



NETWORKS

CONNECTING YOUR COMMUNITY-LED RENEWABLE ENERGY PROJECT TO THE ELECTRICITY NETWORK

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[esbnetworks.ie](https://www.esbnetworks.ie)





Connecting your community-led renewable energy project to the electricity network

WHO IS THIS GUIDE FOR?

This guide is for people developing community-led renewable energy projects (in the range of 0.5MW to 5MW) who want to get a connection to the electricity network.

This document has been prepared by ESB Networks to help support and explain the steps involved in connecting a community-led renewable energy project to the electricity network.

WHO ARE WE?

ESB Networks is the owner and operator of Ireland's electricity distribution network. We develop, plan, operate and maintain the electricity network which includes all distribution stations, overhead electric wires, poles and underground cables that are used to bring power to Ireland's 2.3 million domestic, farming, commercial and industrial customers.

One of our key roles is to provide new connections and modify existing ones for both generation and demand customers. We aim to make connecting to our network as straightforward as possible, which is why we have produced this guide.

CLIMATE ACTION PLAN AND COMMUNITIES

The Government's Climate Action Plan 2019¹ details the urgent need to tackle climate change and the importance of community involvement in renewable energy projects.

Communities will play a vital role in the journey towards a low carbon future and can participate in community-led renewable energy projects through support schemes made available by Irish policy initiatives including the government's Renewable Electricity Support Scheme (RESS) and the regulator's generator connection policy called Enduring Connection Policy (ECP).

ESB Networks is fully committed to supporting and empowering communities in this journey and in proactively providing information, advice and guidance in relation to connecting community-led renewable energy projects to the electricity distribution network.

¹ <https://www.gov.ie/en/publication/ccb2e0-the-climate-action-plan-2019/>



RENEWABLE ELECTRICITY SUPPORT SCHEME (RESS)

The primary focus of the Renewable Electricity Support Scheme (RESS) is to create a cost-effective renewable electricity market that supports the growth of a green economy and Ireland's ambition of 70% renewable electricity by 2030. The RESS provides financial support to renewable electricity projects in Ireland through a series of scheduled, competitive auctions.

COMMUNITY-LED RENEWABLE ENERGY PROJECTS

To apply for RESS, a project must meet the definition of a community-led renewable energy project, as defined in the terms and conditions of RESS-2. A project must also apply in conjunction with a Sustainable Energy Community which should be identified on the declaration form for community-led renewable energy projects, together with a description of the relationship between the Applicant and the Sustainable Energy Community.

COMMUNITY BENEFIT FUND

A mandatory Community Benefit Fund must be provided by all projects successful in a RESS auction. The contribution is currently to be set at €2/MWh. This fund will be aligned to incentivise investment in local renewable energy, energy efficiency measures and climate action initiatives.²

² <https://www.seai.ie/community-energy/ress/>



WHAT IS THE ENDURING CONNECTION POLICY (ECP)?

The Enduring Connection Policy (ECP) process for grid connection applications is the current pathway for generators, storage and other system services technology projects to connect to the electricity system.

The Decision Paper for the first stage of the Enduring Connection Policy (ECP-1)³ and accompanying ECP-1 Ruleset⁴ were published by the Commission for Regulation of Utilities (CRU) on the 27th March 2018, with the principal objective to allow projects which were 'shovel ready' (i.e. with Planning Permission), the opportunity to connect to the network while also providing more regular opportunities for the processing of connection offers (i.e. more frequent batches) in the future.

On 10th June 2020, the CRU published the Decision Paper for the second stage of the Enduring Connection Policy process (ECP-2)⁵, followed by the corresponding ECP-2 Ruleset⁶. ECP-2 builds on the objectives of ECP-1, with increased prioritisation of large renewable energy projects and community-led renewable energy projects, helping to facilitate a low-carbon future with well-regulated networks.

On 1st July 2021, a Clarification Note (CRU/21/069)⁷ was published by the CRU to change the definition of a Community-Led Renewable Energy Project, outlined in the ECP-2 Decision Paper, to align with the definition contained in the Renewable Electricity Support Scheme 2 (RESS-2) Terms and Conditions. This means that Community-Led Projects must now be 100% community-owned to be processed under Category C in ECP-2.2 and in subsequent ECP-2 batches.

³ <https://www.cru.ie/wp-content/uploads/2017/04/CRU18058-ECP-1-decision-FINAL-27.03.2018.pdf>

⁴ <https://www.cru.ie/wp-content/uploads/2017/04/CRU18059-Annex-I-ECP-1-Ruleset.pdf>

⁵ <https://www.cru.ie/wp-content/uploads/2020/06/CRU20060-ECP-2-Decision.pdf>

⁶ https://www.esbnetworks.ie/docs/default-source/default-document-library/ecp-2-ruleset.pdf?sfvrsn=98f401f0_0

⁷ <https://www.cru.ie/wp-content/uploads/2021/07/CRU21069-Clarification-Note-on-the-ECP-2-decision-Community-Led-Renewable-Energy-Projects-Definition.pdf>



An Coimisiún
um Rialáil Fóntais

Commission for
Regulation of Utilities

ECP-2 Application Window Timelines

Under ECP-2, each application window will commence on the 1st of September and close on the 30th September each year. Community-led renewable energy projects and non-batch applicants may, however, apply at any time during the calendar year.

Following review by the System Operator (ESB Networks or EirGrid), projects will then be grouped into batches which will determine when a customer will receive their connection offer.

ECP-2 Categories

For each batch period, the System Operators, will target a total of 115 connection offers broken down into the following categories:

Category	Definition	Offer
A	Generation, storage and other system services technology projects (MEC>0.5MW)	85
B	Non-batch projects not processed in the preceding batch period (MEC<0.5MW)	15
C	Community-led renewable energy projects not processed in the preceding batch period (0.5MW to 5MW)	15

ECP-2 AND COMMUNITY-LED RENEWABLE ENERGY PROJECTS

An important part of ECP-2 is the inclusion of the community-led renewable energy projects (Category C applicants).

To facilitate community-led renewable energy projects getting connected, the ECP-2 Decision Paper sets out a lower barrier to entry and allows applicants to receive their offer on a preferred basis.

Key differences for Category C applicants:

ECP-2 Application Window	The ECP-2 application window will remain open to applicants throughout the batch period year
Planning Permission	Planning Permission is not a requirement at application stage but will be required before a grid connection offer is issued. Applicants who apply with planning permission will be prioritised during batch processing, according to planning permission grant date and then by application form Received Complete Date. Applicants without planning permission will be prioritised by application Received Complete Date.
Connection Assessment	Following detailed study, projects will receive a Connection Assessment (connection method and cost). This capacity will be held for two years to allow projects to gain planning permission. On receipt of planning permission and payment of the balance of the application fee, the project will receive a grid connection offer

WHAT DOES A COMMUNITY-LED RENEWABLE ENERGY PROJECT LOOK LIKE?

A community-led renewable energy project, as defined by the Department of Environment, Climate and Communications, involves building a small renewable energy generation facility with a Maximum Export Capacity (MEC) greater than or equal to 0.5 MW and less than or equal to 5 MW.

In addition, community-led renewable energy projects must also meet the following requirements:

A. at all relevant times, be at least 100% owned by a Renewable Energy Community (the "Relevant REC") either by way of

- (i) a direct ownership of the project's assets, or**
- (ii) a direct ownership of the shares in the generator; and**

B. at all relevant times, at least 100% of all expected profits, dividends and surpluses derived from the project are returned to the Relevant REC*.

The following are examples of different types of renewable energy generation technologies

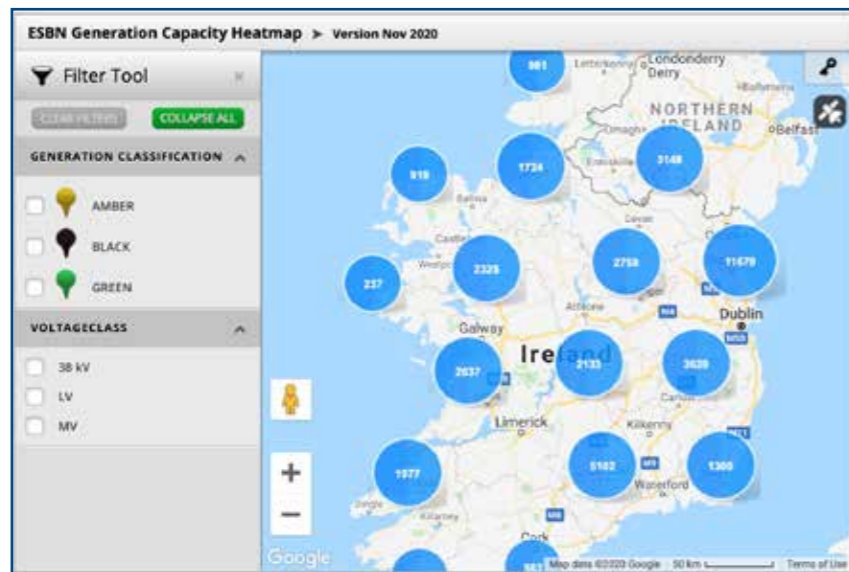
- > Wind Turbines
- > Solar Photovoltaic Panels
- > Hydraulic Turbines excluding Pumped Storage
- > Waste to Energy Projects
- > Biomass Projects and Biogas Projects

*Note: In February 2021, it was announced by the Department of the Environment, Climate and Communications that there will be a new requirement for community-led projects to be 100% community-owned in order to apply for future RESS auctions.

PRE-GRID APPLICATION

Generation Heat Map

We have prepared an interactive generation heat map which contains capacity information on MV and HV DSO substations and information on all our 3phase LV substations. Before submitting a grid application, this tool may be used to identify potential transformer capacity in the vicinity of your site. To view our generation heat map, please visit our website by clicking on this [link](#)



We envisage that the map will be used to inform initial discussion between ourselves and our customers. Although we have taken steps to ensure the accuracy of the map, it is important to note that the generation heat map cannot replicate the level of accuracy provided by the detailed assessment carried out as part of the formal application process.

Contestable or Non-Contestable?

Developers may choose to contestably build part of the grid connection by requesting a contestable quotation.

If the developer chooses a contestable quotation, the quotation will detail the works to be designed and built contestably by the developer. Note that works in existing substations, and parts of telecommunications and metering equipment are not contestable. When the works are designed and constructed to ESB Networks design and quality standards and after successful commissioning and energisation, ownership is transferred to ESB Networks for a nominal fee of €1. They will become part of the distribution system and ESB Networks will maintain them and carry out any necessary repairs and replacement (after the warranty period).

Alternatively, ESB Networks may construct all parts of the grid connection – this would be a non-contestable offer.



MAKING YOUR COMMUNITY-LED RENEWABLE ENERGY PROJECT APPLICATION

Step 1 Familiarise yourself with the Process

Before you apply, we recommend that you familiarise yourself with both the ECP-2 Decision Paper (Section 2.4) and subsequent Ruleset (Section 3). It may be also be useful to familiarise yourself with our Generation Heat Map.

Step 2 Acquire an Ordnance Survey (OS) Map, Site Plan and Single Line Diagram (SLD)

Obtain a 1:50,000 'Discovery Series' Ordnance Survey map with both the location of your new generator and the site boundary clearly marked with a red pen. You will also need a detailed site plan in the appropriate scale with both the location of your project and the site boundary clearly marked with a red pen.

A draft electrical single line diagram of the proposed facility detailing all significant items of plant and their values.

Step 3 Declare your Status

You will be required to complete a declaration of community-led renewable energy project form, confirming that your project meets the community-led renewable energy project definition requirements. You can download this declaration form from our website at this [link](#).

The screenshot shows the 'ECP-2 Community-Led Renewable Energy Project Declaration Form' with a redacted area for the applicant's name and registration number. The form includes a list of conditions to be confirmed, such as ownership requirements and project definitions.

Step 4 Make an Application

You will also need to complete a fully completed NC5 application form (full form) or NC5A application form (reduced criteria form) which are available for download from our website. If you wish to submit an NC5 application form, please click on this [link](#).

The screenshot shows the 'FORM NC5 EMBEDDED GENERATION FACILITIES' application form for a new connection. It includes an introduction section, a list of terms, and contact information for DSOGenerators@esb.ie.

The NC5A form can be found at this [link](#). Please refer to the glossary of terms and abbreviations section of this brochure to learn more about the key difference between these two forms.

The final step is to make a non-refundable application fee in the amount of €2,000 (incl. VAT). Further information on making this payment is available on our website.

If you have previously submitted an application fee deposit, this deposit may be carried forward for valid unprocessed applicants that re-apply under ECP-2.

All application documentation may be submitted, by electronic format, to DSOgenerators@esb.ie.

For more information on how to apply for a community-led renewable energy project, please visit our website by clicking this [link](#).

GETTING YOUR NETWORK CONNECTION – A STEP BY STEP PROCESS

Step 5 Study by ESB Networks

After the application stage, ESB Networks will examine the proposals and local grid capacity in order to ascertain the best connection method for each project. Factors influencing this are existing loads and generators at nearby substations and capacity of the existing electricity network to distribute the power generated.

Step 6 Connection Method Preference and Connection Assessment

Customers will then be asked whether they would like a contestable or non-contestable quotation and whether they would prefer an overhead line or underground cable connection.

Step 7 Connection Assessment

Customers will be issued with a connection assessment by ESB Networks, outlining the approximate connection method and cost. The connection assessment carried out will determine the Least Cost Technically Acceptable (LCTA) connection method. If a customer has not secured planning permission, the connection assessment will remain valid for up to two years.

Step 8 Planning Permission

If a project does not already have planning permission, then it must be obtained at this stage.

Step 9 Connection Offer Issuance

Once a project has confirmed that planning permission is in place and the balance of the application fee has been paid, a formal contract for the grid connection will be issued to the customer.

Step 10 First Stage Payment and Connection Offer Acceptance

The customer pays first stage payment (10% of the connection cost) and the formal contract is signed by the customer and ESB Networks.

Step 11 ESB Networks Approval and Project Scoping

ESB Networks completes the internal project approval and scope of works for the grid connection.

Step 12 Second Stage Payment

The customer pays second stage payment (55% of the grid connection costs) before detailed design.

Step 13 Contestable Specifications

If the developer has chosen to contest the grid connection, ESB Networks will issue the customer with the contestable specifications.

Step 14 Contestable Design review by ESB Networks

The developer's contestable designs are reviewed by ESB Networks before construction starts.

Step 15 Grid Connection Construction

Construction of the non-contestable and contestable works, if applicable, can proceed in parallel.

Step 16 Third Stage Payment

The customer pays third stage payment (25% of the grid connection costs), towards the end of construction.

Step 17 Documentation

The developer submits the documentation necessary for transfer of assets to ESB Networks.

Step 18 Commissioning

ESB Networks does the commissioning of the grid connection works for both contestable and non-contestable projects.

Step 19 Energisation

After successful commissioning, the grid connection is energised.

Step 20 Final Stage Payment

The customer pays the fourth and final stage payment of the grid connection costs.

Step 21 Grid Code Testing

Final grid code testing is carried out by ESB Networks.

MEET THE COMMUNITY ENERGY LIAISON PANEL

We have a team of dedicated professionals available to assist you with any queries you may have in relation to your community-led renewable energy project.

Our team span the areas of stakeholder engagement, network connection policy to project construction and delivery and act as a point of contact for any queries you may have.

If you have any further questions on how to apply to connect your community-led renewable energy project to the electricity distribution network, you can contact our team at communityenergy@esbnetworks.ie.



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GLOSSARY OF TERMS AND ABBREVIATIONS

Abbreviation or Term	Definition or Meaning
CER	Commission for Energy Regulation (now, Commission for Regulation of Utilities)
Community-led Energy Project Definition	Projects with 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); <ul style="list-style-type: none"> • 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: <ol style="list-style-type: none"> (a) at all relevant times, be at least 100% owned by a Renewable Energy Community (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 100% of all expected profits, dividends and surpluses derived from project are returned to the Relevant REC
Contestable Delivery Model	Where the developer takes responsibility for the planning permission, the majority of the design and the construction programme
COPP	Connection Offer Policy and Process Paper
CRU	Commission for Regulation of Utilities (formerly, Commission for Energy Regulation)
DECC	Department of Environment, Climate and Communications
Declaration of Community-led Energy Project Form	A form which must be completed by the Applicant at application stage confirming that the project meets all of the community-led renewable energy project definition requirements
DSO	Distribution System Operator (ESB Networks)
ECP	Enduring Connection Policy
ECP-1	First stage of the Enduring Connection Policy; includes the 2018 batch and non-batch processes
ECP-2	Second stage of the Enduring Connection Policy
ECP-2.1	The first batch under the ECP-2 batch process
ECP-2 Category A	Generation, storage and other system services technology projects (MEC>0.5MW)
ECP-2 Category B	Non-batch projects not processed in the preceding batch period (MEC≤0.5MW)
ECP-2 Category C	Community-led Energy Projects not processed in the preceding batch period (0.5MW to 5MW)
Electricity System	Transmission and distribution electricity systems
Existing Applicants	Applicants who have an existing grid application as of the date of ECP-2 decision
Existing Contracted Projects	Projects for which a connection agreement has been signed by the connecting party and executed by the relevant SO as of the date of the ECP-2 decision
HV	High Voltage (38kV-110kV)
kW	Kilowatt
LCTA	Least Cost Technically Acceptable
MEC	Maximum Export Capacity
MIC	Maximum Import Capacity
MV	Medium Voltage (10kV or 20kV)
MW	Megawatt
NC5 Application Form (Full Form)	The NC5 Application Form completed by the Applicant if at the time of application, the specific generator manufacturer detail has been identified and the technical study would be processed using specified data provided by the applicant
NC5A Application Form (Reduced Criteria Form)	The NC5A Application Form is a shortened version of the NC5 Application Form and may be used where the specific generator manufacturer detail is unknown at time of application. The technical study will therefore be completed using assumed data and the applicant is required to provide their specific data a year in advance of energisation
New Applicants	Applicants who have no existing grid connection application as of the date of ECP-2 decision
Non-contestable Delivery Model	Work must be carried out by us and is not open to competition. Non-contestable elements of a new connection could include work that may be required on existing lines and in remote substations
PV	Photovoltaics
REC	Renewable Energy Community
Received Complete Date	The SOs assign a "Received Complete Date" to projects which submit application forms with a certain minimum amount of information contained therein
RES	Renewable Energy Sources
RESS	Renewable Electricity Support Scheme
SEAI	Sustainable Energy Authority Ireland
SEC	Sustainable Energy Community (SEAI)
SOs	System Operators (i.e. TSO and DSO)
TSO	Transmission System Operator (EirGrid)

IMPORTANT READING AND CONTACTS

Commission for Regulation of Utilities (CRU) - Enduring Connection Policy Stage 2 (ECP-2) Decision Paper, June 2020: <https://www.cru.ie/wp-content/uploads/2020/06/CRU20060-ECP-2-Decision.pdf>

Commission for Regulation of Utilities (CRU) - Enduring Connection Policy Stage 2 (ECP-2) Ruleset, August 2020: https://www.esbnetworks.ie/docs/default-source/default-document-library/ecp-2-ruleset.pdf?sfvrsn=98f401fo_0

Commission for Regulation of Utilities (CRU) - Clarification Note on ECP-2 Community-Led Renewable Energy Project definition, July 2021: <https://www.cru.ie/wp-content/uploads/2021/07/CRU21069-Clarification-Note-on-the-ECP-2-decision-Community-Led-Renewable-Energy-Projects-Definition.pdf>

Department of Environment, Climate and Communications (DECC) - Consultation on the second onshore Renewable Electricity Support Scheme (RESS 2) auction design and implementation: <https://www.gov.ie/en/consultation/bd4ef-consultation-on-the-second-onshore-renewable-electricity-support-scheme-ress-2-auction-design-and-implementation/>

Department of Environment, Climate and Communications (DECC) - Climate Action Plan, 2019: <https://www.gov.ie/en/publication/ccb2e0-the-climate-action-plan-2019/>

Department of Environment, Climate and Communications (DECC) - Renewable Electricity Support Scheme (RESS): <https://www.gov.ie/en/publication/36d8d2-renewable-electricity-support-scheme/>

ESB Networks - Connect a community-led renewable energy project: <https://www.esbnetworks.ie/new-connections/generator-connections-group/community-led-renewable-energy-projects>

ESB Networks - Generation Availability Capacity Map: <https://www.esbnetworks.ie/new-connections/generator-connections-group/availability-capacity-map>

Sustainable Energy Authority of Ireland - Renewable Electricity Support Scheme (RESS): <https://www.seai.ie/community-energy/ress/>



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