European Commission

# Clean energy for EU islands: Study on regulatory barriers and recommendation for clean energy transition on the islands

# **Ireland**

Clean energy
for EU islands

# Study on regulatory barriers and recommendations for clean energy transition on the islands - Ireland

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# Readers' Guide

This Study on legal and regulatory barriers for the clean energy transition on Irish islands is the result of a consultative process. Based on an inventory of the current legislation and information gathered via surveys and interviews, the Clean energy for EU islands secretariat has brought together relevant stakeholders to identify barriers to the clean energy transition on Irish islands, and formulated recommendations to overcome them.

After an introduction and explanation of the methodology, the first Chapter of this Study provides an overview of the existing policy and legislation for clean energy on Irish islands.

The second Chapter contains the identified legal and regulatory barriers, based on the survey and the interviews (see Annex 1 for a detailed assessment), and the recommendations, based on the Focus Group Meetings and the National Stakeholder Meetings (see Annex 2 for more information).

# Introduction

Small size, remoteness and climatic vulnerability lead to an unfavourable geographic condition and make islands susceptible to external factors. While islands are particularly vulnerable to climate change, they enjoy a naturally high potential of renewable energy sources to harness. Many islands have abundant renewable energy potential, which can be tapped into to lead decarbonisation. While access to reliable, clean and competitive sources of energy remains a main concern of island communities in the EU, islands present unique opportunities to become leaders in clean energy transition.

While it is often technically and financially possible to develop renewable energy projects on islands, EU, national, regional and local legal frameworks are not always fit-for purpose.

This **country study** identifies existing and emerging legal, regulatory and policy frameworks that foster the development of local decarbonised energy systems on Irish islands. It aims to provide insight into whether the legislation supports or poses obstacles for islands to develop and implement their plans. It processes input gathered from literature review, surveys, interviews, and workshops and highlights best and worst practices, inspiring examples, failures and their lessons learned. In addition the study provides recommendations for overcoming the identified barriers.

This study is the third deliverable of the Task Force 2 – Think Tank on legislation and regulation for islands of the Clean energy for EU islands secretariat. It builds further on the Regulatory inventory of legal and regulatory information on clean energy development for 15 Member States, available online at the website of the Clean energy for EU islands secretariat.

# Methodological approach

Different methods of information collection were used by the Think Tank to complete the information needs for the detailed inventory:

- Desk research completing the information for the selected Member States was conducted.
- In-depth surveys were created and sent to the consortium's network. 37 stakeholders were engaged, and the response rate was 30%. (See Annex 1 for more details)
- Information templates were sent to regulators, national authorities and relevant stakeholders.
- Six semi-structured open-ended interviews with national and regional legislators, regulators and academic institutions and relevant actors (local DSOs, citizens, authorities, businesses and communities) of local energy initiatives were organised. This helped clarify the rationale behind, and interpretation of existing legal developments. In these interviews we identified the key actions drivers, opportunities and obstacles for the implementation of the action plans they encountered, including possible ways to address or overcome them.
- Two online Focus-Group discussions were held; one to discuss the identified barriers and one to discuss the formulated recommendations to overcome the barriers (see Annex 2 for more details).
- A National Stakeholder Meeting was held on the Aran Islands on 15 and 16 September 2022 (See Annex 3 for more details).

- Experiences from local stakeholders, available through one-on-one contacts, articles in local newspapers or as part of communication provided by (local) advocacy groups were integrated. The contacted actors included those that were identified during the project work from Phase I of the Secretariat and project experiences that have arisen from the technical assistance in Task Force 1.

# Policy and Legislation for clean energy on Irish Islands

## Introduction to the Irish Energy Market – Relevant Actors

Throughout the report, several key stakeholders in the Irish Energy Market will be referred to. A short overview of these actors and their role is given below.

The All-Ireland single electricity market[1] (SEM) is the wholesale electricity market for the island of Ireland. It is regulated jointly by the Commission for Regulation of Utilities (CRU)[2] in the Republic of Ireland and the Utilities Regulator in Northern Ireland. The islands are part of the SEM.

Different players are active on this market. There are players that produce the energy and others that consume energy. Between production and consumption there are several actors, such as: the control of production and the establishment of prices (Regulators and Market Operators), the transport of energy (Transmission Operators), the distribution of energy (Distributors) and the sale of energy to the final customer (Suppliers or Utilities).

The SEM is operated by the Single Electricity Market Operator (SEMO)[3] – which is a joint venture between the transmission system operators in both jurisdictions – EirGrid and System Operator Northern Ireland (Soni).

EirGrid[4] is the Transmission System Operator (TSO) and ESB Networks[5] is the Distribution System Operator (DSO). All Marketers or Utilities sell across the entire grid.

The Department of the Environment, Climate and Communications[6] (DECC) is responsible for the development and delivery of policies and programmes in the areas of communications, postal, energy, natural resources, climate action, waste, and the environment.

The Sustainable Energy Authority of Ireland[7] (SEAI) is a governmental body established to promote and aid in the development of sustainable energy in Ireland.

## Irish islands and their governance

Ireland is the second-largest island of the British Isles, located in the Atlantic Ocean. The Republic of Ireland covers 70,273 km$^2$, or about 83% of the island. Off the coast of Ireland there are 83 offshore islands, 23 of which are inhabited. The largest of the inhabited Irish Isles, Achill Island, has an area of 148 km$^2$. Many of the islands are much smaller, with an area below 30 km$^2$. Ireland has a total offshore island population of 8,756 inhabitants[8], which corresponds to 0.2% of its population[9].

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[1] https://www.cru.ie/professional/energy/energy-market/wholesale-market-design/

[2] https://www.cru.ie/

[3] https://www.sem-o.com/

[4] https://www.eirgridgroup.com/

[5] https://www.esb.ie/

[6] https://www.gov.ie/en/organisation/department-of-the-environment-climate-and-communications/

[7] https://www.seai.ie/

[8] CNA17: Population by Off Shore Island, Sex and Year (Link)

[9] Eurostat 2020 (Link)

The islands are under the jurisdiction of a county. Irish islands do not have their own local authorities but depend on counties on the mainland. However, each of Irish islands has a very specific culture and community. Community development cooperatives play an important role in the administration and day-to-day life on the islands. In addition, island cooperatives are currently there to interact with the regional and national government and push for islands' priorities. For example, on the Cape Clear island[10] there is a cooperative that deals with all the relevant issues for the local community, including energy. Therefore, the implementation of clean energy on the island would optimally involve the cooperatives. The Irish islands are represented by the Irish island federation[11].

## General policy

The Integrated National Energy and Climate Plan for the Republic of Ireland aims to achieve a share of renewable electricity of 70% by 2030, a share of renewable heating and cooling of 24% by 2030 and a share of renewable energy in the transport sector of 13.4% by 2030.

Regarding **Strategic Planning**, specific attention is given to islands in the Policy Document 'Our Rural Future: rural development policy for 2021-2025'[12]. The plan spans over 120 pages and details 150 different actions to revive rural Ireland. Chapter 10 'Supporting the Sustainability of our Islands and Coastal Communities' is especially relevant from the perspective of the clean energy on EU islands initiative. There are 12 Policy Measures mentioned for the Islands and Coastal communities, the main one being the 10 Year policy for Islands Development to 2030. It promises an extensive consultation process with island communities and will address issues such as housing, health, energy, utilities, waste management, climate change, education, digital connectivity, employment, infrastructure and transport.

Specifically for islands, the Irish Government is developing a new national policy for the development of the islands around Ireland, called the 'new National Policy for the Future Development and Sustainability of Communities on the Offshore Islands of Ireland'[13]. This new '10-year Policy for Islands Development to 2030'[14] will focus on developing new opportunities for islanders and building sustainable futures for island communities.

"*The Programme for Government commits to the production of a long term plan outlining how Ireland will take advantage of the significant potential of offshore energy on the Atlantic Coast and achieve 5GW capacity in offshore wind by 2030 off Ireland's Eastern and Southern coasts. This plan will position Ireland to become a major contributor to a pan-European renewable energy generation and transmission system.*"

The focus with the Irish islands when it comes to energy transition is on using the islands as testing sites for the innovative technologies and behavioural change. The Department of Rural & Community Development is working on finalising the Islands Policy, which had stalled since the end of 2019. The goal is to have this ten-year action plan ready by the end of 2022. The interdepartmental committee that is currently drawing up the plan will also be following up its implementation with sequential three-year action plans.

[10] http://www.capeclearisland.ie/Comharchumann

[11] http://oileain.net/

[12] https://www.gov.ie/en/publication/4c236-our-rural-future-vision-and-policy-context/

[13] https://www.gov.ie/en/publication/02a4d-island-policy-consultation-paper/

[14] https://www.gov.ie/pdf/?file=https://assets.gov.ie/132413/433aebac-f12a-4640-8cac-9faf52e5ea1f.pdf#page=91

Ireland's planning hierarchy in relation to energy policies is done at different levels, namely national, regional and municipal.

The National Planning Framework (NPF) and the National Development Plan (NDP) are the two pillars of Project Ireland 2040, setting out a shared vision for coordinated planning and investment, linking national spatial development priorities and enhancement of physical Infrastructure. Project Ireland 2040 is the government's long-term overarching strategy to make Ireland a better country for all of its citizens[15]. It is about doing things differently. Ireland has changed how it invests in public infrastructure, moving away from the approach of the past which saw public investment spread too thinly and investment decisions which didn't align with a clearly thought out and defined strategy.

Project Ireland 2040 is committed to the delivery of the NPF as a blueprint for spatial planning in Ireland to 2040, with the National Development Plan supporting the delivery of the 'Ten National Strategic Outcomes of the NPF out to 2027'[16]. The National Strategic Outcomes (NSO) are the tools which the NPF will use to deliver its goals.

NSO 8. TRANSITION TO LOW CARBON AND CLIMATE RESILIENT SOCIETY[17]

The National Climate Policy position establishes the national objective of achieving a transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. This objective will shape investment choices over the coming decades. New energy systems and transmission grids will be necessary for a more distributed, renewables focused energy generation system, harnessing both the considerable on-shore and off-shore potential from energy sources such as wind, wave, and solar, as well as connecting the richest sources of that energy to the major sources of demand.

The Irish Government published a Climate Action Plan in 2021. This plan provides a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting Ireland on a path to reach net-zero emissions by no later than 2050, as committed to in the Programme for Government and set out in the Climate Act 2021[18].

The Plan lists the actions needed to deliver on climate targets and sets indicative ranges of emissions reductions for each sector of the economy. It will be updated annually, including in 2022, to ensure alignment with a legally binding economy-wide carbon budget and sectoral ceilings.

Citizens, communities and business will all have a role to play. The government will support the changes through the €165 billion National Development Plan which includes funding for retrofitting homes, building new public transport, reskilling workers and supporting a just transition.

In the Public Sector, the plan aims to:

- Reduce emissions from the public sector by 51% by 2030 with Green Teams in every public body
- Prohibit new fossil fuel heating systems in public buildings after 2023 (limited exceptions)
- Mandate all new fleet purchases to be electric from 2023 (where vehicle type available)
- Improve energy efficiency of the public sector from 33% in 2020 to 50% by 2030.

[15] https://www.gov.ie/en/campaigns/09022006-project-ireland-2040/

[16] https://assets.gov.ie/37937/12baa8fe0dcb43a78122fb316dc51277.pdf

[17] https://assets.gov.ie/128921/8ee8ecc9-dd53-40ae-bc5d-48fa15db5066.pdf

[18] https://www.gov.ie/en/publication/6223e-climate-action-plan-2021/

The Climate Action Fund (CAF) was established to provide assistance and financial support to projects which will help Ireland achieve its climate and energy targets[19]. The CAF will provide at least €500 million in government funding up to 2027 towards this aim.

Regional Spatial and Economic Strategy (RSES) sets out the key strategic assets, opportunities and challenges and sets out policy responses to ensure that people's needs – such as access to housing, jobs, ease of travel and overall well-being – are met, up to 2030 and beyond[20]. Included in these regional strategies are the region's Climate Action Strategy – to accelerate climate action, ensure a clean and healthy environment and to promote sustainable transport and strategic green infrastructure. The North West Regional Assembly is responsible for the North West Renewable Electricity Support Scheme (NW RESS) (2020-2032).

The Government's Climate Action Plan 2019[21] requires each Local Authority to identify and develop plans for one decarbonisation zone - an area in which a range of climate mitigation, adaptation and biodiversity measures are identified to address local low carbon energy, greenhouse gas emissions and climate needs, to contribute to national climate action targets. After identifying the most suitable area for the zone, each Local Authority must develop their implementation plan ahead of the deadline (December 2021)[22].
Furthermore, local authorities in Ireland are now charged with developing individual climate action plans[23]. They are supported, on a regional level, and connected through the coordinating role and work of the Climate Action Regional Offices (CAROs).

Specific funding under the Climate Action Fund for community initiatives will be routed through the local authority framework. In addition, the Sustainable Authority of Ireland partners with Local Authorities to provide bridge funding for community energy upgrades. A new partnership between the SEAI and the Atlantic Seaboard North Climate Action Regional Office, which consists of counties Donegal, Sligo, Mayo and Galway, will pay communities up to €25,000 towards the upfront costs of their energy upgrade projects.

Energy transition discussion for the islands is currently mainly focused on electricity, as this is centrally controlled and planned. Heating is managed locally. Energy performance of Irish buildings needs to improve not just on the islands but also on the mainland. Most transport from and to the island is locally owned.

## Renewable energy

### Support systems

There are no island specific support systems in Ireland. The generally applicable support systems are described below. The Renewable Electricity Support Scheme (RESS) is the main government support to help deliver on Ireland's 70% renewable electricity target by 2030. The scheme has a

[19] https://www.gov.ie/en/publication/de5d3-climate-action-fund/

[20] An example: https://emra.ie/rses/

[21] https://www.gov.ie/en/publication/ccb2e0-the-climate-action-plan-2019/

[22] https://www.caro.ie/news/local-authority-decarbonisation-zones

[23] https://www.lgma.ie/en/publications/local-authority-sector-reports/delivering-effective-climate-action-2030.pdf

number of community features designed to ensure community participation. Of particular interest to island communities are the provisions of the Community Benefit Fund and the Community-led category. The former provides for all RESS projects, including offshore projects, to share project revenues with local communities for sustainable purposes and the latter provides a route to market for community-led projects.

According to the Sustainable Energy Authority Ireland, around 90% of the residents on islands are part of a community and the vast majority of islands is represented in the community's programme. Although it does not have a specific island mandate, it significantly contributes to the clean energy development on islands. According to a certain interviewee the reason for this high interest in sustainable energy communities on the islands is that there are full-time people employed in community cooperatives on the islands. These employees are looking into renewable energy to provide for their (small) island community. That is the reason islands make so much use of the support system.

Ireland offers several incentives for the deployment of renewable technologies in the electricity generation, heating and cooling, and transport sector. Support for larger RES projects (both solar and wind power) is allocated through auctions. Additionally, a solar PV scheme provides subsidies for the purchase and installation of roof-mounted PV. The heating and cooling sector is addressed through a grant scheme for heat pumps, an operational tariff for biomass/biogas installations, and grants for the energy upgrading of dwellings. In the transport sector, grants are provided for the purchase of private and commercial EVs and the installation of public and private chargers. Ireland has a biofuel obligation scheme and offers tax relief and tax exemption for electric vehicles.

Support schemes:

- A Solar PV scheme offers grants for the purchase and installation of roof-mounted PV. Battery storage is also eligible for support.
- The RESS 1 auction offers support to medium and large wind and solar power projects and has a specific Community Preference Category to support communities.
- The Pig & Poultry Investment Scheme offers grant aid to pig and poultry farmers for specific investments in renewable generation and energy efficiency measures.
- The Young Farmers' Capital Investment Scheme offers grant aid to young farmers for renewable generation and energy efficiency measures.
- The tax regulation mechanism 'Accelerated Capital Allowance' is a tax-relief scheme that promotes renewable generation, measures on energy efficiency and electric mobility to enterprises located in the Republic of Ireland through accelerated depreciation.
- The tax regulation mechanism 'VAT Refund for farmers' refunds the VAT for farmers that purchase wind turbines or PV plants.
- The support scheme 'Renewable Heat' provides grants for the purchase and installation of heat pumps.
- The subsidy 'Better Energy Homes' provides grants for the energy upgrading of dwellings.
- The subsidy 'Electric Vehicle Grant Scheme' provides grants for the purchase of private and commercial Evs.
- Under the tax regulation mechanism 'Vehicle Registration Tax', electric vehicles are exempted from the vehicle registration tax.
- Ireland has a biofuel quota scheme under which fuel suppliers are required to include a certain percentage of biofuels in their annual fuel sales.
- The 'Electric Vehicle Home Charger Grant' & 'Electric Vehicle Public Charger Grant' offer grants for the installation of electric chargers.

### RES projects authorisation process

A range of permits must be obtained for renewable energy projects including from the local planning authorities, the national regulator, the distribution and/or transmission grid operator and the national valuation office. The permit and authorisation process for RES in the Republic of Ireland includes the following steps:

- Site selection: project developers should consider specific planning regulations, which are stated in the Local Development Plans. For onshore wind, specific guidelines are available (currently under revision).
- Application preparation: This step includes the preparation of the Environmental Impact Assessment Report (EIA Report) and/or the Natura Impact Statement (NIS) for onshore wind/ ground-mounted PV and expectedly for offshore wind.
- Electricity production licence: This step foresees the issue of the Licence to Generate (operation licence) by the Commission for Regulation of Utilities (CRU). Its application can follow the Authorisation to Construct licence (see below), or a single application is possible. Planning permission and grid connection offer is mandatory for the issue of this licence.
- Administrative authorisation: This step includes the issuing of the planning permission by the Planning Authority or An Bord Pleanála. The application includes all accompanying documents, such as the EIA Report and the NIS.
- Grid connection procedure: The Enduring Connection Policy (ECO) follows a standard approach since 2018. The last one took place in 2020. The TSO Eirgrid, and the DSO ESB Networks are tasked to announce the initiation of the application window. ECP defines the categories and the number of projects which will be offered a connection ('batch process'). By accepting the connection offer, project developers can realise their grid connection works.
- Corporate legal-fiscal: This step concerns the 'Revaluation' process, which is the periodic update of commercial property rates in local authorities.
- Other: This step foresees the issue of the Authorisation to Construct by the CRU . Application for Authorisation to Construct can come first and then the Licence to Generate may follow. However, the project developer can submit a single application for both licences. In any case, planning permission is necessitated while a proof of grid connection suffices for the application submission

### Grid

The Irish islands are fully interconnected. The grid connection procedure is defined by the 'Enduring Connection Policy' (ECP). Additional grid connection and development works are classified as contestable i.e., they can be carried out by the project developer and or non-contestable i.e. they are carried out by the TSO/DSO. Grid access is non-discriminatory. Ireland has one distribution system operator and one transmission system operator. The country has a smart meter penetration rate of 3.7%. The electricity supplier switching rates for household customers in 2018 was 14.2%.

## Supported energy efficiency measures

Several of the schemes under 'supported RES technologies', such as the Pig & Poultry Investment Scheme and the Better Energy Homes, offer grants to energy efficiency measures as well. Apart from that, the Energy Efficiency Obligation Scheme requires every energy supplier to achieve a

certain energy efficiency target by carrying out energy efficiency projects in the domestic or non-domestic sectors. The Excellence in Energy Efficiency Design grant scheme offers subsidies to public and private organisations for the design and implementation of energy efficient projects. Finally, the Better Energy Communities is a comprehensive scheme that finances energy efficiency projects to Irish Communities.

**Regulatory best practice**
Contrary to the Renewable Electricity Support Scheme (RESS), the grants for energy efficiency projects foresee a 'grant uplift' of 50% for islands. Island inhabitants could thus ask for 50% more funding for energy efficiency renovations. The special funding applied to two schemes – phase three of the greener homes scheme[24], which allows homeowners to install energy efficient technologies such as geothermal heat pumps, solar panels and biomass boilers and stoves, at a subsidised cost; and the home energy saving scheme. This extra allocation is still active on the Better Energy Homes Scheme (previously Greener homes) and the grant is uplifted by 50% when there is an application from an eligible island.

Also, the SEAI 'Community Grant' supports energy efficiency community projects through capital funding, partnerships, and technical support. Offshore islands score more favourably in the selection process, due to their more challenging installation requirements.

## Supporting policies

Ireland has an official training and certification programme called Renewable Energy Installers. The National Standards Authority of Ireland also offers certification for energy efficiency measures, while additional accreditation for energy auditors is required in order to qualify for the Excellence in Energy Efficiency Design (EXEED) grant scheme. The Public Sector Energy Programme provides support to public sector entities for energy savings. Ireland also issues annual calls for RD&D projects on clean energy transition.

## Self-consumption and community energy

A community preference category was taken up in the country's first RES auction, the Renewable Electricity Support Scheme (RESS). Currently, there is no specific legal framework with regard to prosumers, but the distribution system operator is planning to introduce a micro-generation support scheme for prosumers.

**Regulatory best practice**
Unlike commercial projects, energy communities do not need to have a planning permission before their grid application, making it less burdensome. On top of that, a new bill has recently passed simplifying authorisation procedure for community projects[25].

[24] https://www.iea.org/policies/4632-greener-homes-scheme

[25] Planning and Development (Solar Panels for Public Buildings, Schools, Homes and Other Premises) (Amendment) Bill 2021 (https://www.oireachtas.ie/en/debates/debate/seanad/2021-06-28/18/).

## Spatial Planning

At the national level two main organisations are responsible for planning: the Department of Housing, Heritage and Local Government and the An Bord Pleanála, which is an independent, statutory, quasi-judicial body that decides on appeals from planning decisions made by local authorities. As the main body responsible for oversight of the planning system in Ireland, the Department of Housing, Heritage and Local Government is responsible for framing planning legislation as well as the preparation and issue of policy guidance[26]. In addition, the eight regional authorities are responsible for drawing up and implementing Regional Planning Guidelines (RPGs) to support strategies for regional development. The implementation of the physical planning system in Ireland is the responsibility of the 88 local planning authorities. Development Plans and Local Plans are made by the 29 County Councils, 5 City Councils and 49 Towns.


The Planning and Development Act 2000[27] (as amended) forms the foundation for planning in Ireland. This Act covers a huge range of planning-related issues, and merges a wide range of different legislation into one Act. It sets out regional planning guidelines, development plans and local area plans. It further sets out how the process for planning permission works. It contains special requirements for protected structures, conservation areas and areas of special planning control.

[26] http://residentsalliancegroup.com/docs/planning%20in%20Ireland.pdf

[27] https://www.gov.ie/pdf/?file=https://assets.gov.ie/118297/b65e91a5-ea82-460a-9f8c-cc6bb8c754f5.pdf#page=null

## Identified barriers and recommendations to overcome them

The Clean energy for EU island secretariat's Think Tank has identified legal and regulatory barriers. The research is based on the detailed assessment of the current regulatory framework and consultation with relevant Irish stakeholders, through surveys and interviews (see Annex 1 for a detailed assessment). For each of the regulatory barriers, the Secretariat identified multiple recommendations. Those barriers and recommendations were presented and discussed within the Focus Group Meetings and the National Stakeholder Meeting (see Annex 2 for more information).

The identified regulatory barriers are presented in the order of their priority for energy transition on the Irish islands. Some of the barriers also exist on the mainland. In the recommendations below, the focus lies on the concrete regulatory barriers encountered by islands .

The table below represents the list of barriers (marked in dark blue) ordered based on their priority, and the proposed recommendations (marked in white).

Barrier 1**. Bottlenecks and gaps in framework for community energy projects and energy sharing**

Recommendations:

1.1 Revise permitting procedures and especially the Enduring Connection Policy

1.2 Accelerate the regulatory work on P2P trading and energy communities

1.3 Set-up a one-stop-shop for support and provide capacity building for (island) communities

Barrier 2. **Spatial planning constraints and complicated permitting procedures**

Recommendations:

2.1 Provide spatial planning guidelines for implementation of clean energy projects

2.2 Designate go-to areas and create simplified permitting procedures

Barrier 3. **Grid constraints and absent framework for storage to cope with it**

Recommendations:

3.1 Adapt grid development methodology from an ad-hoc approach to a future-oriented approach

3.2 Develop suitable frameworks for storage with particular attention for islands

Barrier 4. **Renewable energy support system not adapted to island challenges**

Recommendations:

4.1 Develop support systems with particular attention for islands

4.2 Use regulatory sandboxes for testing of innovative solutions

Barrier 5. **Islands are not consulted in a systematic manner**

Recommendations:

5.1 Integrate island views in the policy for the development of the islands around Ireland

5.2 Relaunch the initiative to create an intergovernmental department to specifically focus on islands

Barrier 6. **Lack of support from the regional and national government**

Recommendations:

6.1 Mandatory follow-up on decarbonization zones, mandatory development of Local Authority Renewable Energy Strategies together with national guidance
6.2 Channel funding from the EU towards clean energy development on islands

**REPowerEU - Proposal for amendment of RED II (and EPBD & EED)[28] and Recommendation on speeding up permit-granting procedures for renewable energy projects**

On 18 May 2022 the European Commission has presented the REPowerEU Plan, its response to the hardships and global energy market disruption caused by Russia's invasion of Ukraine. There is a double urgency to transform Europe's energy system: ending the EU's dependence on Russian fossil fuels, which are used as an economic and political weapon and cost European taxpayers nearly €100 billion per year, and tackling the climate crisis. There are three main axis:

- Saving energy
- Diversifying supplies and supporting our international partners
- Accelerating the rollout of renewables

A massive scaling-up and speeding-up of renewable energy in power generation, industry, buildings and transport will accelerate our independence, give a boost to the green transition, and reduce prices over time. The Commission proposes to increase the headline 2030 target for renewables from 40% to 45% under the Fit for 55 package. Setting this overall increased ambition will create the framework for other initiatives, including among others:

- A dedicated EU Solar Strategy to double solar photovoltaic capacity by 2025 and install 600GW by 2030.
- A Solar Rooftop Initiative with a phased-in legal obligation to install solar panels on new public and commercial buildings and new residential buildings.
- A Commission Recommendation to tackle slow and complex permitting for major renewable projects, and a targeted amendment to the Renewable Energy Directive to recognise renewable energy as an overriding public interest. Dedicated 'go-to' areas for renewables should be put in place by Member States with shortened and simplified permitting processes in areas with lower environmental risks. To help quickly identify such 'go-to' areas, the Commission is making available datasets on environmentally sensitive areas as part of its digital mapping tool for geographic data related to energy, industry and infrastructure.

These two last tools are particularly relevant for islands as renewable energy development is often hampered by spatial planning constraints and complicated permitting procedures. Where relevant references to the these tools are made in text boxes.

On the same day the European Commission (DG ENER) published the report "Technical support for RES policy development and implementation – Simplification of permission and administrative procedures for RES installations (RES Simplify)". The aim of the report is to provide insights on the most important obstacles impeding the diffusion of renewable energy technologies in the permitting and grid connection procedures. It also discusses best practice examples deployed by the EU Member States and general best-practice recommendations which can be promoted with regard to permitting new and repowered renewable energy installations and connecting them to the grid. Relevant recommendations and examples are given throughout the study where relevant.

[28] Proposal for Directive amending Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources, Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency

## 1. Bottlenecks and gaps in framework for community energy projects and energy sharing

On the Irish islands, there is a strong sense of community. Cooperatives play a big role in the daily lives of island citizens. There are island cooperatives and communities that focus on renewable energy. For example on the Aran Islands the residents formed the Aran Islands Energy Cooperative in 2012. Through this cooperative the islands participate in several innovative pilots funded by the Horizon 2020 and InterReg programmes. At the same time, the energy cooperative is working to develop a wind power plant of 2.7 MW. Planning, grid connection and feed-in tariffs are some of the issues they face in achieving this goal. The example of the Aran Islands shows how an engaged island community can move forward with small citizen-scale investments. The Aran Islands developed a Clean Energy Transitions agenda[29]. Bere Island has an energy group that is working with the sustainable energy authority of Ireland to produce an energy master plan that will guide the islanders on their journey[30]. Cape Clear and its island community have been frontrunners on clean energy[31]. The community developed an integrated wind energy system in 1987, which operated until the early nineties. Other islands on the road of their energy transition are for example Rathlin[32] and Valentia[33].

As presented in the Chapter on Policy and Legislation above, a community preference category was taken up in the country's first RES auction, the Renewable Electricity Support Scheme. Several other supportive systems are available for energy communities as demonstrated on the visual below.

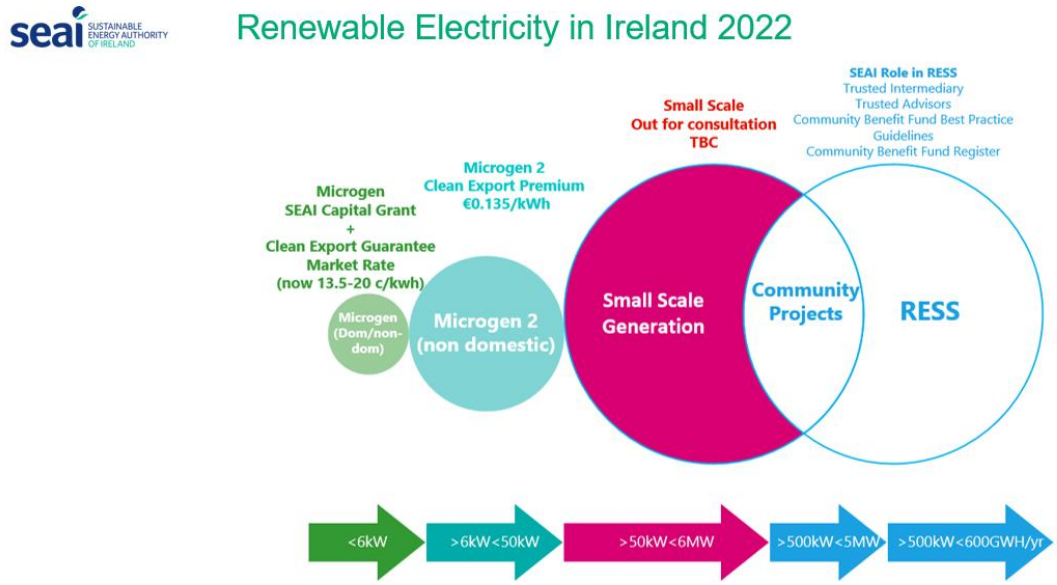


Figure 1 - Overview of RES-E support systems available for Communities - Source SEAI

Besides support systems, supportive actions by SEAI are foreseen:

- Sustainable Energy Communities: Network of 700 communities, supported with mentors, training and energy master planning grants

[29] https://www.aranislandsenergycoop.ie/wp-content/uploads/2020/01/ARAN_FinalTransitionAgenda_20191118.pdf

[30] https://clean-energy-islands.ec.europa.eu/index.php/countries/ireland/bere-island

[31] https://clean-energy-islands.ec.europa.eu/countries/ireland/cape-clear

[32] https://clean-energy-islands.ec.europa.eu/index.php/countries/ireland/rathlin

[33] https://clean-energy-islands.ec.europa.eu/index.php/countries/ireland/valentia

- Better Energy Communities: Panel of project coordinators who can deliver large scale energy retrofit projects (circa €100M/year)
- Renewable Energy Communities: Community category for large scale community led generation projects with trusted advisors and early stage grant support
- Mandatory Community Benefit funds: Communities near new large scale wind and solar, onshore and offshore projects will have access to €1-2 Bn over the coming decades that could support climate action ambitions

In spite of these initiatives, the legal and regulatory frameworks for community energy projects and energy sharing are partially missing. As also identified by the LECo policy paper[34] there is a lack of national community energy strategy, and a lack of national targets for community energy projects. This is a barrier for the whole of Ireland, but as clean energy projects on islands are mainly community driven, this barrier is particularly relevant for islands. Additionally, there is no framework for prosumers yet[35]. This creates an obstacle for the viable business case for small scale renewable energy on the islands. Finally, there is no specific legal framework for energy communities nor for Peer-to-Peer (P2P) Trading.

As also identified by the LECo policy paper[36] there are bureaucratic barriers to grid connection including: complicated application procedures, uncertainty of approval, costs, and time-consuming administration. There is also no priority grid access for community projects. Complicated grid access and lengthy procedures to secure a connection to ensure a FIT (large scale community renewable project), make it particularly difficult for community projects.

While there is the national Sustainable Energy Communities program, which allows for 100% funding to develop an energy master plan at municipality level, and the availability of a grant program of €75 million for communities to apply to do projects in their own locality, the issue is lack of capacity of the island stakeholders.

A specific issue that makes developing energy projects complicated for communities are the strict timelines in permitting and support schemes. An overview of the planning and authorisation process is given in the Policy and Legislation chapter – section RES projects authorisation process above. For the grid connection procedure, a standard approach named the Enduring Connection Policy (ECP) is followed since 2018. The transmission system operator (TSO) Eirgrid and the distribution system operator (DSO) ESB Networks announce the initiation of the application window. ECP defines the categories and the number of projects which will be offered a connection ('batch process'). By accepting the connection offer, project developers can realise their grid connection works.
The issue around planning permission for community projects stems from this grid connection procedure. In order to stop projects reserving too much grid capacity, all developers must have a planning permission before they seek a grid connection. Community led projects do not have to have planning permission to apply for a grid connection, but the actual connection offer itself won't be issued until planning permission is granted. Community projects instead are issued with a 'connection assessment' following some early engagement meetings with ESB Networks.

[34] https://leco.interreg-npa.eu/subsites/leco/PESTLE_Analysis_LECO_A4_190110-singlepages.pdf

[35] It was stated that from 2022 a new support system would start, supporting individual use of res up to 50 kW for self-consumption. If energy is used for self-consumption, then 33 % of the total consumption injected to the grid will be provided benefits for. There is however at the time of report writing a framework published.

[36] https://leco.interreg-npa.eu/subsites/leco/PESTLE_Analysis_LECO_A4_190110-singlepages.pdf

Once the connection assessment is issued, communities have two years to secure planning permission. If they fail to do so, this capacity on the grid is released again to another project. This constitutes a real barrier: once the connection assessment is issued, communities have two years to secure planning permission, which is a too short timeframe since it takes much longer for communities than professional developers to develop these projects.

**Recommendation 1.1: Revising permitting procedures and especially the Enduring Connection Policy**

Under the Electricity Regulation Act [37], the Commission for Regulation of Utilities (CRU) may give directions to EirGrid, the transmission system operator (TSO) and ESB Networks, the distribution system operator (DSO), on the terms and conditions of access to the transmission and distribution systems. Based on the CRU's policy directions, the system operators issue connection offers to generators and storage projects. Since 2018, the CRU has published these grid connection procedures known as 'Enduring Connection Policies'(ECP). The TSO and the DSO announce the initiation of the application window. ECP defines the categories and the number of projects which will be offered a connection ('batch process'). By accepting the connection offer, project developers can realise their grid connection works.

In order to address the barrier mentioned above the secretariat recommends that the CRU, and the TSO and DSO reconsider the ECP to create a level playing field. The strict timelines for obtaining the planning permission (two years) should be revisited, at least for wind projects for which this is a particular short timeframe, when looked at from a community perspective. And even more so on islands where there are severe Special Area of Conservation restrictions. This could be done by extending or enlarging the two-year limit for community-led projects Category C (Community-led Energy[38]) in the ECP. Instead of losing the grid connection assessment if the community led project does not get a planning permit within 2 years, a more flexible approach could be adopted. If a community led project could demonstrate on the basis of transparent KPIs that it has advanced in its project development process and would only needs some months more to obtain planning permission, a deadline extension could be granted. Projects that have stalled would still be removed after 2 years to make place for other community led projects waiting in line.

Actors involved:

- **Commission for Regulation of Utilities (CRU)**
- **Department of Environment, Climate and Communications**
- Local Planning Authorities
- An Board Pleanála (Planning Authority)
- Sustainable Energy Authority (SEAI)
- Eirgrid – Transmission system operator
- ESB Networks – Distribution system operator
- Energy communities and cooperatives

[37] Electricity Regulation Act 1999 - section 34

[38] Projects with maximum export capacity (MEC) greater than or equal to 0.5 MW and less than or equal to 5 MW utilising one or more of the following renewable energy generation technologies (and not in combination with non-renewable generation technologies); wind turbines (wind), solar photovoltaic panels (solar), hydraulic turbines (hydro) excluding pumped storage, waste to energy projects, biomass projects and biogas projects, and who meet the following requirements: (a) at all relevant times, be at least 51% owned by a Renewable Energy Community2 (the "Relevant REC") either by way of (i) a direct ownership of the ECP project's assets, or (ii) a direct ownership of the shares in the generator; and (b) at all relevant times, at least 51% of all expected profits, dividends and surpluses derived from project are returned to the Relevant REC

### Recommendation 1.2: Accelerate the regulatory work on P2P trading and energy communities

The CRU is in the process of developing an enabling regulatory framework that will facilitate the participation of active consumers and energy communities in the Irish electricity sector. Different 'Calls for Evidence'[39] and a Consultation Paper[40] on the topics of energy communities and active consumers have been launched by the CRU.

The CRU should prioritise further development of the regulation (financing, permitting procedures, social support) for energy communities. The regulation should provide a clear advantage to forming an energy community. The support can be in the form of incentives for specific projects, tax benefits, technical assistance for starting an energy community and simplified procedures for clean energy projects. Moreover, the regulation for energy communities on the islands could be coupled with the regulatory sandboxes to allow controlled environments for testing of the new tariffs and innovative technologies. Regulatory sandboxes[41] are ways for authorities, tasked with the implementation and enforcement of specific legislation, to test innovative approaches and technologies in real-life situations through time limited implementation of except to the existing legislation. This way incentives for clean energy transition on the islands can be tested without a permanent change in legislation. It also gives room to evaluate the success of the experiment.

**REPowerEU - facilitating citizen and community participation**
To facilitate citizen and community participation, Member States should stimulate the participation of citizens, including from low and middle-income households, and energy communities in renewable energy projects, as well as take measures to encourage passing the benefits of the energy transition on to local communities thus enhancing public acceptance and engagement. Member States should implement simplified permit-granting procedures for renewable energy communities, including for the connection of community-owned plants to the grid and reduce to a minimum production licensing procedures and requirements, including for renewables self-consumers.

A specific measure that can be taken in this regard is the creation of soft loans for energy communities. While a developer might have the money to execute required studies for planning permission (EIA, grid studies, surveys etc.), energy communities do not have that money available. In this regard up-front finance for community owned projects, such as soft loans and grants should be made available – to cover the preparation costs. Concretely this loan would be repaid if the project succeeds and starts operating. If the project fails because it does not get the planning permission, then the loan is cancelled (partially).

Another measure for supporting citizen involvement, could be to 'oblige' mandatory citizen participation in renewable energy projects. For example, the Balearic Climate change and Energy Transition Law[42], approved in February 2019, requires the public administrations of the Balearic Islands to support participation of citizens, civil society organisations and local renewable energy communities in the deployment and management of renewable energy systems. More precisely, Article 49 of the Law defines that the local participation of at least 20% should be encouraged or obliged for RES projects with less than 5.0 MWp or more than 5 MWp, respectively.

Actors involved:
- **Commission for Regulation of Utilities**
- Department of Environment, Climate and Communications

[39] https://www.cru.ie/wp-content/uploads/2021/01/CRU20098_Call-for-Evidence-on-Active-Consumers-and-Jointly-Acting-Active-Consumers-under-the-Clean-Energy-Package.pdf & https://www.cru.ie/document_group/energy-communities-and-active-consumers/

[40] https://www.cru.ie/document_group/energy-communities-and-active-consumers/

[41] Regulatory sandboxes and experimentation clauses as tools for better regulation: Council adopts conclusions - Consilium (europa.eu)

[42] http://www.caib.es/sites/canviclimatic2/es/llei_de_ccite/

- Sustainable Energy Authority (SEAI)
- Energy communities and cooperatives

**Recommendation 1.3: Set-up a one-stop-shop for and provide capacity building for (island) communities.**

Energy communities are beneficial from the point of view of involvement of local communities and achieving just transition. Moreover, involvement of energy communities in the energy transition aims to help increase knowledge of energy topics, implementation of energy efficiency measures and uptake of renewable energy.

As also identified by the LECo policy paper[43] there is a fragmentation of roles and responsibilities across government departments, agencies, local authorities and other bodies is a barrier for effective planning. There is also a lack of an intermediary body. Energy sector regulation is a complex matter. In order to get the right information to set up energy communities, it is worthwhile to look at one-stop-shops. The national government could help set up a platform, trainings or conferences with island stakeholders to foster the discussion, promote best practices or even provide funding for mentorship programmes. This can be coordinated and monitored by the intergovernmental department focusing on islands (cfr. Barrier 'islands are not consulted in a systematic manner' and the recommendation 5.2 to relaunch the initiative to create an intergovernmental department to specifically focus on islands).

Additionally, communication is important. The SEAI should provide clear and transparent communication about advantages and disadvantages of forming an energy community and available support. This should be easy to access and written clearly in easy language. Designing the level and details of communication can also be a task for the intergovernmental department focussing on islands.

**REPowerEU - facilitating citizen and community participation**

The EU Solar Strategy highlights that better information is key to enhance clarity and predictability on the benefits of selfconsumption for potential investors, citizens and SMEs. Investment costs, financial support, increase of property value, network tariffs, generation and consumption profiles and return on investment are all relevant factors impacting investments. One-stop-shops in Member States should share such information and give citizens advice on both energy efficiency measures and solar energy projects in an integrated manner, from the technical requirements to administrative steps and support measures.

Community energy projects still face significant barriers, including difficulties in securing financing, navigating licencing and permitting procedures or developing sustainable business models. In addition, as they are often initiated by a group of volunteers, they suffer from limited time and lack of access to technical expertise. Member States should establish appropriate incentives and adapt administrative requirements to the characteristics of energy communities. An integrated 3-step "learn-plan-do" programme could help energy communities build technical expertise and secure access to financing. The assessment and removal of existing barriers would level the playing field with more professionalised and established market participants.

Actors involved:

- **Sustainable Energy Authority (SEAI)**
- Department of Environment, Climate and Communications
- Local and regional authorities
- Energy communities and cooperatives

[43] https://leco.interreg-npa.eu/subsites/leco/PESTLE_Analysis_LECO_A4_190110-singlepages.pdf

## 2. Spatial planning constraints and complicated permitting procedures

An overview of the planning and authorisation process is given in the Policy and Legislation chapter – sections Spatial Planning and RES projects authorisation process above. Land-use conflicts form a major barrier, specifically on islands. Energy generation can be in conflict with historical buildings and tourism and the designation of an island as a Special Area of Conservation. Spatial planning legislation related to these protected areas impose restrictions on RES installations that are not adjusted to the local island's characteristics. Due to spatial planning constraints, the authorisation and licensing procedures for clean energy projects are too complex for individuals or communities which do not have expertise in the sector.

Partly due to these spatial planning constraints, the authorisation and licensing procedures for clean energy projects are too complex for people or communities which do not have expertise in the sector.

As also identified by the LECo policy paper[44] the fragmentation of roles and responsibilities across government departments, agencies, local authorities and other bodies is a barrier for effective planning.

**Recommendation 2.1: Provide spatial planning guidelines for implementation of clean energy projects**

While the Development Plans and Local Plans are realised – every six years - by the regional authorities and local planning authorities, the clean energy transition on the islands is already ongoing and should not wait for their implementation. Therefore, there is a need for the guidelines from the national level, namely the Department of Housing, Heritage and Local Government, on how clean energy projects should be planned and implemented in regard to the land use priorities. Such guidelines have to take into account the characteristics of islands and seek compromises between environment conservation, agriculture, preservation of historical sites, tourism and sustainable and clean energy. The guidelines should embody a long term vision on how different land use on islands are coordinated to assure sustainable economic development. The use of the guidelines would help assure that the approval process is not additionally complicated or delayed during the process of adoption of local plans.

**REPowerEU – RES Simplify**

The RES Simplify report contains some useful recommendations and examples for political backing of RES:
Integrated planning system from national to local.
A general planning strategy can enhance local and regional involvement. Such a strategy includes breaking down national targets to the regional and local levels. Measures should be implemented to legally ensure the availability of sufficient land area for a target-compliant RES development (e.g. x% of national area is allocated to wind power). This could feature regional targets, but would leave decisions about specific locations in the hands of local actors.

**Germany**: The German Renewable Energy Act requires the federal states to report to the federal government on the status of renewables. This particularly includes permitted RES installations, the progress of repowering, and the area of land which is available for further wind energy deployment according to regional and urban land-use plans. If the available area is not sufficient, reasons and proposals for improvement have to be provided. Monitoring reports are assessed by a cooperation committee of the Federal Ministry of Economy and Energy and the federal states. Based on the committee's assessment, the Federal Government report on the progress of RES deployment with a view to reaching the RES targets and provides recommendations for further measures (Tagesspiegel Background 2021).

[44] https://leco.interreg-npa.eu/subsites/leco/PESTLE_Analysis_LECO_A4_190110-singlepages.pdf

While the guidelines should be prepared on the national level by the Department of Housing, Heritage and Local Government, the preparation process should involve representatives of the Department of Environment, Climate and Communications, SEAI, regional authorities, local planning authorities who will be implementing the guidelines and experts and academia involved in the realisation of clean energy projects on the islands. Even though the guidelines represent a temporary document until the local spatial plans are developed, they can also be used as one of the guiding documents for integration of energy transition topics in the preparation of Development Plans and Local Plans.

**REPowerEU – RES Simplify**

The RES Simplify report contains some useful recommendations and examples for public provision of guidelines and documentation templates on the national level for authorities, project developers and stakeholders Guidelines for authorities and stakeholders act as a helping hand when it comes to the realisation of renewable projects. They inform and describe the RES-E permitting process and thus increase expertise and knowledge amongst all parties involved. Stakeholders can follow a clear cook-book recipe and have direct access to the standard ingredients (templates for all application documents etc.) they have to use during project permitting.

**Spain**: Some Autonomous Communities, such as Andalucía and Extremadura, published a guiding document explaining step by step how to install a renewable energy system for self-consumption.

**Italy**: Good practice by the competent authority to provide project developers with guidance on the application process at the beginning of the authorisation procedures, as for example the 'MUTA portal' of the Lombardy region.

**UK**: The Scottish Government has published "Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments" which provides guidance on good practice principles for communities, businesses, local authorities and others.

Actors involved:

- **Department of Housing, Local Government and Heritage**
- An Bord Pleanála, the planning appeals board
- Department of Environment, Climate and Communications
- Environmental Protection Agency (EPA)
- Sustainable Energy Authority of Ireland (SEAI)
- The Office of the Planning Regulator (OPR)
- Regional authorities,
- Local planning authorities
- Irish Planning Institute

### Recommendation 2.2: Designate go-to areas and create simplified permitting procedures

Integration of spatial planning and sectoral strategies is fundamental in identifying and accessing suitable land for renewable energy projects but is not a common practice. In light of the land-use conflicts mentioned above, we recommend developing an integrated approach via the creation of a detailed Master Plan per island that investigates and approves the areas or sites for clean energy development. This Master Plan should define go-to areas specifically for one or more renewable energy sources. Consequently, projects in these zones should be subjected to fast-track and simplified permitting procedures or lightened environmental impact assessments. Concretely the Department of Housing could propose certain zones for a Ministerial exception.

**REPowerEU – Renewable go-to areas**

Article 1(1) adds a new definition to Article 2 of Directive (EU) 2018/2001, to define 'renewables go-to area'. Which means *a specific location, whether on land or sea, which has been designated by a Member State as particularly*

*suitable for the installation of plants for the production of energy from renewable sources, other than biomass combustion plants*. Article 1(4) inserts a new Article 15b on the obligation for Member States to identify the land and sea areas necessary for the installation of plants for the production of energy from renewable sources in order to meet their national contributions towards the 2030 renewable energy target. Article 1(5) inserts a new Article 15c on the obligation for Member States to adopt a plan or plans designating 'renewables go-to areas', which are particularly suitable areas for the installation of production of energy from renewable sources.

A faster roll-out of renewable energy projects could be supported by strategic planning carried out by Member States. Member States should identify the land and sea areas necessary for the installation of plants for the production of energy from renewable sources in order to meet their national contributions towards the revised 2030 renewable energy target set out in Article 3(1) of Directive (EU) 2018/2001. The identification of the required land and sea areas should take into consideration the availability of the renewable energy resources and the potential offered by the different land and sea areas for renewable energy production of the different technologies, the projected energy demand overall and in the different regions of the Member State, and the availability of relevant grid infrastructure, storage and other flexibility tools bearing in mind the capacity needed to cater for the increasing amount of renewable energy.

Member States should designate as renewables go-to areas those areas that are particularly suitable to develop renewable energy projects, differentiating between technologies, and where the deployment of the specific type of renewable energy sources is not expected to have a significant environmental impact. In the designation of renewables go-to areas, Member States should avoid protected areas to the extent possible and consider restoration plans. Member States may designate renewable go-to areas specific for one or more types of renewable energy plants and should indicate the type or types of renewable energy that are suitable to be produced in each renewable go-to area.

A possible simplification can be to explore options for a single permit, for instance for any clean energy project on the islands or for a specific size and type of the project which is considered priority in strategic documents. For instance, in Greece the national government has introduced a simplified procedure for ground mounted PV plants with installed capacity lower than 1 MW where some steps in the authorisation process are removed (certification of the RES producer), while others are simplified to the single permit (administrative authorisation and grid connection).

**REPowerEU – accelerated procedures.**

As explained above, the proposed amendment to the renewable energy directive foresees the identification of go-to zones.

In the designated renewables go-to areas, renewable energy projects that comply with the rules and measures identified in the plan or plans prepared by Member States, should benefit from a presumption of not having significant effects on the environment. Therefore, there should be an exemption from the need to carry out a specific environmental impact assessment at project level in the sense of Directive 2011/92/EU of the European Parliament and of the Council[45].

The designation of renewables go-to areas should allow renewable energy plants, their grid connection as well as co-located energy storage facilities located in these areas to benefit from predictability and streamlined administrative procedures. In particular, projects located in renewable go-to areas should benefit from accelerated administrative procedures, including a tacit agreement in case of a lack of response by the competent authority on an administrative step by the established deadline, unless the specific project is subject to an environmental impact assessment. These projects should also benefit from clearly delimited deadlines and legal certainty as regards the expected outcome of the procedure.

Following the application for projects in a renewables go-to area, Member States should carry out a fast screening of such applications with the aim to identify if any of such projects is highly likely to give rise to significant unforeseen adverse effects in view of the environmental sensitivity of the geographic area where they are located that were not identified during the environmental assessment of the plan or plans designating renewables go-to areas carried out in accordance with Directive 2001/42/EC. All projects located in renewables go-to areas should be deemed approved at the end of such screening process.

[45] Directive 2011/92/EU of the European parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment

Article 1(6) of the proposed amendment replaces Articles 16 of Directive (EU) 2018/2001, extending the scope of the permit-granting process, clarifying the start of the permit-granting process and asking for the most expeditious administrative and judicial procedures available for appeals in the context of an application for a renewable energy projects. Article 1(7) inserts a new Article16a, which regulates the permit-granting process in renewables go-to areas. Member States shall ensure that the permit-granting process referred to in Article 16(1) shall not exceed one year for projects in renewables go-to areas. The permit-granting process for the repowering of plants and for new installations with an electrical capacity of less than 150 kW, co-located energy storage facilities as well as their grid connection, located in renewables go-to areas shall not exceed six months. Article 1(8) inserts a new Article 16b, which regulates the permit-granting process outside renewables go-to areas. Member States shall ensure that the permit-granting process referred to in Article 16(1) shall not exceed two years, for projects outside renewables go-to areas. Article 1(9) inserts a new Article 16c, which regulates the permit-granting process for the installation of solar energy equipment in artificial structures.
Member States should establish timeframes and lay down specific procedural rules with a view to ensuring the efficiency of the legal proceedings related to access to justice for renewable energy projects.
Member States should create a single unified application process for the entire administrative permit application and granting process. Simultaneous applications should be prioritised over sequential applications if different authorisations are required, including for related grid projects.
Member States should introduce fully digital permit-granting procedures and e-communication to substitute the use of paper. Relevant information should be made available to project developers centrally as part of an online manual of procedures, including templates for applications, environmental studies and data, as well as information on options for public participation and administrative charges.

In light of the grid planning constraints, described in more detail in the previous barrier, it could be envisageable to develop a plan, indicating go-to areas for community energy projects, which could foster accelerated planning permission procedures. It could be considered to have special conditions for these energy community go-to zones. Projects in these zones should be subjected to fast-track and simplified permitting procedures or lightened environmental impact assessments.

In addition, the permitting process should be digitalized as much as possible. Implementation of standardised and digitalised authorisation procedures across all the levels of governance needs to be encouraged to reduce the administrative weight on permit granting.

Actors involved:

- Department of Housing, Local Government and Heritage
- An Bord Pleanála, the planning appeals board
- Department of Environment, Climate and Communications
- Sustainable Energy Authority (SEAI)
- **Regional authorities,**
- **Local planning authorities**
- Irish Planning Institute

## 3. Grid constraints and absent framework for storage to cope with it

Several of the Irish islands are connected to the mainland electricity grid. According to ESB[46], island interconnection started in the 1940s – 1960s when a number of islands close to the mainland were connected as part of the Rural Electrification Scheme including Arranmore and Achill. In 1976, Under The Electricity Supply Act 1976 (Final phase of Rural Electrification) some islands qualified for connection to the grid including Dursey (1979) and Inishbiggle (1978). In the late 1970s – early 1980s a request for supply to three more islands, Inishturk, Clare Island and Inishbofin were made by the government who believed supply should be available to these islands at the same standard and rate as mainland customers. ESB looked into costs for connections to the mainland grid, but it was not feasible at that time. In the 1990s – 2000s improved technology and European funding allowed a number of islands who previously had no ESB supply and many of those who had ESB Generators to receive connection to mainland grid via submarine cable connections.

While this interconnection is good for the islands, several of the underwater connection cables are too small to allow for clean energy development in and around the islands. Islands are unable to export excess energy beyond the capacity of the cable connecting them to the mainland. At the same time, the grids on the islands are not strong enough to incorporate any substantial amount of additional renewable energy generations. Projects have to be downscaled due to grid constraints on the island. There is thus less opportunity for revenue compared to onshore RE projects.

There are no plans on upgrading the grids on and to the islands. In Ireland in general, grid capacity for demand related reasons is socialised and centrally planned. It is based on 10-years development plans. Grid capacity upgrades are demand led. This means that the DSO projects how demand will grow and upgrades the grids accordingly. It is not based on potential generation capacity. So any (renewable) energy project, whether on an island or not, has to apply and then the grid could get upgraded if needed. It is acknowledged that a grid upgrade on the mainland would be cheaper, quicker and easier than the grid upgrades on islands. As a consequence, this general policy on grid development for generation has a disproportionate impact on (island) grid development.

To cope with the insufficient grid capacity, energy storage is of critical importance. There is however no comprehensive framework for energy storage in Ireland. The Solar PV scheme provides subsidies for the purchase and installation for roof-mounted PV (up to 2kWp and with battery storage up to 4 kWp). The 2kWp of PV systems are subsidized (€900 per kWp). If the roof-mounted PV is combined with battery storage, then an additional grant for further 2kWp is offered (€300 per kWp). Consequently, the maximum level of support reaches €2,400 (ch. 2 Solar PV Scheme). But there is no support system for (residential/small-scale) storage as 'stand-alone'.

**Recommendation 3.1: Adapt grid development methodology from an ad-hoc approach to a future-oriented approach.**

If there is no availability on the network the community will either have to pay for the network to be upgraded or downscale the size of the project. To allow Irish islands to fully benefit from the renewable energy potential they have, this logic should be turned around and a more forward-

[46] https://esbarchives.ie/2020/06/04/islands/

looking grid development policy is needed. The DSO should look, together with the islands, at the potential production capacity from renewable energy on the islands and tailor its grid development policy to this anticipated growth.

This requires strong pro-active steps and public engagement in long-term planning, assessing costs and working with citizens on social acceptance. These efforts can nonetheless be partly integrated in renewals of ageing network assets. To allow for projects with bigger capacity to be developed, the underwater connection cables should be modernised and strengthened. More grid reinforcement and expansions on the islands are necessary to connect larger generation facilities and match demand patterns, geographically and in time.

**REPowerEU – RE, grids and storage regarded as 'overriding public interest'**
Article 1(10) of the proposed amendment to RED II inserts a new Article 16d to ensure that plants for the production of energy from renewable sources, their connection to the grid, the related grid itself or storage assets are presumed to be of overriding public interest for specific purposes.
Renewable energy sources are crucial to fight climate change, reduce energy prices, decrease the Union's dependence on fossil fuels and ensure the Union's security of supply. For the purposes of the relevant Union environmental legislation, in the necessary case-by-case assessments to ascertain whether a plant for the production of energy from renewable sources, its connection to the grid, the related grid itself or storage assets is of overriding public interest in a particular case, Member States should presume these plants and their related infrastructure as being of overriding public interest and serving public health and safety, except where there is clear evidence that these projects have major adverse effects on the environment which cannot be mitigated or compensated. Considering such plants as being of overriding public interest and serving public health and safety would allow such projects to benefit from a simplified assessment.
Member States should implement long-term grid planning and investment consistent with the planned expansion of renewable energy production capacities, taking into account future demand and the objective of climate neutrality.
Member States should establish simplified procedures for repowering existing renewable energy plants, including streamlined procedures for environmental assessments, and adopt a simple-notification procedure for their grid connections where no significant negative environmental or social impact is expected.
Member States should ensure that system operators (i) apply a transparent and digital procedure for grid connection applications; (ii) provide information on grid capacities; and (iii) optimise the use of grid capacity by allowing its use by power plants combining multiple complementary technologies

As mentioned under the second recommendation on the second barrier on Spatial Planning, having designated go-to zones would contribute to targeted grid upgrades. Grid operators could plan based on these areas where and when to upgrade the network and the island stakeholders would know which areas are planned to be upgraded and when to plan their projects.

Practically, this could be done by revising or updating the Multi-year DSO/TSO Work Plan Covering 2022 - 2026[47] and it should become standard practice to update this planning at regular intervals to cater for evolving energy policy and renewable energy developments. This could be partly based on 'Shaping Our Electricity Future Roadmap' prepared by EirGrid and SONI[48], which identifies the transmission network reinforcements needed to manage (growth in) renewable generation and demand growth.

Actors involved:
- **ESB Networks – Distribution System Operator**
- EirGrid – transmission system operator
- Commission for Regulation of Utilities
- Department of Environment, Climate and Communications

[47] https://www.esbnetworks.ie/docs/default-source/publications/esb-networks-national-network-local-connections--eirgrid-multi-year-dso-tso-work-plan-covering-2022-2026.pdf?sfvrsn=5613bda_8

[48] https://www.eirgridgroup.com/site-files/library/EirGrid/Shaping_Our_Electricity_Future_Roadmap.pdf

### Recommendation 3.2: Develop suitable frameworks for storage with particular attention for islands

There is currently a 3MW sub-sea cable coming to the island Aran Islands, and the 2018 Energy Masterplan showed that 52% of electricity that comes from the mainland is lost in transmission[49]. If electricity is generated and used (and thus also stored) locally on the island, every unit consumed would replace more than two which would otherwise be imported[50]. To cope with the insufficient grid capacity, energy storage is of critical importance. An (island specific) support system for storage would help overcome this barrier. The Irish electricity regulatory framework does not currently recognise electricity storage as a licensable activity in its own right[51]. Absent such recognition, the business of an entity engaged in the storage of electricity falls to be regulated on the basis of the separate licensable activities that such business entails:

- Planning permission – from the local authority (which may be referred to An Bord Pleanála – the Planning Board). An environmental impact statement may be required as part of this
- Grid connection – from EirGrid
- Authorisation to construct - from the Commission for Regulation of Utilities (CRU)
- Licence to Generate - from the Commission for Regulation of Utilities (CRU)

The framework for storage should provide investors with clear visibility on the remuneration parameters of this technology and encourage its penetration. Most of the battery energy storage in Ireland is short duration (1/2hr to 1hr). Longer duration storage for energy balancing to compensate for the variability in output from wind and solar generation is not currently financially viable. There are 3 possible revenue streams:

- Fast response and reserve services to stabilise the grid. There is a good market for this, but the same MW capacity cannot be used to provide these services and also to provide energy balancing to compensate for the variability in output from wind and solar generation over the timeframe of minutes to several hours e.g. 8 hrs
- Energy arbitrage: The difference between the energy price used for charging when there is excess wind/solar generation and the price received for discharging when there is a deficit in wind/solar generation is not sufficient, and should be reviewed
- Capacity payments: These are derated depending on the storage duration e.g 10MW of ½ hr storage is only counted as 1.4MW. 10MW of 4hr storage is counted as 6MW. We recommend that the methodology for calculating these derating factors should be reviewed. We would also recommend that capacity payments be linked to carbon emissions to incentivise low carbon capacity. As the CO2 emissions of grid electricity falls with greater renewable generation, this will incentivise energy storage compared to OCGT.

Few countries currently provide a comprehensive regulatory framework for energy storage, with the majority of jurisdictions currently allowing storage to be defined as “generation” for the purposes of licensing and other regulatory requirements. However, some countries like the UK and Belgium have provided a more elaborate framework, mainly for revenue streams to help different storage technologies to develop, for example capacity markets, ancillary services and other grid services. A more detailed overview is given in the Annex 3.

[49] https://www.seai.ie/community-energy/sustainable-energy-communities/tools-and-resources/energy-master-plan/Sample_Energy_Master_Plan.pdf

[50] https://www.iesve.com/products/case-studies/27353/inishmore-community-microgrid?platform=hootsuite

[51] https://www.mhc.ie/uploads/ER2020Ireland.pdf

To help cover the investment costs, and this particularly in the light of higher costs of technical equipment installation and maintenance, the system of an uplifted grant as foreseen for energy efficiency projects on islands could be used. As mentioned above, the grants for energy efficiency projects foresee a 'grant uplift' of 50% for islands. Island inhabitants could thus ask for 50% more funding for energy efficiency renovations. In line with that existing system, when designing a support system for (stand-alone) energy storage applicable for the whole of Ireland, it could be envisaged to have an uplifted grant for islands.

Actors involved:

- Commission for Regulation of Utilities
- Department of Environment, Climate and Communications
- Sustainable Energy Authority (SEAI)

## 4. Renewable energy support system not adapted to island challenges

Contrary to countries such as Greece[52] and Estonia[53], with island specific (energy) support schemes, or countries such as Croatia, with a high percentage coverage for islands within the general support system, there are no island specific support systems in Ireland. The Renewable Electricity Support Scheme (RESS) – described in the Policy section above - is the main government support. Additionally, a solar PV scheme provides subsidies for the purchase and installation for roof-mounted PV. The heating and cooling sector is addressed through a grant scheme for heat pumps, an operational tariff for biomass/biogas installations and grants for the energy upgrading of dwellings. In the transport sector, grants are provided for the purchase of private and commercial EVs and the installation of public and private chargers. Ireland has a biofuel obligation scheme and offers tax relief and tax exemption for electric vehicles.
Most recently, the SEAI launched the National Energy Research Development and Demonstration (RD&D) Funding Programme 2022[54], which invests in innovative energy RD&D projects which contribute to Ireland's transition to a clean and secure energy future.

The absence of island specific support systems or at least, particular attention to islands within the existing support systems pose difficulties for clean energy development on islands. It costs more to bring out technicians and equipment to do renovations and thus islanders are in different position as:

- Investments on the islands are usually higher
- Maintenance is more difficult and more expensive
- It is harder to have access to skilled workforce

In the application for support systems, the extra costs put the islands at a disadvantage. The funding and support under the existing schemes and funds are thus allocated to projects on the mainland since there is more value for money compared to island projects. Also, finding the right site is more expensive, as nature conservation designations entail high upfront costs (for example bird studies for wind energy projects).

**Recommendation 4.1: Develop support systems with particular attention for islands**
It is necessary to provide additional support to the islands, within the existing frameworks for renewable energy. Within those, the SEAI should provide additional support for the islands, taking into account island characteristics and energy peculiarities. This could be done by providing preferential categories or providing uplifted grants, as has been done before in Ireland.

As mentioned above, the grants for energy efficiency projects foresee a 'grant uplift' of 50% for islands. In line with that existing system, it could be envisaged to have an uplifted grant for islands in the existing subsidy Solar PV Scheme which provides grants for homeowners of dwellings for the purchase and installation of roof-mounted PV up to 2kWp and roof-mounted PV + battery storage up to 4 kWp.

[52] RES projects in Greece on non-interconnected islands can benefit from a Feed-in Tariff, regardless of the capacity (size) of the project, whereas on interconnected islands there is a maximum threshold of 400kw. There is also a subsidy for RES plants on non-interconnected islands employing two or more RES technologies.

[53] Small Islands Programme aimed to contribute to the availability and quality of essential services for the inhabitants of the small islands that are included in the list of small islands under the Small Islands Act. The programme supported improvement of electricity connections and installation of electric vehicles loading stations to islands.

[54] https://www.seai.ie/grants/research-funding/research-development-and-demonstration-fund/SEAI-RDD-Call-Document.pdf

In the design of the next RESS (auction) the terms and conditions could provide for an adjusted calculation method, with a specific island coefficient, taking into account the higher investment and maintenance costs. However, this RESS auction is only for projects above 0.5MW. There is nothing foreseen for selling electricity below that threshold of 0.5MW. It could thus be envisaged to (i) increase the maximum capacity of the solar PV scheme (ii) lower the RESS threshold, and (iii) extend the eligible parties to community projects as done under the RESS.

Actors involved:
- **Sustainable Energy Authority (SEAI)**
- Commission for Regulation of Utilities
- Department of Environment, Climate and Communications

### Recommendation 4.2: Use regulatory sandboxes for testing of innovative solutions

Considering the islands have their own specific requirements when it comes to energy system and market, the implementation of new technologies, innovative operation, tariffing and business models, the islands can be used as a testing site for energy transition.

We recommend using the regulatory sandbox[55] approach to allow specific islands to experiment with, for example different designs of electricity tariffs (hourly tariff, time of use tariff, etc.). Regulatory sandbox are ways for authorities, tasked with implementation and enforcing of specific legislation, to test innovative approaches and technologies in real-life situations through time limited implementation of except to the existing legislation. This way incentives for clean energy transition on the islands can be tested without a permanent change in legislation. It also gives room to evaluate the success of the experiment.

Choice of the islands and grids within which different regulatory sandboxes should be implemented can be decided in collaboration with the intergovernmental department focussing on islands (cfr. Barrier 'islands are not consulted in a systematic manner' and the recommendation to relaunch the initiative to create an intergovernmental department to specifically focus on islands). This will assure local inputs.

Regulatory sandboxes have been implemented in Italy[56], Austria, Germany and the Netherlands for temporary tests of specific energy tariffs[57].

Islands could then be used for research and innovation projects if planned in line with local needs or to solve local issues in innovative ways. Research projects do not only have to be focussed on innovative technologies, they could also look at new ways of applying technology or innovative financing for new business models – crowdfunding, etc.

**REPowerEU – Innovation and sandboxing**
Article 1(3) of the proposed amendments to RED II inserts a new paragraph 2a in Article 15 requiring the Member States to promote the testing of new renewable energy technologies while applying appropriate safeguards:

> *'Member States shall promote the testing of new renewable energy technologies in pilot projects in a real-world environment, for a limited period of time, in accordance with the applicable EU legislation and accompanied by appropriate safeguards to ensure the secure operation of the electricity system and avoid disproportionate impacts on the functioning of the internal market, under the supervision of a competent authority.'*

Consideration 18 of the Recommendation highlights that barriers resulting from permit procedures might also affect the future deployment of innovative decarbonisation technologies needed for climate neutrality. Setting up regulatory sandboxes, that is to

[55] https://www.consilium.europa.eu/en/press/press-releases/2020/11/16/regulatory-sandboxes-and-experimentation-clauses-as-tools-for-better-regulation-council-adopts-conclusions/

[56] https://www.iea-isgan.org/wp-content/uploads/2021/10/Regulatory-Sandbox-2.0_For-Publication.pdf

[57] https://fsr.eui.eu/regulatory-sandboxes-in-the-energy-sector-the-what-the-who-and-the-how/

say the testing, in a real-life environment, of innovative technologies, products, services or approaches, which are not fully compliant with the existing legal and regulatory framework, could support innovation and facilitate the subsequent adaptation of the regulatory environment to accommodate them.
Member States are encouraged to put in place regulatory sandboxes to grant targeted exemptions from the national, regional or local legislative or regulatory framework for innovative technologies, products, services or approaches, to facilitate permit granting in support of the deployment and system integration of renewable energy, storage, and other decarbonisation technologies, in line with Union legislation.

Actors involved:

- **Sustainable Energy Authority (SEAI)**
- Commission for Regulation of Utilities
- Department of Environment, Climate and Communications

## 5. Islands are not consulted in a systematic manner

Both the energy sector strategies and the long-term energy planning are highly centralised. The Department of Environment, Climate and Communications is responsible for the energy sector and the regional development department is under the Department of Rural and Community Development. The National Energy and Climate Plan for Ireland does not provide a clear strategy for the energy transition on the islands. It is currently not clear how islands and their energy potential or needs will contribute to the energy transition in Ireland.
Island stakeholders are not consulted in a systematic manner to ensure that the island needs and priorities are addressed. The islands are relatively small, and they make up a small portion of the population, therefore their political power is limited. Currently islands' priorities are not very visible on the national level. There is not much traction from the island side in Ireland or from the policy for islands and the ministry dealing with energy.

Specifically for islands, the Irish Government initiated a consultation in 2019 regarding policy development for the development of the islands around Ireland, called the 'new National Policy for the Future Development and Sustainability of Communities on the Offshore Islands of Ireland'[58].
The Department of Rural & Community Development is working on finalising the Islands Policy, which had stalled since the end of 2019. The goal is to have this ten-year action plan ready by the end of 2022. The interdepartmental committee that is currently drawing up the plan will also be following up its implementation with sequential 3-year action plans.

On the other hand, islands are very active in energy transition on the local level; Aran Islands developed a Clean Energy Transitions agenda[59]. Bere Island has an energy group that is working with the sustainable energy authority of Ireland to produce an energy master plan that will guide the islanders on their journey[60]. Cape Clear and its island community have been frontrunners on clean energy. The community developed an integrated wind energy system in 1987, which operated until the early nineties. The island is about to take part in a pilot project that will use electric minibuses and charge them with green electricity units. In the long term, the island hopes to generate clean energy locally to charge these electric vehicles. Cape Clear further aims to become a Smart Island, taking advantage of the digital technology available to advance the clean energy transition. Other islands on the road of their energy transition are for example Rathlin[61] and Valentia[62].

In conclusion, there is a disconnection between national energy planning and lack of strategy for the islands and the local activities of the islands to accelerate their own energy transition.

[58] https://www.gov.ie/en/publication/02a4d-island-policy-consultation-paper/

[59] https://www.aranislandsenergycoop.ie/wp-content/uploads/2020/01/ARAN_FinalTransitionAgenda_20191118.pdf

[60] https://clean-energy-islands.ec.europa.eu/index.php/countries/ireland/bere-island

[61] https://clean-energy-islands.ec.europa.eu/index.php/countries/ireland/rathlin

[62] https://clean-energy-islands.ec.europa.eu/index.php/countries/ireland/valentia

### Recommendation 5.1: Integrate islands views in the policy for the development of the islands around Ireland

Ireland has signed the Memorandum of Split[63], committing itself to supporting the Clean energy for EU islands initiative and to accelerating the clean energy transition on all EU islands. We recommend having a national policy – coming from the national government – to address the specific needs of islands. It should contain targets & objectives, concrete guidelines as well as a set of concrete measures to be taken.

The barriers and recommendations formulated in this study can serve as examples for actions to be taken in the short-, mid and long term. Key points to be considered in this policy are the additional costs of equipment, installation and maintenance and obsolete grid infrastructure. It is also worthwhile to link some of the advantages that the energy transition can bring to other sectors such as employment.

In the 2019 consultation it was envisaged that: '*consultation workshops will be organised in collaboration with local island organisations and promoted widely so that a broad spectrum of the island community can attend and participate.*' Before finalising this Islands Policy we recommend submitting it for public consultation to the Irish island community. The policy should not be made for them but with them.

Actors involved:

- **Department of Rural and Community Development**
- Department of Housing, Local Government and Heritage
- Department of Environment, Climate and Communications
- Sustainable Energy Authority (SEAI)
- Regional authorities,
- Local planning authorities

### Recommendation 5.2: Relaunch the initiative to create an intergovernmental department to specifically focus on islands

The energy sector strategies and the long-term energy planning are highly centralised. To foster the involvement of island stakeholders in national strategic & long-term energy planning and funding distribution, we recommend relaunching this initiative. This would help bring in different views from different island stakeholders up to the national level. There is a clear need for a link between islands and national level in a cross-departmental way. This department would also help to align islands priorities and needs with the national planning and to coordinate across sectors needed for island energy transition.

The department would be a dedicated team that would take charge of all aspects related to the clean energy transition on the islands and coordinate at the national level to ensure all tasks are aligned. The department can also be used to provide guidelines to the regional and local authorities while taking into account overall sustainable development of the islands.

[63] https://ec.europa.eu/regional_policy/sources/policy/themes/sparsely-populated-areas/eu2020_mou_split_en.pdf

The department would be responsible for defining the short-, mid- and long-term strategy on how national goals identified in NECP can be further developed and implemented through actions on the local level and in coordination with the local island priorities and with other sector priorities.

The Department of Environment, Climate and Communications (DECC) is used to working with cross-departmental task forces, such as for example on offshore energy. The islands department could be organised under the DECC in coordination with other national bodies responsible for spatial planning, environment, culture and history and tourism or it could be envisaged to enlarge the mission of the current interdepartmental committee that is developing the Islands Policy. In addition it should be assisted with representatives of the relevant regional governments, representatives of academia, civil sector, private sector (including energy companies) who are experts and highly involved in the clean energy transition on Irish islands.

In addition to strategic planning and coordination with the various sectors on the national level and with the stakeholders from the different levels, the department could be responsible for:

- Monitoring and evaluating the implementation of clean energy projects in regard to foreseen targets;
- Identifying bottlenecks and gaps in implementation and coordinating with responsible bodies to overcome them;
- Providing support through funding, training, technical assistance or advice to local or regional governments, energy communities and local stakeholder in planning and implementation of clean energy projects;
- Provide guidelines documents to national and local government for implementation of new procedures;
- Provide a platform for exchange of experiences among various islands and island stakeholder.

Actors involved:

- **Department of Rural and Community Development**
- **Department of Environment, Climate and Communications**
- Sustainable Energy Authority (SEAI)
- Local and regional authorities
- Energy communities and cooperatives

## 6. Lack of support from the regional and national government

The Government's Climate Action Plan 2019, and notably Action 165, requires each Local Authority to identify and develop plans for one decarbonisation zone - an area in which a range of climate mitigation, adaptation and biodiversity measures are identified to address local low carbon energy, greenhouse gas emissions and climate needs, to contribute to national climate action targets. After identifying the most suitable area for the zone, each Local Authority must develop their implementation plan before the deadline. Some of the Irish islands have been designated as the carbon free zone by the local authority but there has been no support from that local government in taking concrete actions. This was also identified by the LECo policy paper[64], which mentioned that there is a lack of supportive local authorities and/or local energy agencies.

While certain regions of Ireland – for example the Midlands due to the presence of Peat - receive particular attention for the national government under the Just Transition Fund, islands are not particularly envisaged with supportive actions. Up to €84.5 million has been allocated to Ireland under the EU Just Transition Fund over the period to 2027. In the draft Ireland's Territorial Just Transition Plan[65] the chapter 'Identify the outermost regions and islands with specific challenges within territories listed under Section 1.1 and the specific amounts allocated for those territories with corresponding justification' is empty.

**Recommendation 6.1: Mandatory follow-up on decarbonization zones, mandatory development of Local Authority Renewable Energy Strategies together with national guidance**

Our recommendation is to introduce a mandatory follow-up and monitoring/reporting (with concrete actions, KPIs, Etc. within a certain time limit) of the implementation of the regional/local decarbonization zones. A monitoring framework typically adopts indicators, with baselines and targets, to measure progress against certain goals and objectives. Indicators help to outline goals in specific terms, monitor progress, and provide feedback to stakeholders. Many examples of such frameworks for zero-energy districts[66], sustainable city monitoring and evaluation systems[67] exist[68]. This can be annual or bi-annual and focus on local and regional authorities with the guidelines provided by the intergovernmental department focussing on islands.

In 2013, SEAI published a Methodology for Local Authority Renewable Energy Strategies (LARES)[69] to provide guidance to local authorities engaging with spatial planning for renewable energy. This methodology aims to facilitate consistency of approach in the preparation of LARES, and to assist local authorities in developing robust, co-ordinated and sustainable strategies in accordance with national and European obligations. However, this is a voluntary methodology and only 6 out of 31 local authorities participated.

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64 https://leco.interreg-npa.eu/subsites/leco/PESTLE_Analysis_LECO_A4_190110-singlepages.pdf

65 https://assets.gov.ie/211810/2da58ad1-2153-498e-9fba-6a7b3b3c4a8a.pdf

66 From nearly-zero energy buildings to net-zero energy districts, JRC, 2019 (https://publications.jrc.ec.europa.eu/repository/handle/JRC115188)

67 Vandevyvere, Han. (2013). Evaluating the sustainable performance of an urban district: Measured score or reflexive governance?. International Journal of Sustainable Development and Planning. 8. 36-58. 10.2495/SDP-V8-N1-36-58. Available on ResearchGate; Asian Green City Index (https://eiuperspectives.economist.com/economic-development/asian-green-city-index)

68 SCIS KPI framework (2018), CITYkeys, Syn.ikia - Sustainable Plus Energy Neighbourhoods (2020), REPLICATE Renaissance of Places with Innovative Citizenship and Technologies, MATCHUP Maximizing the Upscaling and replication potential of high-level urban transformation strategies, SMARTEnCITY Towards Smart Zero CO2 Cities across Europe, MySMARTLIFE Smart Transition of EU cities towards a new concept of Smart Life and Economy, SHARINGCITIES Building Smart Cities Together, TRIANGULUM The Three Point Project / Demonstrate. Disseminate. Replicate, GROWSMARTER Transforming Cities for a Smart, Sustainable Europe, +CityxChange Positive City ExChange, STARDUST Enlightening European Cities

69 https://www.seai.ie/publications/Methodology-for-Local-Authority-Renewable-Energy-Strategies.pdf

In addition to mandatory rules, the Department of Rural and Community Development & the Department of Housing, Local Government and Heritage could provide guidelines for the development and implementation of local energy and climate plans. It could recommend implementing support schemes to provide capacity building and/or technical assistance for realization of the decarbonisation zone. These can take the form of workshops for municipalities and communities, guidelines for energy transition and examples of roadmaps from similar municipalities or regions. Where there is not enough capacity on the islands, the department can provide support through technical assistance to engage external support for short-term projects.

Actors involved:

- **Department of Rural and Community Development**
- **Department of Housing, Local Government and Heritage**
- Sustainable Energy Authority of Ireland (SEAI)
- Regional authorities,
- Local authorities
- County and City Management Association (CCMA), the 'representative voice' of the local government management network
- Climate Action Regional Offices (CARO)

**Recommendation 6.2: Channel funding from the EU towards clean energy development on islands**

Ireland should pay particular attention to the island regions when developing plans allocating EU funding. In doing so, the responsible authorities should align the funding with the other plans for the energy transition on the islands, as discussed in the barriers and recommendations above (go-to zones, island-specific policy), but also keeping the link with the objectives set-out in the NECP. This could be coordinated and managed by the intergovernmental department on islands (mentioned above).

Earmarking the budget from EU funds to island specific clean energy development has already been done by Greece and Spain for example.

> The Just Transition Fund prioritises the least developed regions, outermost territories and islands of the EU. The Greek government provides financial support to six Greek islands through the Just Transition Fund in order to tackle issues expected following planned withdrawals of local petrol-fuelled power stations[70]. Ireland could envisage in its implementation of the Just Transition to channel funding towards clean energy projects on islands because of their remoteness, vulnerability, as well as the higher costs for the energy transition on the islands.
>
> Spain has a dedicated budget for clean energy development on islands under the Recovery and Resilience Facility. The Spanish NECP already provided for the need for progress in the energy transition in the islands. Within this axis of ecological transition, the Spanish Recovery and Resilience plan, in its Component 7 “Deployment and integration of renewable energies", includes in line with the provisions of the NECP, a vision of island specificity in the energy transition and the promotion of renewable energies in the islands, the improvement of the functioning of their energy systems through storage and the

[70] https://energypress.eu/jtf-support-for-6-islands-closing-high-cost-polluting-local-power-units/

implementation of "Smart Islands" projects, as well as citizen participation through renewable energy communities. There is even a chapter called 'Sustainable energy on the islands through the promotion of an Agenda for Energy Transition in the Islands, support for projects for the penetration and integration of renewable energies in island and non-mainland systems". The allocated budget amounts to €700 million with one third of the funds going to the Balearic Islands and two thirds to the Canary Islands, given their larger population and the fact that they do not have systems connected to the mainland.

While the Irish Recovery and Resilience plan is already approved by the Commission it could be envisaged, in its implementation, in concertation with the Commission, to dedicate budget for clean energy development on islands. This could come from, on the one hand, the €155 million in energy efficiency in residential and public buildings, and on the other hand the budget foreseen for onshore and offshore wind energy. Budget under these headings could specifically be dedicated to projects on the islands.

Actors involved:

- **Department of Public Expenditure and Reform** (for the RRF)
- **Department of Environment, Climate and Communications** (for the JTF)
- Sustainable Energy Authority (SEAI)

# Conclusions

The Irish islands have been frontrunners in the energy transition. Community engagement has always been very strong on the islands. Cooperatives are used on the islands to provide services regarding waste, water, transport etc. for the benefit of the island inhabitants. Providing clean, affordable, and secure energy has become one of the key-actions of these community driven initiatives. Several actions taken by the Irish national government have contributed to this objective such as for example an uplifted grant for islands within the energy efficiency programmes. Nonetheless several challenges for the clean energy transition on the islands remain.

A community preference category has been integrated in Ireland's main renewable electricity support system and a range of supportive actions and programmes are foreseen by the Sustainable Energy Authority Ireland. However, the legal and regulatory frameworks for community energy projects and energy sharing are missing. There is a lack of national community energy strategy and national targets for community energy projects. This is a barrier for the whole of Ireland, but as clean energy projects on islands are mainly community driven, this is a barrier particularly relevant for islands. The Commission for Regulation of Utilities should thus accelerate the regulatory work on Peer2Peer trading and energy communities. In addition, implementation of clean energy project by community initiatives should be made simpler and easier. For example, the DSO should work on levelling the playing field, by for example revising the strict timelines in the grid connection procedures (Enduring Connection Policy). This should go hand in hand with communication, systematic information sharing (through one-stop shops) and capacity building targeted at island communities and their projects.

The electricity grids on the islands lack capacity to absorb any substantial amount of additional locally produced renewable energy, while keeping security of supply. At the same time the connection cables are unable to transport any excess electricity that would be produced. Above that, around 50% of the electricity imported from the mainland is lost in transmission. Producing and consuming energy locally is thus of utmost importance against that backdrop. To enable this, grid planning by the distribution system operator should take a forward-looking approach, looking at where there are generation opportunities and how best to support them. The islands have the RES potential, and they should thus be given more attention in the grid modernisation plans. In the short term energy storage should be supported via legal and regulatory frameworks and support systems. The system of uplifted grants used within the energy efficiency programmes could serve as an example for a storage-specific support system with particular attention for islands. This approach of uplifted grants could also be used within the existing support systems for renewable energy to take into account island characteristics and energy peculiarities.

The Irish islands have beautiful landscapes which attracts many tourists. They are also a habitat for rich fauna and flora. While this must be preserved, a balance between nature conservation and clean energy generation must be sought as having access to clean, affordable and reliable energy is important on the islands. Moreover, in light of climate change, clean energy transition is a partner to nature conservation aiming for the same sustainable development. The Department of Housing, Local Government and Heritage and all other involved stakeholders in spatial planning should identify go-to zones on and around the islands where renewable energy projects and grid upgrades should benefit from simplified and accelerated permitting and connection procedures. This should be accompanied by guidelines on how to implement clean energy projects as

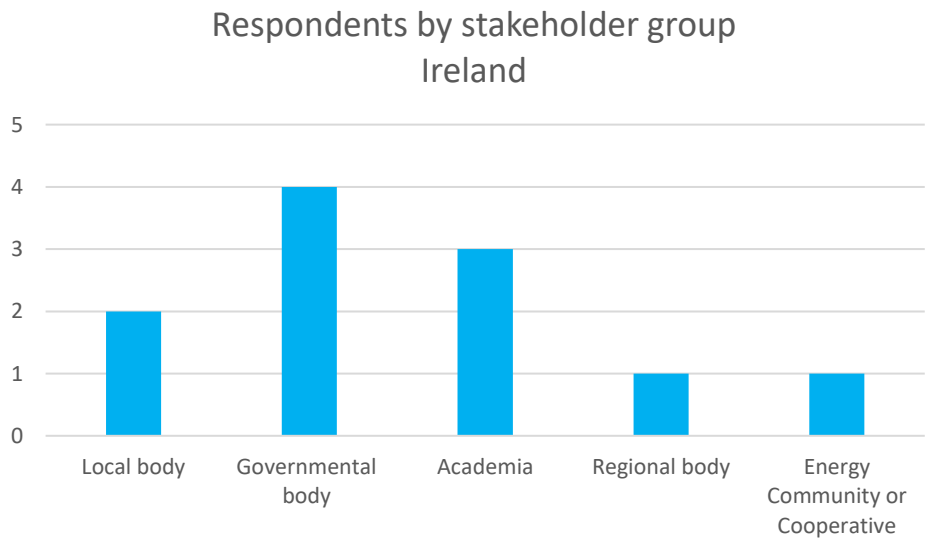
navigating through the Irish spatial planning system is not always easy for community led projects on the islands.

Living on an island has always brought and will always bring additional costs. Many of the supplies need to be imported by boat or plane. Decarbonising this transport is a particular important challenge on itself. Importing, installing and maintaining solar panels, heat pumps, batteries, etc. on the islands inevitably costs more than on the mainland. These additional costs should be taken into account within the existing support systems This could be done by providing preferential categories or providing uplifted grants, as has been done before in Ireland. It is also important to build local capacity; technical assistance can be provided to bring needed technical workforce to the islands when needed.

Recommended actions and measures should be included in the Islands Policy, called the 'new National Policy for the Future Development and Sustainability of Communities on the Offshore Islands of Ireland'. The interdepartmental committee or taskforce should be empowered to follow up and implement the Island Policy. With all the identified barriers and recommendations in mind, Irish national and regional stakeholder should always involve the island communities in the (re-)shaping and implementation of the Island Policy and legislative and regulatory framework aimed at Irish islands. Islands policy and regulatory framework should not be made for island stakeholder, but with them.

# Annex 1 – Detailed analysis of the survey and interview results

Survey for Legal and regulatory barriers for clean energy on Irish islands has been sent to 46 contacts, representing 39 stakeholders from national and local governments, over academia to energy associations and NGOs. In addition, the survey was publicly accessible and could have been forwarded to more contacts or organisations which we cannot account for. The survey has been completed by 11 responders. However, the response rate cannot be evaluated as the survey was publicly available as well.
Responders of the survey are representatives of 5 stakeholder groups. The responders are relatively distributed among the different stakeholders with local bodies (including energy communities and cooperatives) representing 27 %, national government bodies 36 %, academia 27 %. One respondent was from the stakeholder group regional body.
Six semi-structured open-ended interviews were held. Interviews were organised with Aran Islands Energy Cooperative, Sustainable Energy Authority of Ireland (SEAI), International Energy Research Center, Údarás na Gaeltachta, Department for Environment, Climate Change and Communication, Comharchumann Chléire Teoranta.




The main barriers that were identified were the following:

- Island stakeholders are not consulted in a systematic manner to ensure that the island issues and priorities are addressed;
- Lack of an island specific support system; As well as a lack of support schemes for electricity storage, interconnection and innovative technologies such as floating wind/solar, tidal- and wave power;
- Lack of long term vision on how different land use on islands are coordinated to assure sustainable economic development;
- Insufficient grid capacity and lack of systematic approach to grid development needs for integration of RES;
- Lack of legal framework for prosumers and lack of financial/funding mechanisms for collective/community involvement in clean energy projects.

These and other barriers are elaborated upon in more detail in the sections below.

## General

Survey results:
The survey has asked the respondents to give their opinion the following three statements regarding strategic energy planning for clean energy on Irish islands using a Likert scale. The results are presented in numerical form showing the average from all responses. The numerical representation is from 1-5, with 1 representing not at strong disagreement to 5 representing strong agreement.

| Statements | Rating |
|---|---|
| Island(s) energy plans would help align local and national regulation, spatial plans, restrictions for clean energy | 4.0 |
| National obligation for islands to develop energy action plans would lead to accelerated realization of clean energy projects on islands | 3.8 |
| Islands should be better integrated in the National Energy and Climate Plans | 4.2 |

If we take into account only statements that were agreed and strongly agreed upon, or equal or above rating of 4,0, the following statements were agreed upon by the respondents:

- Island(s) energy plans would help align local and national regulation, spatial plans, restrictions for clean energy
- Islands should be better integrated in the National Energy and Climate Plans

The statement 'Islands should be better integrated in the National Energy and Climate Plans' were strongly agreed upon by the respondents from the stakeholder groups Regional Body and Local Body, while the respondents from the stakeholder groups Governmental body, Academia and Cooperative agreed upon it.
The statement 'Island(s) energy plans would help align local and national regulation, spatial plans, restrictions for clean energy' was agreed upon by all respondents.

Interview results:
From the interviews with Irish stakeholders, the following general barriers for clean energy development on Irish islands have been retained:

- Island stakeholders are not consulted in a systematic manner to ensure that the island issues and priorities are addressed. The islands are relatively small, and they make up a small portion of the population, therefore their political power is limited. The visibility of the island issues on the national level is not so big. There is not much traction from the island side in Ireland or from the policy for islands and the ministry dealing with energy. Attention mainly comes via the Memorandum of Split or from the Islands Secretariat.
- The national government lacks a clear view on how the energy transition could be best done on all islands. Some islands are close to the shore and some are connected and some not. So the islands have to be involved in defining their development. The right support from the national government towards communities on the island should help accelerate energy transition. This approach already fits with the national legislation and regulation.
- The islands have their own local cultures and conditions. Each island should have their own unique solution on how they approach energy transition.

- To date there is no national islands energy policy that enables the islands to progress with their clean energy transition. There is no news regarding the 'new National Policy for the Future Development and Sustainability of Communities on the Offshore Islands of Ireland'.
    - For example, the Aran islands has put in a proposal to the government regarding the ongoing development of the 'National Policy for the Future Development and Sustainability of Communities on the Offshore Islands of Ireland'. They have asked to designate the Irish islands as primary focus area for the energy transition, lighthouse islands in essence. However, the process has been very slow and has not been given any priority by the government.

- While islands' local energy plans would be useful, there is no capacity on the islands to do this on their own. Most islands are small and while they have active community, many of the community members are older and more conservative and less likely to get into a new topic such as renewable energy.

## Renewable energy

### General

Survey results:
The survey has asked the respondents to rate the following eight general barriers to renewable energy development on Irish islands based on their importance using Likert scale. The results are presented in numerical form showing the average from all responses. The numerical representation is from 1-5, with 1 representing not at all important to 5 representing very important.

| Barrier | Rating |
|---|---|
| Lack of long-term planning developed at regional/island level (e.g. lack of clear renewable energy targets) | 3.2 |
| Renewable Electricity Support Scheme (RESS) is not sufficiently adapted to the island specifics | 3.8 |
| Lack of guidelines tailored to islands | 4.0 |
| Lack of support schemes for electricity storage and interconnection | 4.4 |
| Lack of support schemes for innovative technologies such as floating wind/solar, tidal- and wave power | 4.3 |
| Lack of enabling framework for green hydrogen | 4.0 |
| Lack of awareness raising campaigns and/or increasing capacity of the stakeholders for developing clean energy projects | 3.7 |
| Lack of specific planning/permit procedures for solar power for households, schools, communities | 3.6 |

If we take into account only barriers that are considered important or very important (with an aggregated rating of 4.0 and above) there are four barriers put forward by respondents.
They include from least to most important:

- Lack of enabling framework for green hydrogen
- Lack of guidelines tailored to islands
- Lack of support schemes for innovative technologies such as floating wind/solar, tidal- and wave power
- Lack of support schemes for electricity storage and interconnection

The barriers 'Lack of support schemes for electricity storage and interconnection' and 'Lack of support schemes for innovative technologies such as floating wind/solar, tidal- and wave power' are rated as "very important" by respondents from the stakeholder groups Local Body, Regional Body and Cooperative while the respondents from the stakeholder groups Governmental Body and Academia take a rather neutral stance on it.
The barrier 'Lack of enabling framework for green hydrogen' is rated as "very important" by respondents from the stakeholder groups Regional Body and Cooperative while the other respondents take a rather neutral stance on it.
The barrier 'Lack of guidelines tailored to islands' is rated as "very important" by respondents from the stakeholder groups Local Body and Cooperative while the other respondents take a rather neutral stance on it. This is in line with the findings in the general section above; a different opinion between local stakeholders and regional/national on what is needed specifically for the islands.

The barrier 'Renewable Electricity Support Scheme (RESS) is not sufficiently adapted to the island specifics' is highly positively correlated to most of the barriers for self-consumption and energy sharing. This means that respondents who rated this barrier high also highly rated the barriers for self-consumption and energy sharing.

The barrier 'Lack of support schemes for electricity storage and interconnection' is highly positively correlated to most of the barriers for energy efficiency as well as the barriers for self-consumption and energy sharing. This means that respondents who rated this barrier high also highly rated the barriers for energy efficiency and self-consumption and energy sharing.

<u>Interview results:</u>
From the interviews with Irish stakeholders, the following general barriers for renewable energy development on Irish islands have been retained:

- One of the main barriers is the lack of an island specific support system. As mentioned above in the description of the Irish Policy and Legislation for clean energy for islands, a community preference category was taken up in the country's first RES auction, the Renewable Electricity Support Scheme. This accounts to 5% of the funding available under the scheme. However, while that novelty is regarded as positive, there is thus no island specific support system in addition to those available.

- The lack of funding for the small islands is a serious barrier. There needs to be specific funding available to support the practical development of renewable energy development on the islands. Likewise, the lack of availability of financing is an issue. An island community has no option to apply for financing at the bank. Business models for supporting renewable energy projects are missing. Smaller RES projects don't have access to wholesale market so smaller RES are

supported through other ways such as FIT (which is not currently case in Ireland). FIT for smaller res (below 50 kW ) will start from 2022 – this is mainly for self-consumption.

- While some effort has been made to accommodate renewable energy in the system, the process should go beyond that and work to maximise renewable energy solutions and security of supply.

- While Irish islands have many visitors in summer, which mainly come by ferry, there is no plan or framework to decarbonise the transport to and from the islands[71].

- While there is interest from the island communities to use offshore energy and produce hydrogen, there are no legal frameworks to accommodate these technologies. There has been a maritime spatial plan, but it is not yet clear how to apply for a planning permission for an offshore site.

- There is a lack of technical knowledge on the islands in terms of grants, technology and regulations.

### RES projects authorization process (permitting and spatial planning)

Survey results:
The survey has asked the respondents to rate the following eight barriers to renewable energy development regarding permitting and spatial planning on Irish islands based on their importance using Likert scale. The results are presented in numerical form showing the average from all responses. The numerical representation is from 1-5, with 1 representing not at all important to 5 representing very important.

| Barrier | Rating |
|---|---|
| Lack of specific planning/permit procedures for solar power for households, schools, communities | 3.6 |
| Complex administrative procedure | 3.7 |
| Long ( >2 years) permitting procedure | 3.9 |
| Lack of permitting exemption for small-scale systems (PV, battery, EV chargers) | 3.4 |
| Spatial planning constraints (Natura 2000) | 3.7 |
| Spatial planning legislation related to protected areas restrictions and RES installations not adjusted to the local island's characteristics | 4.2 |
| Renewable energy projects seen as conflicting to environmental protection of the islands/area around islands | 4.2 |
| Lack of long term vision on how different land use on islands are coordinated to assure sustainable economic development | 4.4 |

[71] There is one research project with a hydrogen ferry SEAFUELS, merely looking at feasibility. https://www.independent.ie/news/environment/hydrogen-to-power-homes-boats-and-cars-on-aran-islands-36604638.html

If we take into account only barriers that are considered important or very important (with an aggregated rating of 4.0 and above) there are three barriers put forward by respondents.
They include from least to most important:

- Spatial planning legislation related to protected areas restrictions and RES installations not adjusted to the local island's characteristics.
- Renewable energy projects seen as conflicting to environmental protection of the islands/area around islands.
- Lack of long-term vision on how different land use on islands are coordinated to assure sustainable economic development.

The barriers 'Renewable energy projects seen as conflicting to environmental protection of the islands/area around islands' and 'Lack of long-term vision on how different land use on islands are coordinated to assure sustainable economic development' were rated as "very important" by respondents from the stakeholder groups Regional body and Cooperatives. The barrier 'Spatial planning legislation related to protected areas restrictions and RES installations not adjusted to the local island's characteristics' was rated "fairly important" by all respondents and "very important" by respondents from the stakeholder group Cooperative.

The barrier 'Spatial planning constraints (Natura 2000)' is highly positively correlated to the barrier 'Lack of institutionalised platforms for information exchange, awareness raising and capacity building on local or regional level'. This means that respondents who rated the first barrier high also highly rated the latter barrier.

Interview results:
From the interviews with Irish stakeholders, the following barriers for renewable energy development, regarding permitting and spatial planning, on Irish islands have been retained:

- Spatial planning limitations form a significant barrier. Nature conservation designations entail high upfront costs (for example bird studies for wind energy projects). Other land-use conflicts with tourism and historical buildings make obtaining a permit a significant challenge. The designation of an island as a Special Area of Conservation can have a negative impact on the development of Renewable Energy projects. The installation of wind turbines of various sizes or PV farms can directly contradict Natura 2000 designations, so that the goal of improving the environment is directly affected by an existing directive aimed at improving or protecting the environment.

- The authorisation and licensing procedures for clean energy projects are too complex for people or communities which do not have expertise in the sector. There is a need for more direct and simplified renewable energy authorisation procedures. Especially for small-scale RES projects the grid connection permit is a serious hurdle. There is no clear process for how to connect small RES (less than 50 kW). For large scale projects, the DSO would connect them as the new infrastructure would be built. For the very small generation projects, the DSO easily connects them assuming this should not create a problem on the grid.

## Grids

Survey results:

The survey has asked the respondents to rate the following four barriers related to grid connection on Irish islands based on their importance using Likert scale. The results are presented in numerical form showing the average from all responses. The numerical representation is from 1-5, with 1 representing not at all important to 5 representing very important.

| Barrier | Rating |
|---|---|
| No priority access to the grid for RES | 4 |
| Insufficient capacity due to grid infrastructure constrains | 4.5 |
| Limited sustainable back-up options to assure security of supply | 4.3 |
| Lack of systematic approach to grid development needs for integration of RES | 4.5 |

If we take into account only barriers that are considered important or very important (with an aggregated rating of 4.0 and above) all of the barriers put forward are considered important by respondents.

While respondents from the stakeholder groups Regional body and Energy community or cooperative rated these barriers all as "very important". The barrier 'No priority access to the grid for RES' was rated as neutral by the other respondents. While the barriers 'Insufficient capacity due to grid infrastructure constrains' and 'Lack of systematic approach to grid development needs for integration of RES' were rated as important by respondents from the stakeholder groups Academia, Local bodies, Regional body and Energy community or cooperative, the respondents from the stakeholder group Governmental body had a more neutral stance on it.

Interview results:
From the interviews with Irish stakeholders, the following barriers for renewable energy development, regarding the grid, on Irish islands have been retained:

- The underwater connection cables are too small to carry any substantial amount of exported electricity and they often get damaged. This causes significant problems and creates the need for back-up capacity (often fossil fuelled).

- There are no plans on upgrading the island grids. Island grids were historically developed after the grids on the mainland were developed – in most cases after a connection with the mainland. The island grids are thus seen as the most modern and they are thus entitled last to modernization of the grids.

- One of the biggest challenges for RE on Irish islands is that they are unable to export excess energy beyond the capacity of the cable connecting them to the mainland. There is thus less opportunity for revenue compared to onshore RE projects. Thus, battery storage is of critical importance. An island specific support system for storage would help overcome this barrier.

## Energy Efficiency

Survey results:
The survey has asked the respondents to rate the following five barriers to energy efficiency projects on Irish islands based on their importance using Likert scale. The results are presented in

numerical form showing the average from all responses. The numerical representation is from 1-5, with 1 representing not at all important to 5 representing very important.

| Barrier | Rating |
|---|---|
| Complex application process for 'Better energy homes' subsidy | 4.2 |
| Lack of citizens' awareness resulting in inability to make informed decisions | 3.6 |
| Lack of capacity of local governments to implement and support energy efficiency projects | 3.9 |
| Lack of clear energy efficiency targets | 3.5 |
| Lack of clear regulations for energy service companies | 3.5 |

If we take into account only barriers that are considered important or very important (with an aggregated rating of 4.0 and above) there is one barrier put forward by respondents, namely 'Complex application process for Better energy homes subsidy'. It is rated as very important by the respondents from the stakeholder groups local bodies, regional bodies and energy communities/cooperatives.

While the barrier 'Lack of capacity of local governments to implement and support energy efficiency projects' was rated as "very important" by the respondents from the stakeholder categories Regional Body and Local body, respondents from the stakeholder category Governmental Body rated it as "less important".

While the barrier 'Complex application process for Better energy homes subsidy' was rated as "very important" by the respondents from the stakeholder categories Regional Body and Local body, respondents from the stakeholder category Governmental Body had a rather neutral stance on it.

Interview results:
From the interviews with Irish stakeholders, the following barriers for energy efficiency on Irish islands have been retained:

- Although there is an uplift for energy efficiency grants - as mentioned in the description of the Irish Policy and Legislation for clean energy for islands above-, the issue is that in the application for the support from energy efficiency funds, the extra costs associated with islands puts the islands at a disadvantage. It costs more to bring out technicians and equipment to do renovations. The funds are thus allocated to projects on the mainland since there is more value for money. Even if it is true that the island communities can ask for a grant uplift (50% more), the SEAI assesses this application on a value-for-money basis, which will in most cases lead to projects on the mainland as the most valuable projects.

- It is difficult to co-fund projects while staying withing the boundaries of state aid rules. Many of the island particularities request for special attention; for example additional cost of delivery of materials, need to have ongoing technical knowledge for example for servicing heat pumps, high level of summer occupancy versus winter occupancy

- While the island communities are very aware of the support for energy efficiency, the building stock remains of poor quality. An island particularity is that there are no gas networks on the islands. Oil or LPG is thus used for heating. This is heavily taxed and not subsidized which incentivises the islanders to look for better options, but it's just the cost of the retrofitting that's the problem.

## Self-consumption and community energy

Survey results:
The survey has asked the respondents to rate the following four barriers to community energy projects and energy sharing on Irish islands based on their importance using Likert scale. The results are presented in numerical form showing the average from all responses. The numerical representation is from 1-5, with 1 representing not at all important to 5 representing very important.

| Barrier | Rating |
|---|---|
| Lack of legal framework for prosumers | 4.3 |
| Lack of regulation for energy sharing options (eg. Collective self-consumption, peer-to-peer exchange) | 4.2 |
| Lack of institutionalised platforms for information exchange, awareness raising and capacity building on local or regional level | 4.0 |
| Lack of financial/funding mechanisms for collective/community involvement in clean energy projects | 4.3 |

If we take into account only barriers that are considered important or very important (with an aggregated rating of 4.0 and above) all of these barriers were put forward as important by respondents. Respondents from the stakeholder groups Local bodies, Regional bodies and Energy communities/cooperatives rated them slightly more important that respondents from the stakeholder groups Governmental body and Academia.

Interview results:
From the interviews with Irish stakeholders, the following barriers for self-consumption and community energy on Irish islands have been retained:

- There is no framework for prosumers, which creates an obstacle for the viable business case for small scale renewable energy on the islands. From 2022 a new support system will start, supporting individual use of res up to 50 kW for self-consumption. If energy is used for self-consumption then 33 % of the total consumption injected to the grid will be provided benefits for. This is not good for energy sharing among community, but it encourages single user consumption.

- There is no specific legal framework for energy communities and thus a major bottleneck community projects need permission from the national grid operator to use the electricity grid, and specifically as regards islands they are not cooperative.

- As mentioned in the description of the Irish Policy and Legislation for clean energy for islands above, a community preference category was taken up in the country's first RES auction, however this is only for projects above 0.5MW. There is nothing foreseen for selling electricity below that threshold of 0.5MW. Any electricity generated but not self-consumer is lost. There is no framework for Peer-to-Peer Trading. The only option is selling directly via a Power Purchase Agreement with a commercial entity via a private wire. However, legislation is being developed and will probably take the form as a feed-in tariff for prosumers.

- The islanders have limited capacity to invest in local project needed for self-consumption, in comparison to consumers on the mainland. In addition, the islanders are in different position as the investments on the islands are usually higher, finding the right site is more expensive, which all increases cost of project financing. Finally, for the island's RES solutions security of supply is a priority, which provides more need for energy storage. The capacity to invest within locality may be limited, balance between self-consumption and export is likely to be different to mainland projects so project paybacks may be very different, site exposure and project risks may be higher, again increasing cost of project financing, security of supply and potential for battery storage as well.'

- While there is the national Sustainable Energy Communities program, which allows for 100% funding to develop an energy master plan at municipality level, and the availability of a grant program of €75 million for communities to apply to do projects in their own locality, the issue is lack of capacity of the island stakeholders. Due to the lack of capacity of the volunteers or local administration, they have to work with a professional coordinator which chooses the projects which are most cost effective, rather than those that the community might want to see being done.

- As cooperatives are the main driving force on the islands, they are involved in starting most of energy transition projects. However, cooperatives have difficulties in receiving funding for RES projects through bank loans as they already have existing loans for other applications on the islands (agriculture, water systems etc.). Therefore, direct support systems or different business models are needed for the islands to implement RES projects.

Besides these island specific barriers, the LECo policy paper[72] has identified the following **legal barriers to community energy projects, in general, for Ireland**:

- Lack of national community energy strategy; lack of national targets for community energy projects, which then are broken down in Local Energy Action Plans by local authorities
- Lack of supportive local authorities and/or local energy agencies
- The fragmentation of roles and responsibilities across government departments, agencies, local authorities and other bodies is a barrier for effective planning
- Generally no support schemes for RES projects at a community level
- Lack of intermediary body
- Complicated legal framework, high levels of bureaucracy to acquire licenses

[72] https://leco.interreg-npa.eu/subsites/leco/PESTLE_Analysis_LECO_A4_190110-singlepages.pdf

- Bureaucratic barriers to grid connection including: complicated application procedures, uncertainty of approval, costs, time consuming
- No priority grid access for community projects
- Complicated grid access process and long time to secure a connection to ensure a FIT (large scale community renewable project)
- No ownership framework in place

## Other barriers

Socio-economic barriers or issues discussed in the interviews:

- The local capacity and knowledge of projects is a challenge on low population islands The lack of technicians specialised in solar PV and heat pumps and materials on or close to the islands forms a barrier. If for example a heat pump breaks, it takes weeks to get it repaired. A solution could be to create a support system to train local people or to create a specific service on the mainland that focusses on energy systems operation and management on islands.
- In general the biggest barrier is the perspective and need for security of supply. The more conservative population of the islands is less likely to go for renewables as they are not sure what to do in cases when there is no generation, and they would rather stick with diesel generator as they know that this can run anytime.

Technical barriers or issues discussed in the interviews:

- There is seasonality on the islands, during the tourist season there is 2 times more consumption.
- Most islands have a radial network, but it will be a single phase MV network. This makes it more difficult to connect renewable energy projects.
- Another issue is the poor energy performance of the buildings. All built stock should be refurbished in Ireland. There is no gas network on the islands and therefore most people use either oil for heating. Heat pumps would be the best option, but they are expensive to implement. The same goes for refurbishment.

## Measures to overcome the identified barriers

Survey results:

The survey has asked the respondents to rate the following eight measures for overcoming the barriers for clean energy projects on the Irish islands based on their importance using Likert scale. The results are presented in numerical form showing the average from all responses. The numerical representation is from 1-5, with 1 representing not at all important to 5 representing very important.

| Measures | Rating |
|---|---|
| Increase awareness of citizens on different clean energy projects costs and benefits | 4.4 |
| Compromises between environment conservation, agriculture, preservation of historical sites, tourism and sustainable and clean energy | 4.5 |

| | |
|---|---|
| Involvement of key stakeholders in preparation of island specific strategic document | 4.7 |
| Subsidies for fossil fuels are redirected to support clean energy projects through the avoided GHG emissions method | 3.5 |
| Capacity building or advisory services on clean energy projects specific to islands | 4.3 |
| Regional/local one-stop shop for clean energy projects on the islands | 4.2 |
| Single permit for clean energy projects on the islands | 3.6 |
| Create enabling framework (regulation, financing, permitting procedures, social support) for prosumers and energy sharing | 4.6 |

If we take into account only measures that are considered important or very important (with an aggregated rating of 4.0 and above) there are six measures put forward by respondents.
They include from least to most important:

- Regional/local one-stop shop for clean energy projects on the islands
- Capacity building or advisory services on clean energy projects specific to islands
- Increase awareness of citizens on different clean energy projects costs and benefits
- Compromises between environment conservation, agriculture, preservation of historical sites, tourism and sustainable and clean energy
- Create enabling framework (regulation, financing, permitting procedures, social support) for prosumers and energy sharing
- Involvement of key stakeholders in preparation of island specific strategic document

The barriers 'Involvement of key stakeholders in preparation of island specific strategic document ' and 'compromises between environment conservation, agriculture, preservation of historical sites, tourism and sustainable and clean energy ' are rated as "very important" by respondents from the stakeholder groups local body, regional body and energy community/cooperatives.

The barriers 'Spatial planning constraints (Natura 2000)' and 'Lack of enabling framework for green hydrogen' are highly positively correlated to the measure 'Regional/local one-stop shop for clean energy projects on the islands'. This means that respondents who rated these barriers high also highly rated this measure.

The barrier 'Insufficient capacity due to grid infrastructure constraints' is highly positively correlated to the measure 'Involvement of key stakeholders in preparation of island specific strategic document'. This means that respondents who rated these barriers high also highly rated this measure.

<u>Interview results:</u>
From the interviews with Irish stakeholders, the following measures to overcome some of the above-mentioned barriers for clean energy development on Irish islands have been retained:

Regarding strategic planning:

- Clean energy objectives should be integrated in other strategies regarding development and opportunities for public services. All of the services are obviously much more difficult to procure for islands. So it makes sense to coordinate investment.
- While measures to support islands should emanate from the national government - as Ireland is very much centralised and this is what people are already used to -, islands should be more involved in the national level policy and strategy preparation. The islands are not opposed to having guidance from the national level.
- Island energy projects should also be coupled with water, waste and similar island issues in order to create a better environment for growth. This will lead to less people moving away from the islands and it will create more jobs.
- A specific island representative body could be created to make policy on their behalf.

Regarding renewable energy in general:

- Build capacity and increase political commitment for the municipalities and local authorities.
- Island specific support systems and funding could be established.
- A framework for decarbonizing transport to and from the islands could be created.
- A framework to harness the potential of offshore technologies and hydrogen, particularly relevant for islands, could be created.
- A support system to train local people to maintain and renewable generation technologies (fe. PV) and smart and sustainable consumption technologies (fe. heat pumps) or to create a specific service on the mainland that focuses on energy systems operation and management on islands.

Regarding the grid:

- An island specific support system for storage would help overcome the barrier of insufficient grid capacity of the interconnectors.

Regarding energy efficiency:

- None

Regarding energy communities:

- There is a need for a national platform that allows small communities to collectively engage in clean energy transition. While there is the SEAI and the Sustainable Energy Communities program, there is room for improvement. Dedicating resources within the SEAI to support islands in their energy transition would be a good measure
- There are still many obstacles for energy communities (on islands). While a developer might have the money to do the required studies to get the planning permission (EIA, grid studies, surveys etc.), energy communities do not have that money available. In this regard up-front finance for community owned projects, such as soft loans and grants should be made available – to cover the preparation costs. Concretely this loan would be repaid if the project succeeds and starts operating. If the project fails because it does not get the planning permission, then the loan is cancelled (partially).

Examples of islands/projects as best practice or to contact:

- Inish Oirr islands for energy community setting up – collaboration with IERC http://www.energise-project.eu/node/1254
- Valentia island for potential hydrogen production https://www.energyco-ops.ie/hydrogen-production-plans-for-irelands-valentia-island/

# Annex 2 - Ireland Stakeholder Meetings

## Ireland Focus Group

Ireland Focus Group invited members:

- Ministry of Energy – International and Offshore energy division
- Department of Environment, Climate and Communications
- Department of Rural and Community Development
- Sustainable Energy Authority of Ireland (SEAI)
- EirGrid (TSO)
- ESB Networks (DSO)
- Energia (electricity and gas provider)
- International Energy Research Center
- Regional state agency Údarás na Gaeltachta
- Aran islands energy cooperative
- Comharchumann Chléire Teoranta (Cape Clear Cooperative)
- CFIM (development company linked to the island of Inishmaan)
- Irish Solar Federation

## First Ireland Focus Group (IEFG1) meeting

| | |
|---|---|
| **Title** | CE4EUI - Ireland Focus Group - Study on regulatory barriers and recommendations for clean energy development on islands. |
| **When** | Tuesday 29th of March 2022, 15:00-17:00 CET. |
| **Where** | Online |

## List of attendees

Aran Islands Energy Cooperative
Sustainable Energy Authority of Ireland (SEAI)
Ministry for energy - International and Offshore Energy Division
Comharchumann Chléire Teoranta (Cape Clear Cooperative)
International Energy Research Center
Údarás na Gaeltachta (regional state agency which is responsible for the economic, social and cultural development of Irish-speaking regions of Ireland
EirGrid – transmission system operator
ESB Networks – distribution system operator
CFIM (development company linked to the island of Inishmaan)
Department of Environment, Climate and Communications

The Irish Focus Group Meeting 1 (IEFG1) focused on the barriers highlighted in the Report: Detailed Regulatory Analysis Ireland.

One key point from the discussion was that several stakeholders indicated that the identified barriers are barriers for renewable energy development that exist both on the islands and on the mainland. However, the impact of the barriers might be bigger on the islands due to their remoteness and insularity.

During the meeting the following points were discussed:
Strict timelines in permitting and supports schemes cause issues for community energy projects
Grid capacity & lack of systematic approach to grid development

- Lack of support from the regional government
- Lack of support systems for storage, hydrogen, floating wind
- Lack of island specific support systems
- Islands are not consulted in a systematic manner
- Lack of legal framework for Peer-to-Peer trading and energy communities
- Lack of capacity of islands and additional costs

## Second Ireland Focus Group (IEFG2) meeting

| | |
|---|---|
| **Title** | CE4EUI - Ireland Focus Group - Study on regulatory barriers and recommendations for clean energy development on islands. |
| **When** | Wednesday 8 June 2022, 11.00-13.00 CET. |
| **Where** | Online |

## List of attendees

Secretariat
Aran Islands Energy Cooperative
Sustainable Energy Authority of Ireland (SEAI)
International Energy Research Center
Irish Solar federation
Energia: Electricity and Gas Provider in Ireland
Energia: Electricity and Gas Provider in Ireland

The second Irish Focus Meeting focused on the Recommendations for the prioritised legal and regulatory barriers highlighted in the Report: Detailed Regulatory Analysis Ireland.
The discussion concentrated on the following recommendations identified for the three main barriers, see Figure below.

| |
|---|
| **1. Lack of supportive framework for community energy projects and energy sharing** |
| Create a level playing field by revising permitting procedures and especially the Enduring Connection Policy |
| Accelerate the regulatory work on P2P trading and energy communities |
| Set-up a one-stop-shop for support to energy communities and, broader, capacity building for (island) communities. |
| **2. Spatial planning constraints and complicated permitting procedures** |
| Spatial planning guidelines for implementation of clean energy projects |
| Designation of go-to areas and simplified permitting procedures |
| **3. Limited grid capacity, lack of systematic approach to grid development and absent framework for storage to cope with it** |
| Adapt grid development methodology from an ad-hoc approach to a future-oriented approach |
| Development of suitable frameworks for storage with particular attention for islands |

## National Stakeholder Meeting

| | |
|---|---|
| **Title** | CE4EUI – Ireland National Stakeholder Meeting- Study on regulatory barriers and recommendations for clean energy development on islands. |
| **When** | 15 (afternoon) and 16 (morning) September 2022 |

The NSM was held On Inishmaan bringing together representatives from the national government and island stakeholders. The first day focussed on spatial planning guidelines and renewable go-to-zones and setting up a structured cooperation between island representatives and the national government and the steps towards development of an island policy. The second day looked at solving bottlenecks and filling gaps in frameworks for community energy projects and energy sharing. The last discussion focussed on the grid constraints and solutions to cope with it.

The stakeholders at national level were the Department of Environment, Climate Change and Communication, Department of Rural & Community Development, Department of Housing, Sustainable Energy Authority Ireland, Commission for Regulation of Utilities, ESB Networks. There was also a representative from the regional government (under which the Aran Islands fall), namely Galway County Council|. The Irish Solar Energy Association and Integrated Environmental Solutions were also present. The island views were represented by the Aran Islands Energy Co-Operative, Comharchumann Chléire Teoranta (Cape Clear), Údarás na Gaeltachta, Clár Éifeachtachta Fuinnimh (Ceantar na nOileán) and Comhar Caomhán Teo (Inis Oírr).

Some key points that are to be retained from the National Stakeholder Meeting:

- The Department of Rural & Community Development is working on finalising the Islands Policy, which had stalled since the end of 2019. The barriers and recommendations we brought forward will be integrated as much as possible. The goal is to have this ten-year action plan ready by the end of 2022. The interdepartmental committee that is currently drawing up the plan will also be following up its implementation with sequential 3-year action plans. The Irish island stakeholders committed to helping finalise the plan when/if put to public consultation and to contribute to implementing the measures.

- The Department of Housing supports the recommendation to identify go-to zones and will draw up a plan on how to do this.

- The CRU will look into how the Enduring Connection Policy could possibly be revised to deal with the timing issue for Community led-projects. A possibility could be that, instead of losing the grid connection assessment if the community led project does not get a planning permit within two years, some sort of screening could take place. Based on some transparent KPIs a community led project could demonstrate that it has advanced in its project development process and for example only needs 6-8 months more to obtain planning permission.

- The CRU also informed on the regulatory work on energy communities and energy sharing that is going on and that is to be further developed in the coming months. They welcomed the insights in barriers and concerns of the island stakeholders and will take them into consideration.

# Annex 3: Examples of frameworks on Energy Storage

Few countries currently provide a comprehensive regulatory framework for energy storage, with the majority of jurisdictions currently allowing storage to be defined as "generation" for the purposes of licensing and other regulatory requirements. However, some countries like the UK and Belgium have provided a more elaborate framework, mainly regarding revenue streams to help different storage technologies to develop, for example capacity markets, ancillary services and other grid services.

Belgium has changed its Electricity law to have a specific definition of storage[73]: 'Energy Storage' means, in the electricity system, the postponement of the final use of electricity until a time later than that at which the electricity was generated, or the conversion of electrical energy into a form of energy that can be stored, the storage of such energy, and the subsequent conversion of such energy into electrical energy or another energy. While 'electricity' storage' means energy storage where electricity is taken from the grid via the same installation in order to be fully injected back into the grid later on, taking into account efficiency losses. Noteworthy is that the Electricity Law does not assimilate electricity storage to electricity generation, and consequently a generation licence is not required. Regarding revenue streams a Capacity Remuneration Mechanism (CRM) was recently introduced in Belgium by the country's Transmission System Operator. Beginning in October 2021, the first CRM auction was organised to select capacity offers for delivery period 2025-2026: a (priced) demand curve was set by Royal Decree, and prequalified capacity holders were able to submit bids to the market (for existing or new capacity). Some Battery Energy Storage Systems participated in the auction. Also, Ancillary services to maintain frequency and voltage at appropriate levels exist in Belgium and Battery Energy Storage Systems can participate in them

In the United Kingdom, there are at least six markets that batteries can operate in, covering wholesale, balancing, ancillary services, time-of-use, stabilisation and infrastructure. National Grid issues contracts for short term generating capacity to cover sudden failures at power stations and other significant network issues. These typically cover events lasting a few seconds or minutes in duration. As a result of these characteristics, the differing services are typically available to different classes of generators (or demand reduction technologies), each having different technical and regulatory requirements. Some of these include: Short Term Operating Reserve (STOR), Demand Management (DM), Fast Reserve and Frequency Response. Energy storage is particularly suitable for both Fast Reserve and Frequency Response since both of these services require the rapid (second-by second) provision of reliable power which energy storage technologies are ideally placed to deliver. The UK Government provides for funding to install new renewable energy storage technologies in the country under the Longer Duration Energy Storage Demonstration (LODES) competition[74]. As part of this initiative, the government has awarded £6.7m ($9m) to 24 projects across the country under the LODES competition, which is worth £68m ($91m) of capital funding in total.

[73] Article 2.62 and 2.6 of the Electricity Act

[74] https://www.gov.uk/government/collections/longer-duration-energy-storage-demonstration-lodes-competition

Until recently, few countries had specific support systems for storage. Some countries, like the exemplary list below, provide support for (residential/small-scale) storage either as 'stand-alone' or combined with PV.

Since 2019 Flanders (Belgium) grants rebates (premium) for the purchase of domestic batteries to encourage solar power self-consumption[75]. The Flemish government has extended the premium until 2024 and released additional budgets. The rates are as follows: 0-4kWh: 225€/kWh, 4-6kWh: 187.5€/kWh, 6-9kWh: 150€/kWh, Above 9kWh: no additional premium. Maximum premium per battery: 1725€, max 40% of invoice incl. VAT.

In Germany, the KfW funding for renewable energies (Program 270) has been very successful. It is a low-interest promotional loan for (among others) the construction, expansion and acquisition of systems for the use of renewable energies, such as battery storage and photovoltaic systems. With the KfW 270 development loan, you finance up to 100 percent of the investment costs for an electricity storage system or the acquisition costs of a photovoltaic system in general.

In Malta, a subsidy is given for an installation of new PV system with an inverter and battery storage facilities[76]. It covers 80% of eligible costs of the Battery Storage up to a maximum of €3,600 per system and €600/kWh.

In the Azores region of Portugal a specific subsidy for projects on production and storage of electricity from renewable resources covers 25% percent of the eligible costs, up to a maximum of €4,000 per establishment[77].

In Ireland, the Solar PV scheme provides subsidies for the purchase and installation for roof-mounted PV (up to 2kWp and with battery storage up to 4 kWp). The 2kWp of PV systems are subsidised (€900 per kWp). If the roof-mounted PV is combined with battery storage then an additional grant for further 2kWp is offered (€300 per kWp). Consequently, the maximum level of support reaches €2,400 (ch. 2 Solar PV Scheme).

Austria has launched a rebate program for solar-plus-storage installations offering homeowners 250€/kW of solar rooftop generation capacity and €200/kWh of storage.

In Italy rebates exist for two different kinds of projects – installations of PV systems linked to storage systems, and the deployment of standalone storage systems linked to existing solar arrays. For this second category of rebates will cover 100% of project costs.

[75] Decision of the Flemish Government of 28 June 2019

[76] Promotion of Renewable Energy Sources in the Domestic Sector – Grant Scheme 2021/RES; https://www.rews.org.mt/#/en/sdgr/463-2021-renewable-energy-sources-scheme

[77] PROENERGIA. DLR 14/2019/A & Ordinance 73/2019