

Small-Scale Renewable Electricity Support Scheme (SRESS)

High-Level Design

2023

Prepared by the Department of the Environment, Climate and Communications **gov.ie/decc**

Table of Contents

T	able of	f Contents	i
1	Exe	ecutive Summary	2
2	Sm	all-Scale Renewable Electricity Support Scheme (SRESS) Introduction	3
3	Fac	ctors underpinning SRESS design	6
	3.1	Irish policy context	6
	3.3	Independent Economic Analysis	9
	3.4	Learnings from the Renewable Electricity Support Scheme (RESS)	12
	3.5	SRESS Consultation Responses	13
	3.6	Enabling measures	15
4	Pro	posed characteristics of the new SRESS	18
	4.1	Technology Neutral	19
	4.2	Policy lifetime and scheme review	20
	4.3	Eligibility criteria	20
	4.4	Feed-in Premium (FIP)	20
	4.5	State Aid Requirements	21
	4.6	Community aspects of the SRESS	21
5	SR	ESS support design	22
	5.1	Renewables Self-Consumers	22
	5.2	Export-led projects	22
6	Ne	xt steps	24
	6.1 Cons	Phase 1: Grants supports to SRESS Category 1 Projects: Renewable Energy	
	6.2	Phase 2: SRESS Terms and Conditions	
	6.2		
	6.3	Phase 3: Review of the Scheme and Tariffs for all Categories from 2025	

1 Executive Summary

This paper sets out the High-Level Design (HLD) for the new Small-Scale Renewable Electricity Support Scheme (SRESS) for Ireland. The Climate Action Plan 23 sets out Ireland's Solar Strategy to deliver a target of 8 GW of solar energy by 2030 and up to 5 GW by 2025 as one of the measures to meet the carbon budget programme for the electricity sector.

The SRESS is a key building block to deliver on its solar strategy and forms part of the Government's comprehensive enabling framework for Renewables Self-Consumers and will offer supports for renewable electricity installations which are not as suited to other support measures, such as the utility scale Renewable Electricity Support Scheme (RESS) and the Micro-generation Support Scheme (MSS).

This SRESS design described in this paper reflects the independent economic analysis report which underpins the new scheme along with submissions received through a public consultation in Q3/4 2022. The economic analysis and some supporting material can be found at gov.ie - Consultation on a Small-Scale Generation Support Scheme (SSGS) in Ireland (www.gov.ie). The analysis outlines the main policy objectives and external policies impacting the design of the new scheme, setting the context for the proposed support measures. It also aims to capture learnings from the implementation of other support schemes, such as the RESS and the MSS.

The paper outlines the overall ambition for the SRESS and proposes support measures to deliver on these ambitions within the context of Ireland's wider renewable electricity and emissions reductions targets. The below sets out the High Level Design of the scheme and a timetable for the various detailed design phases including the detailed scheme terms and conditions. The paper also recognises that the SRESS is being developed during the exceptionally challenging cost of living crisis driven by the War in Ukraine and the knock-on impact of high energy costs on consumers, and in particular those in or at risk of energy poverty. As part of the REPowerEU plan, the Commission adopted in May 2022 an EU solar energy strategy, which identifies remaining barriers and challenges in the solar energy sector and outlines initiatives to overcome them and accelerate the deployment of solar technologies. The SRESS aligns with this strategy and the objectives of REPowerEU.

Providing pathways for increased community participation will be a cornerstone of the new scheme, to support our Climate Action Plan target of up to 500MW of Community energy by 2030. This paper sets out policy options that will be implemented to support community-led projects and other measures to increase community participation.

Following this Executive Summary, the structure of this HLD paper is as follows:

- ➤ Section 3 SRESS Introduction
- Section 4 Factors underpinning the SRESS Design
- Section 5 Proposed Characteristics of the SRESS
- Section 6 SRESS Support Design
- ➤ Section 7 Next Steps



2 Small-Scale Renewable Electricity Support Scheme (SRESS) Introduction

The new Small-Scale Renewable Electricity Support Scheme (SRESS) will help to deliver on Ireland's renewable energy targets. These include a target of 80% renewable electricity by 2030, including 8GW of solar PV and 500MW of community energy over the same period. Given the short lead-in times for the deployment of rooftop solar PV in particular, the scheme will be a key measure in achieving the CAP 23 target of up to 5GW of solar PV by 2025.

The scheme aims to support larger non-domestic renewables self-consumers, such as farms, public buildings, commercial and industrial entities, as well as to provide a route to

market for Renewable Energy Communities and other small-scale solar PV developments of up to 6 MW installed capacity.

The SRESS is being developed during the exceptionally challenging cost of living crisis driven by the war in Ukraine and the knock-on impact of high energy costs on consumers, and in particular those in or at risk of energy poverty. The EU Commission has identified accelerating renewables, and in particular solar PV, as a major response to protecting consumers from high fossil fuel prices.

In response to the Russian invasion of Ukraine and resulting exacerbation of security of supply concerns, the European Commission launched a joint European action programme, REPowerEU, to terminate the dependence on imported fossil fuels from Russia before 2030, while ensuring more affordable, secure, and clean energy for Europe.

As part of the REPowerEU plan, the Commission adopted in May 2022 an EU solar energy strategy, which identifies remaining barriers and challenges in the solar energy sector and outlines initiatives to overcome them and accelerate the deployment of solar technologies.

This strategy aims to bring online over 320 GW of solar photovoltaic by 2025 (more than doubling compared to 2020) and almost 600 GW by 2030. These frontloaded additional capacities displace the consumption of 9 bcm of natural gas annually by 2027. Thus, the REPoweEU programme underlines the importance of accelerating the deployment of renewables, in particular the role that distributed solar PV generation can play as a rapidly deployable renewable technology that displaces carbon intensive electricity generation and bolsters Europe's energy security.

The SRESS will have an important role in ensuring the security of Ireland's electricity supply into the future, by both enabling energy users to produce their own renewable electricity for their own use – and thereby reduce demand on the electricity network – and providing a route to market for small-scale renewable electricity generators.

The scheme will provide opportunities for multiple technologies, with support levels determined based on the cost of solar PV. This will ensure that the scheme delivers diversity both in terms of the number and types of projects, as well as an increased mix of renewable technologies to complement our deployed onshore wind generation capacity and increasing onshore and offshore wind generation and reduce Ireland's reliance on imported fossil fuels.

The new scheme will have two support mechanisms in order to suit two distinct cohorts of applicants.

First Phase, SRESS Category 1: Renewable Self-Consumers above 50kW and up to 1MW from 2023

For this cohort, capital grants for solar installations are proposed for an interim period up to the end of 2025. The appropriate form of support for post 2025 will be determined in 2024.

Grants are proposed for this category, given the requirement to rapidly accelerate the rollout of renewables to meet much increased CAP 23 and solar PV targets.

It should be noted that the uptake scenarios and policy recommendations in the Ricardo report cited above were developed in the context of a much lower overall CAP 21 target for solar PV of up to 2.5GW by 2030, and 500MW of Community Energy over the same period. However, the solar PV target under CAP 23 has now increased to up to 8GW by 2030, with up to 5 GW targeted by 2025.

Given the lead in times for large utility scale solar projects, a significant portion of this up to 5 GW of solar PV by 2025 will, by necessity, come from rooftop solar PV installations. It is therefore necessary that the supports for these installations under the Micro-generation Support Scheme (MSS) and SRESS are sufficiently targeted to drive significant uptake of non-domestic rooftop solar PV installations. While a tariff-based support set at an appropriate level may bridge the viability gap of large rooftop solar PV installations, this may not prove sufficient to drive the required level of accelerated uptake in the short term.

Second Phase, SRESS Category Two: Community/Local/SME projects between 1MW-6MW and export only projects below 1 MW from 2024

This cohort is proposed to be supported via a floating Feed-in Premium tariff for the entire duration of the scheme. This tariff will be characterised by a Feed-in Premium (FiP) tariff without an auction, i.e., the support rate will be provided for the support lifetime, with successful applicants receiving a premium on the market revenues they receive for their renewable electricity. In addition, export only projects (i.e. those renewable electricity generation projects which are not renewable self- consumers) below 1 MW would also be supported under this category.

Support rates for this category will be determined in the final Terms and Conditions of the Scheme due to be published by end 2023. Risk mitigation measures including inflation exposure will be factored into this tariff setting process.

The issue of whether there will be any capping of volume and if a certain proportion of the 1-6MW should be ringfenced for Community participation will be determined as part of the finalisation of the Terms and Conditions.

➤ Third Phase: All Categories Tariff Support from 2025

It is intended that all categories of applicant, including Renewable Self-Consumers from 50kW to 1MW, will be supported via a Feed in Tariff post-2025, when tariff supports are expected to represent better value for money than capital grants, as electricity retail prices are expected to have returned to nearer to their historical lower norms.

It is proposed that the final decision on this will be taken after up-to-date analysis in 2024.

3 Factors underpinning SRESS design

3.1 Irish policy context

Programme for Government and Climate Action Plan commitments

The October 2020 Programme for Government committed to the development of a 'Solar Energy Strategy for rooftop and ground-based photovoltaics to ensure that a greater share of our electricity needs is met through solar power'.

The Climate Action Plan 2023 (CAP 23) sets out how Ireland can accelerate the actions that are required to respond to the climate crisis, putting climate solutions at the centre of Ireland's social and economic development. The plan implements the carbon budgets and sectoral emissions ceilings and sets out a roadmap for taking decisive action to halve our emissions by 2030 and reach net zero no later than 2050.

The plan outlines a number of actions to support Ireland's renewables programme, including the accelerated delivery of onshore wind, offshore wind, and solar to reach 80% of electricity demand from renewable energy by 2030. The Plan targets:

- ➤ 6 GW of onshore wind and up to 5GW of solar by 2025;
- → 9 GW onshore wind, 8 GW solar, and at least 5 GW of offshore wind by 2030 (and an additional 2 GW offshore wind for green hydrogen production):
- Support at least 500 MW of local community-based renewable energy projects and increased levels of new micro-generation and small-scale generation.

The publication of this HLD paper represents the delivery of Action EL/23/13 of CAP 23.

Enabling framework for micro- and small-scale generators

On 15th February 2022, the Minister for the Environment, Climate and Communications signed the regulations which transpose Article 21 of the recast Renewable Energy Directive (RED II) into Irish law. These regulations provide the legal basis for the introduction of the

Clean Export Guarantee (CEG) tariff to both new and existing micro and small-scale generators. The CEG tariff represents the first phase of a comprehensive enabling framework for micro-and small-scale generators in Ireland, allowing them to receive payment from their electricity supplier for all excess renewable electricity they export to the grid, reflective of the market value of the electricity.

The <u>Micro-generation Support Scheme (MSS)</u> provides supports for new domestic and non-domestic micro-generators up to 50kW capacity. The MSS solar PV grant scheme commenced on 16th February 2022 for domestic customers and was extended to non-domestic applicants for systems up to 6kW in September 2022.

3.2 EU policy context

EU Clean Energy Package

The EU Clean Energy Package is part of a packe of initiatives entitled "Clean Energy for all Europeans". It consists of a range of legislative actions and proposals as follows:

- Internal Market for Electricity Regulation (Recast)
- > ACER Regulation (Recast)
- Regulation on Risk-Preparedness in the Electricity Sector and Repealing the Security of Supply Directive
- Renewable Energy Directive (Recast)
- Revised Energy Efficiency Directive
- Revised Energy Performance of Buildings Directive
- Regulation on the Governance of the Energy Union

There are provisions pertinent to micro-generation/self-generation, specifically the provisions relating to Active Customers & Citizen Energy Communities, contained in the Internal Market for Electricity Directive (IMED).

The provisions of the recast Renewable Energy Directive (RED II), particularly in relation to Renewables self-consumers and Renewable Energy Communities are also directly relevant to this topic.

Furthermore, under Article 4 of the RED II, Member States "...may apply support schemes... for electricity from renewable sources" which "shall provide incentives for the integration of electricity from renewable sources in the electricity market"

Ireland transposed the relevant aspects of Article 4 of the RED II through Statutory Instrument No. 365 of 2020 which provides under Regulation 6 that:

- (1) Support provided under a support scheme referred to in Regulation 3(1) shall be granted following a process that is open, transparent, competitive, non-discriminatory and cost-effective.
- (2) Notwithstanding paragraph (1), a support scheme referred to in Regulation 3(1) may provide that small-scale installations or demonstration projects or both are exempt from a requirement to engage in a competitive tendering process under the relevant scheme where necessary to ensure the cost-effectiveness of, and to minimise the overall cost of support under, that scheme and in order to take into account the more limited capabilities of such installations or projects.

European Commission Guidelines on State aid for climate, environmental protection and energy (CEEAG)

As the SRESS will be available to non-domestic applicants, EU state aid rules will apply. The European Commission Guidelines on State aid for climate, environmental protection and energy (CEEAG), outline state aid rules for renewable energy projects.

The Commission adopted its updated CEEAG on 27 January 2022. These guidelines include provisions that remove the requirement to demonstrate that aid has been allocated through a competitive bidding process to all renewable electricity projects up to 1MW, and up to 6 MW solar PV for SMEs and Communities, or 18MW for wind energy projects. Thus, they allow for supports such as tariffs or grants to undertakings without a competitive bidding process.

Draft EU Electricity Market Design Regulation

These legislative proposals to reform the EU electricity market include draft proposed changes to the design of contracts for differences (CfDs).

The aim is to encourage Member States to implement two-way "CfDs" schemes, thus bringing price stability to consumers and supporting renewables and other low-carbon generators. The SRESS scheme is proposed to include a two-way Floating Feed in Premium (FiP), which would be in compliance with such regulations.

REPowerEU Action Programme

In response to the Russian invasion of Ukraine and resulting exacerbation of security of supply concerns, the European Commission has adopted an immediate joint European action programme, REPowerEU, to terminate the dependence on imported fossil fuels from Russia before 2030 while ensuring more affordable, secure, and clean energy for Europe.

This plan addresses the overriding need to make Europe independent from Russian gas, which has made the case for accelerating the delivery and connection of renewable energy projects greater or more urgent. The plan operationalises the principle of renewable energy as an overriding public interest, introduces the designation of 'go-to' areas and other ways to shorten and simplify the permitting process.

It also included an EU solar energy strategy, which outlines a range of measures to target 320GW installed solar PV capacity in the EU by 2025, and 600GW by 2030. These proposed measures include:

- an EU large-scale skills partnership for renewable energy. This partnership will address the skills gap in the EU and promote the development of a skilled workforce in the solar energy sector.
- ➤ a Solar PV Industry Alliance to diversify supply and scale up solar PV manufacturing in EU. This alliance was launched on 9 December 2022.
- a Solar Rooftops initiative to make the installation of rooftop solar energy compulsory for:
 - all new public and commercial buildings with useful floor area larger than 250 m 2 by 2026;
 - all existing public and commercial buildings with useful floor area larger than 250 m2 by 2027;
 - o all new residential buildings by 2029.

3.3 Independent Economic Analysis

In December 2021, the SEAI commissioned an economic and policy analysis report from Ricardo AEA, which provides an assessment of policy options for potential supports to incentivise the uptake of small-scale renewable electricity generation in Ireland. The report considers the existing and planned policies in Ireland and proposes policy options that can overcome barriers for small-scale renewable electricity generation for the range of 50kW to 6MW.

The timeframe for the economic analysis covers the period from the present up to 2030. Key to the assessment is the calculation of levelised cost of energy and the viability gaps of small-scale generation technologies in different sectors:

Levelised Cost of Electricity (LCOE)

Levelised Cost of Energy (LCOE) is typically used when comparing large-scale electricity generators. The LCOE can be interpreted as the relative cost effectiveness of the small-

scale generation archetypes, as it is expressed per unit of electricity generated. In other words, the LCOE, expressed in €/kWh, represents the average price of electricity that each type of RES-E generator would have to earn during its given lifetime in order to cover its capital and operating costs.

Viability Gap

The viability gap represents the difference between a RES-E generator's LCOE and its levelised market revenues.

In other words, it is the additional revenue that generators need to earn to cover their costs. For small-scale generation archetypes who are renewables self-consumers, the viability gap can be defined as:

- The difference between the levelized cost of electricity for an archetype, and;
- The value of self-consumption over the lifetime of the archetype, and;
 The value of revenues received for the exported electricity over the eligibility period.

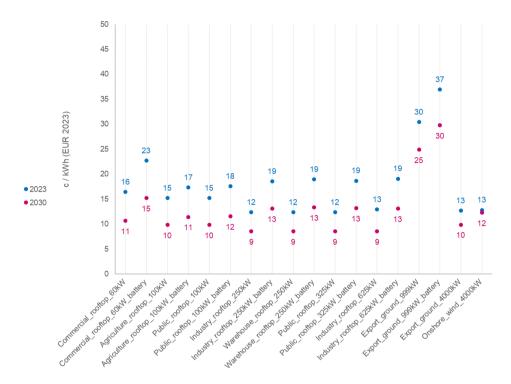
The economic analysis underpinning the report considered a range of small-scale generation archetypes that broadly reflect the scope of the proposed scheme, which is to support all applicants, including renewables self-consumers to install renewable electricity generation between 50kW-1MW, and Renewable Energy Communities/SMEs up to 6MW. These parameters reflect current EU state aid guidance as set out under the Guidelines on State aid for climate, environmental protection and energy 2022. This process included an assessment of the barriers applicable to deploying renewable energy projects above certain capacities.

The analysis employs the archetyping methodology developed during the National Heat Study. As with any archetyping process, the population is represented by a smaller dataset that aims to still retain the key characteristics of the entire population. However, this can lead to simplifications or the loss of variation outside of the archetypes selected.

A detailed financial model was developed to calculate the LCOE and viability gaps for each of the 10 archetypes selected, with and without storage technology. In this analysis, viability gaps are calculated in 2023 EUR/kWh terms for each year between 2023 and 2030, for all archetypes (i.e., the combinations of the technologies, storage options and sectors).

The main outputs of the model are set out below. More detail can be found in the report, which is available at <u>gov.ie - Consultation on a Small-Scale Generation Support Scheme</u> (SSG) in Ireland (www.gov.ie).

Base case LCOE per archetype in 2023 and 2030



The July 2022 Ricardo economic analysis is being further reviewed in 2023 by DECC and the SEAI. As part of this review it has been determined that in order for an appropriate tariff support price to be set, considerable weight should be given to the economics over the full lifetime of the renewable generator and not just the support period.

In other words, the SRESS design must take into account the fact that small-scale installations supported by the scheme will continue to operate and provide financial benefits to applicants beyond the support period of 15 years offered by the scheme.

To account for this, a methodology is being developed to factor the post-subsidy period value of the installation into the viability gap. This will allow for an appropriate support price to be set that is sufficient to cover the costs of small-scale renewables while ensuring value for money to electricity customers through the Public Service Obligation. These support levels for the Category 1 projects will be set out in the detailed Terms and Conditions of the scheme.

3.4 Learnings from the Renewable Electricity Support Scheme (RESS)

The RESS is an auction-based support scheme which invites grid-scale renewable electricity generation projects to compete to receive a guaranteed price for the electricity they generate. The RESS remains one of the major Government policies to help deliver on Ireland's ambitious climate and energy targets.

A cornerstone of the RESS is the provision of pathways for increased community ownership, participation in, and benefit from, renewable electricity projects. To facilitate delivery of this objective, a Preference Category for Community Projects in RESS auctions was developed specifically to allow communities and citizens to participate in and benefit from RESS. The maximum community category project size is 5MW.

There are sometimes competing objectives between the need to ensure adequate levels of competition in the auctions and the benefits that cooperation and shared resources can bring to Community Energy projects, which are often volunteer-led and lack the resources and expertise available to developer-led projects, notwithstanding the community enabling framework that has been established by DECC and operated by the SEAL. Common ownership and other linkages between Community projects can lead to more constrained volumes in the RESS auctions. Despite some success with community projects coming through the RESS auctions, it is therefore recognised that Community projects are not well suited to the competitive auction format.

A key objective of the SRESS is to provide a simpler route to market for Community projects than the competitive RESS auction process. Therefore, the preference category for community projects has not been included in the RESS 3 auction. Such community projects will instead be accommodated in the SRESS. It remains open to community projects to participate in onshore RESS auctions alongside developer projects if they have not applied for support under the SRESS.



3.5 SRESS Consultation Responses

A consultation on proposed high-level design features of the SRESS was held from August-October 2022. This consultation was informed by the Ricardo analysis outlined above and posed a range of questions on various aspects of the proposed scheme. The issues identified for consultation included:

- Eligible Technologies
- > Policy Lifetime
- Eligibility Criteria
- > SRESS Support Structure
- Community Aspects
- ➤ Barriers to Small-Scale Generation
- Appropriate Discount Rates
- Viability of Storage
- > Scheme Delivery, Implementation and Targets

An in-person stakeholder engagement event in support of the SRESS consultation was hosted by DECC on Thursday 15 September 2022 at Dublin Chamber of Commerce.

The event was attended by stakeholders from various interest groups and organisations. SEAI and ESB Networks provided presentations at the event.

21 submissions to the consultation were received from a variety of stakeholders, including Government Departments, suppliers, industry bodies, community groups, as well as individuals. The consultation document, economic report and some supporting documents are available at gov.ie - Consultation on a Small-Scale Generation Support Scheme (SSGS) in Ireland (www.gov.ie).

Consultation Outcome

Feedback to the SRESS consultation showed broad support for the proposed measures across the various stakeholder groups.

Some consistent themes emerging from the consultation include:

➤ Broad support for a technology neutral approach to the scheme and proposed list of eligible technologies, caveated that this should be kept under review to take account of emerging technologies which may become viable over the lifetime of the scheme.

- Widespread agreement with the proposed policy lifetime to 2030 and 15-year support lifetime, with a general preference that the scheme be run as a continuous scheme open for applications on an ongoing basis.
- Strong support for the proposed capacity ranges to be supported under the scheme, i.e., all projects up to 1MW, including renewables self-consumers, with SMEs and RECs supported up to 6MW, in line with state aid guidelines.
- There was general agreement that a floating FiP policy is the most appropriate support mechanism for small-scale generators. However, concerns were raised as to how this would work in the case of renewable self-consumers in receipt of the Clean Export Guarantee from their electricity supplier. There were also suggestions that renewables self-consumers should benefit from additional market revenues above the FiP price. These issues raised are no longer relevant given the proposal to provide grants to this category as set out above.
- In terms of specific supports for RECs under the SRESS, there was general support for the proposals that similar supports as are currently offered under the SEAI RESS Communities Enabling Framework should be available under the SRESS. These include information toolkits, feasibility study support, expert Trusted Advisors etc.
- The consultation sought evidence from respondents regarding the specific barriers to small-scale generation in Ireland, as well as those specifically impacting Community projects, or projects in agricultural, rural, urban or island settings. There was broad consensus regarding the issues identified, which included:
 - o cost and availability of access to the electricity grid
 - the lack of a dedicated connection policy for installations in the 200-500kW range
 - o access to financing for small-scale projects (and particularly REC projects)
 - The administrative burden of developing projects and a lack of access to technical expertise were identified as particular difficulties for RECs
- There were several suggestions from respondents as to how these barriers could be overcome. Many pointed to regulatory issues which are beyond the immediate scope of this scheme to address, such as the implementation of a regulatory framework to allow multiple legal entities behind a single metering point, private wires and direct lines, peer to peer trading etc. These matters are being addressed as part of the suite of actions set out under the Climate Action Plan to accelerate renewable electricity generation.
 - Regarding the first two points above, it should be noted that ESBN generator standard charges were benchmarked by an independent consultant and by

CRU s consultation in 2021 and found to be in line with other international Distribution System Operators. Regarding connection policy installations in the 200-500kW range, there is a dedicated connection policy in the 200-500kW range i.e. ECP2 Category B. This was under subscribed for the past three years which allowed additional community projects to be processed.

It was noted by several respondents that appropriate support levels which provide certainty to investors in small-scale renewable generation projects would be key.



3.6 Enabling measures

The Planning and Development Act 2000 (Exempted Development) (No. 3) Regulations 2022

In October 2022, the Minister for Housing, Local Government and Heritage signed into law revised planning exemptions for the installation of solar panels on the rooftops of houses and certain non-domestic buildings. The new exemptions mean that for the majority of buildings around the country, there will be no square-metre based limits on the size of solar installations that can be installed without the need for planning permission. However, within 43 designated Solar Safeguarding Zones, a rooftop limit of 300 square metres will apply to all building types other than houses.

These regulations will act as a significant enabler of the rollout of micro- and small-scale generation in Ireland by removing the administrative burden of submitting a planning

application for the majority of rooftop solar installations. As well as removing the square-metre based thresholds for the exemptions, the regulations also extend the exemptions to new building types for the first time, including apartments, educational buildings, hospitals recreational or sports facilities, places of worship, community facilities and certain public utility sites.

Spatial Planning for Onshore Renewable Wind and Solar. Given the urgent need to accelerate the energy transition and achieve a more resilient energy system, removing the barriers that exist in the permitting and consenting process whilst ensuring a more facilitative and supportive planning framework for renewable energy projects to essential to achieving this transition as swiftly as possible. A supportive policy framework for renewable electricity generation development at national, regional, and local level is critical to ensure delivery of the electricity targets under the Climate Action Plan.

With this mind, work commenced by DECC in 2022 on a **Renewable Electricity Spatial Policy Framework** (RESPF) to ensure a coherent spatial planning framework for the delivery of increased onshore renewable electricity generation so to enable the delivery of Ireland's national energy and climate objectives, as set out in the Climate Action 2023.

The RESPF, to be launched later in 2023, will establish a clear framework that will translate national energy policy objectives to the regional level in a consistent manner and will set out regional targets for onshore renewable electricity development to inform spatial plans. The RESPF applies to onshore wind and solar projects above 1 MW which will be the mainstay of the renewable generation capacities required to deliver on the first and second electricity carbon budgets and meet the 80% renewable electricity target by 2030.

Critical to the delivery of this spatial planning policy will be continued delivery of community benefits from renewable projects and a major upscaling of community renewable energy projects aligned with the just transition. The large-scale infrastructure associated with grid connected wind farms and solar farms must be accompanied by a renewed drive to increase the level of community renewable energy projects across the country. The SRESS is a significant further step in support for communities in this regard.

ESBN Connection Policy:

ESB Networks Small-Scale Generation Pilot

On 30th September 2022, ESB Networks launched a trial of a new, streamlined Small Scale Generation Connection Process to enable customers to safely and easily connect electricity generators up to 200kW to the electricity network.

Feedback and learnings from the trial will be used to inform the enduring process.

Small Scale Generation (esbnetworks.ie)

Non Export generation

Non-Exporting (MEC=0) Generators operate in parallel with the electricity distribution system. These generators cannot be used to export electricity onto the electricity network or to supply or sell electricity via the distribution network.

Customers applying to install non-exporting generation must complete an NC5 application form for commercial and technical assessment.

Non-Exporting Generators (esbnetworks.ie)

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

Enduring Connection Policy (ECP) (esbnetworks.ie)

Connection policy developments

CRU recently published a Decision Paper (CRU202326) on the Enduring Connection Policy - 2.4. Annex 1 to the Decision Paper also sets out the considerations for the next stages of connection policy, including the need to align with policy developments.

The regulatory framework for connection to and access to the electricity network for renewable community energy projects needs to be reviewed and in order to develop a strong pipeline of community energy projects that is consistent with the Climate Action Plan and that can be delivered through the SRESS. Government urges the CRU and ESB Networks to accelerate their efforts in this regard.

In that respect, CRU issued a Call for Evidence on new connection policy in May 2023.

As stated in the above annex, Action EL/23/6 of the Climate Action Plan 2023 sets out that the CRU, EirGrid and ESBN are to "Ensure electricity generation grid connection policies and regular rounds of connection offers which facilitate timely connecting of renewables, provides a locational signal and supports flexible technologies", with an associated Action EL/23/6/B for "connection policies to be reviewed and published" by Q4 2023. A CRU consultation on this is planned for Q3 with a decision planned for Q4

National Smart Metering Programme

Smart meters and smart infrastructure are essential to the delivery of the benefits of the energy transition, including for renewables self-consumers with installed small-scale generation. Smart meters can measure the profile of demand at the premises and thereby allow small-scale generators to maximise their self-consumption. Smart meters can also measure the export of small-scale generation installations to facilitate access to remuneration for residual electricity exported to the grid.

The Commission for Regulation of Utilities (CRU) is coordinating the National Smart Metering Programme and is working with ESB Networks (ESBN) in delivering the electricity meter rollout on a phased basis.

In the absence of the rollout of the NSMP to small-scale generation customers, it is expected that for the majority of such customers, their meter will be suitable to measure export and as such it will be configured to enable accurate readings to be taken by ESBN as part of the connection process and free of charge. For customers who have an installation which requires an alternative meter in order to measure export a quote will issue in advance for the work involved as this will be chargeable to the customer under the terms of the current regulated connection policy.

4 Proposed characteristics of the new SRESS

Phase one: Renewable Self-Consumers above 50kW and up to 1MW from 2023

For this cohort, capital grants are proposed for solar installations for an interim period up to the end of 2025. The appropriate form of support for post 2025 will be determined in 2024.

Grants are proposed for this category, given the requirement to rapidly accelerate the rollout of renewables to meet much increased CAP 23 and solar PV targets.

Phase Two: Community/Local/SME projects between 1MW-6MW and export only projects below 1 MW from 2024

This cohort is proposed to be supported via a floating Feed-in Premium tariff for the entire duration of the scheme. This tariff, will be characterised by a Feed-in Premium (FiP) tariff without an auction, i.e., the support rate will be provided for the support lifetime, with successful applicants receiving a premium on the market revenues they receive for their renewable electricity. In addition, export only projects (i.e. those renewable electricity generation projects which are not renewable self- consumers) below 1 MW would also be supported under this category.

As a general rule, it is intended to provide compensation for curtailment for projects under the floating Feed-in Premium tariff aligned with the provisions of the RESS 3 auction.

Phase three: All Categories Tariff Support from 2025

It is intended that all categories of applicant, including Renewable Self-Consumers from 50kW to 1MW, will be supported via a Feed in Tariff post-2025, when tariff supports are expected to represent better value for money than capital grants, as electricity retail prices are expected to have returned to nearer to their historical lower norms.

It is proposed that the final decision on this will be taken after up-to-date analysis in 2024.

4.1 Technology Neutral

The second and third phases of the SRESS will adopt a technology neutral approach to supporting zero carbon renewable electricity generation technologies. This approach is consistent with the approach taken for the Renewable Electricity Support Scheme (RESS) and will support an increased mix of renewable technologies to complement Ireland's deployed onshore wind generation capacity, offshore wind capacity and reduce Ireland's reliance on imported fossil fuels.

Due to the capacity range supported under the SRESS, it is expected that the majority of applications will be for solar PV installations, particularly in the case of Renewables Self-Consumers.

While it is not proposed that the scheme will offer targeted supports for electricity storage technologies, it is proposed that hybrid projects incorporating battery storage will be eligible for support on the same terms as other applicants on a similar basis to the rules set out in the onshore RESS auctions.

The terms and conditions will include a list of eligible technologies for the scheme, and this will be reviewed periodically to take account of new technologies which may become viable over the lifetime of the scheme.

4.2 Policy lifetime and scheme review

The SRESS will be operated on the basis of a policy lifetime out to 2030 and a 15-year support lifetime for successful applicants. The scheme will be open for applications on a continuous basis up to a defined closing date to be determined under the terms and conditions of the scheme.

The terms and conditions of the scheme may be amended from time to time based on regular reviews of scheme uptake, relevant supply chain inflation, technology costs and other market factors. This may include amending the policy and support lifetimes for new applicants as appropriate. Any such changes will be communicated well in advance of their taking effect and will align with Article 6 of the Renewable Energy Directive.

4.3 Eligibility criteria

The first phase of the SRESS will support solar PVI renewable electricity generation installations, including for renewables self-consumers, up to 1MW by means of a grant.

For applicants who can demonstrate 100% REC or SME status, installations up to 6MW will be eligible. In addition, export only projects (i.e. those renewable electricity generation projects which are not renewable self - consumers) below 1 MW would also be supported under this category.

In order to be eligible for SRESS support, applicants must be able to demonstrate a full grid connection offer and, where planning exemptions do not apply, full planning permission.

It is not proposed that SRESS applicants will be required to submit performance securities . Specific delivery milestones will be considered as part of the Terms and Conditions of the scheme.

4.4 Feed-in Premium (FIP)

SRESS support for the above 1MW cohorts will be structured as a two way Floating Feed in Premium (FiP). A tariff will also be available to sub 1MW electricity exporters that are not renewable self consumers, and therefore do not qualify for grant support.

Under a Floating FiP scheme, support payments made to generators are expected to be a function of

- (i) generation output,
- (ii) an SRESS support price, and
- (iii) a reference market price.

It is proposed that the reference price used to settle the FIP in the case of these export-led projects will be the hourly Day Ahead Market (DAM) price, as is currently the case for generators under the RESS.

4.5 State Aid Requirements

The SRESS scheme has been designed to align with the requirements set out in the Guidelines on State aid for climate, environmental protection and energy (CEEAG)¹, adopted by the European Commission on 27th January 2022.

These guidelines include provisions that remove the requirement to demonstrate that aid has been allocated through a competitive bidding process to renewable electricity projects up to 1MW, or 6 MW for projects 100% owned by SMEs and Renewable Energy Communities.

The CEEAG provides guidance on how the European Commission will assess the compatibility of environmental protection, including energy aid, measures which are subject to the notification requirement. In addition, the State aid General Block Exemption
Regulation ("GBER") declares specific categories of State aid compatible with Article 107 and 108 of the Treaty on the Functioning of the EU (TFEU), if they fulfil certain conditions. Aid fulfilling these conditions is exempted from the requirement of prior notification and Commission approval.

The European Commission endorsed the text of a <u>revision to the GBER</u> to further facilitate and speed up the green and digital transition on 09 March 2023. Under the revised regulations, operating aid to small-scale renewable electricity installations is exempted from the requirement of prior notification and state aid approval. Therefore, formal notification of SRESS plans for Commission approval is not anticipated. Instead, the SRESS is anticipated to be designed within the parameters of the GBER and in line with relevant requirements to inform the European Commission.

4.6 Community aspects of the SRESS

A reinvigorated support for Communities is one of the major pillars of the SRESS. A key design principle from the outset of the development of the SRESS has been to provide increased certainty in terms of a route to market for Community projects, who may struggle with the competitive nature of the RESS auction process. It is also important to ensure the new scheme benefits communities and consumers around the country, including those who are financially vulnerable or at risk of energy poverty.

¹ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022XC0218(03)&from=EN

- ➤ In line with state aid guidelines, projects which are 100% owned by a REC will be eligible for supports for installations up to 6MW capacity.
- ➤ In addition to FiP support, it is proposed that export-led Community projects will be eligible for further enabling supports. These will be similar to those developed under the SEAI's RESS Community Enabling Framework. This is a package of enabling supports including technical and financial services which it is proposed will be available to Community projects under the SRESS.



5 SRESS support design

5.1 Renewables Self-Consumers

Renewables self-consumers are eligible to receive a Clean Export Guarantee (CEG) tariff from their electricity supplier for the renewable electricity they export. The CEG is an obligation on suppliers to pay customers for exported surplus electricity to the grid. It is not a state payment.

The CRU has determined that the CEG will be set on a competitive market basis to encourage competition, and current CEG offerings range from €0.135 - €0.24/kWh. These current market based CEG offerings are in most cases in excess of the LCOE and viability gap figures of small-scale generation archetypes identified in the Ricardo analysis.

Renewables self-consumers will also be eligible to receive SRESS support for new installations. It is proposed that this support will be in the form of grants.

5.2 Export-led projects

SRESS support for export-led projects will be in the form of a two-way floating FIP on top of market revenues. It is proposed that such applicants to the scheme will receive a letter of offer entitling the supplier who enters into a Power Purchase Agreement (PPA) with the

successful applicant to receive SRESS support through the Public Service Obligation. This is a similar mechanism as exists currently under the RESS.

The FIP is described as being two-way because when the support price exceeds market revenues, generators will receive the support price from the relevant supplier, who will in turn be due SRESS support for the value of the difference between the market value of the electricity and the support price.

Alternatively, when market revenues exceed the support price, applicants will continue to receive the support price, and a difference payment will flow from the relevant supplier to the Public Service Obligation (PSO) fund. This will help to protect electricity customers from high electricity prices by ensuring that projects are not over-compensated and contribute monies back to the PSO at times of high-electricity prices.

As stated above, as a general rule, it is intended to provide compensation for curtailment aligned with the provisions of the RESS 3 auction.

For illustrative purposes only, below is a representation of the proposed SRESS support mechanism as it will operate in the case of export-led projects. These examples are based on the 4,000kW export ground-mounted solar PV archetype from the Ricardo report but apply notional wholesale and FIP prices for ease of interpretation.

Scenario 1: Market Prices > FIP price

Archetype	Export %	Annual Export kWh	Market Reference Price in EURc/kWh	FIP level in EURc/kWh	1 st year revenue in EUR
Export ground 4,000kW	100%	5,203,440	15	10	520,344*

^{*5,203,440}kWh x €0.10 = €520, 344

In this scenario, market prices exceed the FIP price. The SRESS project will receive the FIP price from the supplier with whom they have entered into a PPA. A difference payment will then be due form the supplier to the PSO for the difference between the market price and the FIP price. In this scenario, the project receives revenues of €520,344 and there is also a net flow from the supplier back to the PSO of €260,172. This means that electricity customers benefit from high electricity prices.

Scenario 2: Market Prices < FIP price

Archetype	Export %	Annual Export kWh	Market Reference Price in EURc/kWh	FIP level in EURc/kWh	1 st year revenue in EUR
Export ground 4,000kW	100%	5,203,440	5	10	520,344*

^{*5,203,440}kWh x €0.10 = €520, 344

In this scenario, market prices are lower than the FIP price. Therefore, the SRESS project will receive the FIP price from their supplier, who is then entitled to receive the difference between the market price and the FIP price from the PSO. In this scenario, the SRESS project receives revenues of €520,344, while the cost to the PSO is limited to €260,172.

As can be seen from above two illustrative examples, the applicant has certainty, in that they receive the same amount, regardless of the market reference price. his provides certainty to projects entering the SRESS, as they will be insulated from fluctuating market prices, while ensuring the cost of the scheme is kept to a minimum.

6 Next steps

6.1 Phase 1: Grants supports to SRESS Category 1 Projects: Renewable Energy Self Consumers [TBC]

6.2 Phase 2: SRESS Terms and Conditions

Action EL/23/13/B of the Climate Action Plan 2023 sets a target of launching the SRESS in Q4 2023. In order to achieve this, detailed Terms and Conditions will be developed for the scheme, based on the principles outlined in this High-Level Design. These Terms and Conditions will set out the specific entitlements and obligations of all parties to the scheme and including tariff levels for the relevant categories eligible for support.

6.2.1 Community specific supports

The maximum support available at present under the RESS Community Enabling Framework is currently €180,000 per undertaking.

In addition to FiP support, it is proposed that export-led Community projects will be eligible for further enabling supports. These will be similar to those developed under the SEAI's RESS Community Enabling Framework.

Regarding State Aid compliance, these supports can be provided either via the Guidelines on State aid for climate, environmental protection and energy 2022 (CEEAG) and associated General Block Exemption Regulation (GBER) or else by availing of the De Minimis Aid Regulations. These De Minimis regulations exempt small amounts of aid from the notification process, as they are deemed to have no impact on competition and trade in the single market.2

The SRESS Community Enabling Framework is therefore not required to be notified to the Commission under the State Aid rules.

6.3 Phase 3: Review of the Scheme and Tariffs for all Categories from 2025

It is intended that all categories of applicant, including Renewable Self-Consumers from 50kW to 1MW, will be supported via a Feed in Tariff post-2025, when tariff supports are expected to represent better value for money than capital grants, as electricity retail prices are expected to have returned to nearer to their historical lower norms.

It is proposed that the final decision on this will be taken after up-to-date analysis in 2024.

² Commission Regulation (EU) No 1407/2013 of 18 December 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid