sites designated as SPAs and SACs under EU Birds and Habitats Directives and to the monitoring reports of same prepared by the NPWS For baseline information and monitoring reporting on flora and fauna, refer to NPWS Publications with respect to: • EU Habitats Directive monitoring of the Status of Habitats and Species - Article 17 Reports

RRES Methodology Step	Type of Data	Key Data Sources	
		Description	Link (if applicable)
			• EU Birds Directive monitoring of The status and trends of Ireland's bird species – Article 12 Reports • Threat Response Plans prepared to establish a system of strict protection for species listed in Annex IV of the Habitats Directive. • Red Lists dealing with rare and threatened species. • Species Action Plans (SAPs) for species of highest conservation concern. • Invasive Species Action Plans. For general biodiversity trends over time, flora and fauna records by species, and records for designated invasive alien species, refer to the National Biodiversity Data Centre Biodiversity Maps
		Tourism	Review the CDP for reference to the development plan policy for the LA's approach to developing a sensitive and proactive way to protecting and managing heritage (including tourism aspects). Fáilte Ireland's Regional Development Strategies: Failte Ireland - Regional Development Strategies | National Tourism Development Authority |
		Community & Socioeconomic Impacts	Government is committed to ensuring that communities can play a role in reaching 80% renewable electricity target. The pivotal measure to deliver on this target is the Renewable Electricity Support Scheme (RESS) and the Small-Scale Renewable Electricity Support Scheme (SRESS). Both the RESS and the SRESS mandate the establishment of Community Benefit Funds (CBFs) for participating projects. This core policy ensures that local communities hosting renewable energy developments directly receive tangible social and economic benefits from the country's clean energy transition. The existing, structured mechanism of mandatory CBFs and voluntary community investment opportunities already provide structured and equitable avenues for local participation and benefit. CBFs are ring-fenced for the exclusive benefit of local communities and deployed based on local priorities. The flexibility of the RESS and SRESS CBF model is a defining feature, allowing each community to decide what form of investment best fits its unique local needs. The current RESS auction supports the achievement of the increased ambition of 80% renewable electricity as set out under the National Development Plan and the policies and measures in the Climate Action Plan 2025. The RESS Scheme ensures that Ireland is on a pathway to meet our ambitious climate targets and lays the foundations of a thriving and cost-effective renewable electricity market.

RRES Methodology Step	Type of Data	Key Data Sources	
		Description	Link (if applicable)
			See Section 7 of the RESS Terms & Conditions: https://www.gov.ie/pdf/?file=https://assets.gov.ie/202966/8696964e-fa1e-4879-9648-11c6eaa756da.pdf#page=null The SEAI Community Enabling Framework provides a set of supports for community projects under RESS, with similar supports available under SRESS. The framework provides resources such as free access to specialist technical advisors. These experts guide community groups through every stage of development, from formation and site identification to feasibility studies, project design, and grid and planning applications.
Step 4 – Qualitative & geo-spatial assessment of region considering additional key parameters		Key demographic, social and economic information	CSO database website – can search for data on economics, occupation, health, demographics, etc 2022: https://data.cso.ie/
		Grid infrastructure	See *Step 3 – Determine Renewable Energy Resource Potential* for links to grid infrastructure key data sources
Step 5 – Set County-Level Renewable Targets			N/A
Step 6 – Develop the Renewable Energy Strategy			N/A

Appendix C – Step 3 Technical Handbook

Please refer to external document detailing Appendix C – Step 3 Technical Handbook.

Appendix D – Socio-Economic Benefits

D.1 Overview

Increasing the utilisation of indigenous renewable energy resources, such as wind and solar energy, is a central measure to enhancing national energy security, reducing reliance on imported fossil fuels, and achieving the State's national climate objective - to reduce the extent of further global warming, pursue and achieve, by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.

The deployment of onshore renewable electricity generation delivers a range of socio-economic benefits across economic, social, and environmental spheres. Onshore renewable electricity projects have already added significant value to Ireland and will continue to do so as their deployment rate increases in line with national ambition as set out in the Climate Action Plan. The benefits being realised include:

- Direct and indirect employment opportunities.
- Reduction in carbon emissions.
- Enhanced energy security.
- Direct financial contributions to Local Authorities.
- Support for local community development initiatives.

Planning for and facilitating the sustainable utilisation of Ireland's indigenous renewable energy resources will act to bolster the contribution of Regional Assemblies and Local Authorities to the transition to a low-carbon economy and promote balanced reginal development in line with the national planning objectives set out in the first revised National Planning Framework.

D.1.1 Job Creation

Renewable electricity projects and the associated infrastructure, create jobs in construction, operations, and maintenance, stimulating local economies and offering long-term employment opportunities. Renewable developments can also provide opportunities for technical innovation, skills development, and local supply chain growth, strengthening Ireland's position as a leader in the green transition. Furthermore, renewable projects in rural areas can contribute to regional development, supporting landowners, tourism, and biodiversity initiatives, ensuring a balanced and sustainable economic future.

The Sustainable Energy Authority of Ireland (SEAI) estimates, in their Wind Energy Roadmap 2011-2050[39], that onshore and offshore wind could create 20,000 direct installation and operation/maintenance jobs by 2040 and that the wind industry would also have an annual investment potential of €6-12 billion by the same year. The report also found that the potential economic value of electricity generated by wind could reach almost €15 billion by 2050.

D.1.2 Commercial Rates

Wind and solar farms make significant contributions to the Local Authority commercial rates in the county in which they are located. These commercial rates provide a stable revenue stream to fund public services, infrastructure, and local investment such as roads, libraries, and other services around rural Ireland.

According to the KPMG Report, 'Act Now – Accelerating Onshore Renewable Energy in Ireland'[40] a potential of €100 million could be contributed to local authority rates by 2030, plus a potential Gross Value Add (GVA) of €2.7 billion arising from the capital activities required to meet Climate Action Plan targets by 2030.

[39] Wind Energy Roadmap 2011-2050

[40] KPMG – Act Now - Accelerating Onshore Renewable Energy in Ireland

As detailed in Renewable Energy Ireland's 2023 report[41], wind farms pay nearly €50 million each year to Local Authorities. For solar, it is anticipated that projects will contribute €28 million per year by 2030 in land leasing fees and €41.25 million per year by 2030 in commercial rates.

D.1.3 Community Benefit Funds

Community Benefit Funds (CBF) are a financial resource set up to support local communities in areas located near renewable energy projects, such as wind and solar farms for the benefit of the local community. These funds ensure that communities benefit from the transition to a low-carbon economy and that communities which host the key energy infrastructure to enable this transition, see those benefits in a tangible form in their local areas.

Examples of projects that would be expected to be supported from these funds are retrofits of community buildings and sports club activities.

All Renewable Electricity Support Scheme (RESS) projects must register for a CBF, making sure that local communities benefit directly from the renewable energy development in their area. The fund contribution is set at a minimum of €2 per MWh[42]. This means there are real and quantifiable funds being made available annually for the benefit of the local community. Voluntary community benefit funds have been in place for years. According to research conducted by Wind Energy Ireland (WEI), wind farms contributed €5 million to local initiatives through CBF's in 2023 alone. Example: a Community Benefit Fund established by a 10 MW onshore wind project, expecting to produce on average approximately 30,000 MWh of electricity per year, would have available funds of around €61,000 per year.

To date four onshore RESS auctions have taken place, with the upcoming RESS 5 auction taking place in September 2025. Once operational, the contracted projects under these auctions will deliver circa €12.6m in annual community benefit fund payments to local communities over the RESS support period of c. 15 years. The first offshore auction took place in 2023, when operational these projects have the potential to deliver annual community benefit fund payments of over €37m.

Further onshore and offshore auctions are planned for 2025 and beyond, which will increase these annual fund amounts.

SEAI have a Community Benefit Fund National Register[43], which contains a Map where more information is available on the location of Renewable Energy Projects and Community Benefit Funds, plus a Dashboard providing more detail regarding renewable energy produced and how these funds have been used by Community Benefit Funds. This register is a live register, as projects energise and fund disbursement commences, it will become a valuable resource to show just how impactful the CBFs are.

To note, Climate Action Plan 2024 states that "*all new or repowered renewable electricity generation projects shall implement a Community Benefit Fund equivalent to the RESS requirements*"[44], in order to ensure that those projects not funded via RESS contribute to the wider economic, environmental, social, and cultural well-being of the local community.

D.1.4 Cost to Consumers

Renewable electricity helps lower the cost of electricity for households and businesses by reducing reliance on volatile fossil fuel markets, increasing price stability. Enhanced energy security through domestically produced electricity reduces dependence on imported fuels, making Ireland less vulnerable to global energy price shocks.

[41] Renewable Energy Ireland – Cutting Carbon, Creating Jobs, Building Energy Security

[42] A megawatt-hour (MWh) is a unit of energy that tells us how much electricity is generated or used with a one-hour time period.

[43] SEAI - Community Benefit Fund National Register

[44] Climate Action Plan 2024, p.166

Analysis by the ESRI[45] suggests that early delivery of onshore wind this decade will drive down wholesale electricity prices by up to 10%, supporting Ireland's competitiveness and investment offering attracting Foreign Direct Investment. Crucially, renewables provide stability and resilience to external price shocks along with reducing our dependence on fossil fuels.

D.1.5 Community Owned Projects

Community owned renewable electricity projects play an important role in achieving Irelands clean energy transition. The Programme for Government recognises the importance of community involvement in renewable energy projects. The Small-Scale Renewable Electricity Support Scheme (SRESS) was designed to simplify market access for community owned solar and wind projects, SMEs and farmers, offering a simpler route to market, with fixed tariffs for solar and wind. Applicants receive a fixed tariff for a period of 15 years.

D.1.6 Just Transition

Achieving net-zero emissions requires transformational change across the economy and society, with the impacts of this transition being felt more acutely within certain sectors of the economy and in certain communities, particularly across the Midlands region. The National Economic and Social Council defines a just transition as "one which seeks to ensure transition is fair, equitable and inclusive in terms of processes and outcomes"[46]. A just transition seeks to support those people and communities that may be negatively affected by the green transition, ensuring that they can participate and share in the benefits from the changes underway as the economy and society respond to climate change. It couples climate action with social inclusion, and at its core, identifies and creates opportunities for public and private investment in economic development that is both sustainable and inclusive.

Ireland's Territorial Just Transition Plan[47], approved in 2022, provide for investments of up to €169 million, which is targeted at the economic transition of the Midlands region for the period to 2027. This Plan has supported a number of funding streams providing socio-economic benefits across the wider Midlands region. These include support for:

- Initiatives that deliver new economic and employment opportunities
- Installation of public and private transport networks
- Development of tourism, outdoor and recreation amenities
- Initiatives that support research and development, innovation, research and training

D.1.7 Monitoring of the Socio-Economic Impacts from Renewable Electricity Development:

Renewable electricity will play an essential role in Ireland's transition to a low-carbon economy, with onshore wind and solar PV critical technologies to the achievement of our national climate targets. It is, however, important that these developments positively contribute to local communities, ensuring this transition balances the need to reduce carbon emission with sustainable economic-growth and social well-being.

Regional Assemblies can play an important role in monitoring, assessing and reporting on the socio-economic benefits derived from renewable electricity developments,

This involves tracking the benefits through a consistent framework of data-driven Key Performance Indicators (KPIs) in order to ensure that Ireland's energy transition delivers long-term benefits to local communities.

[45] ESRI - The impact of planning and regulatory delays for renewable energy

[46] Addressing Employment Vulnerability as Part of a Just Transition in Ireland | The National Economic and Social Council - Ireland

[47] EU Just Transition Fund

D.1.8 Possible KPIs for consideration:

Below is a non-exhaustive list of potential KPIs each Regional Assembly might wish to consider when monitoring possible socio-economic impacts from renewable electricity development within their region.

D.1.8.1 Economic KPIs:

- Job Creation
    - *Number of direct and indirect jobs created from the renewable electricity sector (construction, maintenance and operation)*
- Investment Levels
    - *Total capital investment in renewable projects within the region*
- GDP Contribution
    - *Share of renewables in regional economic output*
- Cost Savings
    - *Reduction in energy costs for consumers and businesses*
- Commercial rate Income
    - *Amount of income generated for local authorities from wind and solar projects*

D.1.8.2 Community KPIs:

- Number of Community Benefit Funds
    - *Total number of Community Benefit Funds within the Regional Assembly registered on the National Register*
- Community Benefit Fund Contributions
    - *Total number of funds allocated for local community initiatives from renewable projects*
- Community Owned Projects
    - *Total number of community owned projects within the Regional Assembly*

D.1.9 Useful Links:

Various reports and articles are available online on socio-economic benefits of renewable electricity where further information is available.

- SEAI Wind Energy Roadmap 2011-2050
- KPMG – Act Now Onshore Renewable Energy Ireland
- KPMG - Powering Tomorrow 2025 - Securing Ireland's Energy Future
- Renewable Energy Ireland – Report: The Public Benefits of Renewables
- SEAI - Community Benefit Fund National Register
- IRENA - Renewable Power Generation Costs in 2023
- IRENA – Renewable Energy and Jobs 2024
- ESRI - The impact of planning and regulatory delays for energy infrastructure