SUSTAINABLE ENERGY AUTHORITY OF IRELAND

Rialtas na hÉireann
Government of Ireland

Solar PV

Manual of Consenting Procedures

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11 January 2024

Report prepared for SEAI by:
RPS Group
IE000527 11 January 2024

Disclaimer

Sustainable Energy Authority of Ireland

SEAI is Ireland's national energy authority investing in, and delivering, appropriate, effective and sustainable solutions to help Ireland's transition to a clean energy future. We work with the public, businesses, communities and the Government to achieve this, through expertise, funding, educational programmes, policy advice, research and the development of new technologies.

SEAI is funded by the Government of Ireland through the Department of the Environment, Climate and Communications.

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1 Introduction

1.1 Purpose of Manual

This manual has been produced to accompany the *SEAI Single Point of Contact Renewable Energy* online tool. It provides a more detailed overview of specific technological, legislative, and regulatory information in relation to Solar photovoltaic (PV). This manual provides guidance and assists users in navigating which consents and licenses are required for the installation, operation & maintenance, and project end-of-life procedures for Solar PV.

Solar PV projects can vary in scale and output, and so there are many different scales of regulation relevant to a specific project. Larger commercial ventures will require more consents and licenses than a domestic solar PV array installation, however, it is important to ensure that any project regardless of scale is compliant with relevant legislation and regulations.

1.2 An Introduction to Solar PV

In an era marked by growing environmental concerns and an urgent need to transition toward sustainable energy sources, solar PV technology has emerged as a transformative solution. Solar PV, often simply referred to as solar power, harnesses the abundant energy emitted by the sun and converts it into electricity. This renewable energy technology has gained immense popularity globally, due to its ability to provide clean, reliable, and cost-effective power generation while minimizing the carbon footprint. In Ireland, uptake in solar PV has increased significantly, especially as a domestic micro-generation solution, reducing home energy bills and off-setting carbon emissions.

The core principle of solar PV lies in the photovoltaic effect. When certain materials are exposed to sunlight, they release electrons, creating an electric current. This fundamental concept has been refined over many years, leading to the development of highly efficient solar PV cells that are widely used in residential, commercial, and industrial applications.

Solar PV systems consist of multiple components working in harmony to capture, convert, and distribute solar energy. Solar panels, also known as solar modules, are comprised of interconnected solar cells that absorb sunlight and initiate the photovoltaic process. These panels are typically installed on rooftops, open fields, or even integrated into building facades, maximizing exposure to sunlight. The captured sunlight is then converted into direct current (DC) electricity through the photovoltaic effect.

To make this DC electricity usable for homes and businesses, inverters are used to convert it into alternating current (AC) electricity—a form compatible with the electrical grid. Depending on the system's scale and purpose, excess electricity generated during sunny periods can be stored in batteries for later use or fed back into the grid through a smart meter if you have one installed, allowing owners to receive credit for the surplus energy they contribute back to the national grid.

The adoption of solar PV technology offers numerous advantages. Foremost among them is its remarkable environmental friendliness. Solar power generation produces no greenhouse gas emissions or air pollutants, making it a crucial player in combating climate change and reducing dependence on fossil fuels. Additionally, solar PV helps to reduce energy bills by offsetting consumption of electricity from the grid, or by selling excess electricity back to the grid. Domestic solar PV installations on average cover the costs of installation through savings generated just 7 years after installation. A more specific estimate for your specific array can be calculated using the SEAI Solar Electricity Calculator.

As technological advances and economies of scale come into play, the cost of solar PV systems has steadily declined, making it a viable and attractive option for a diverse range of consumers. Governments and businesses globally have increasingly recognised the potential of solar PV in achieving energy sustainability and security, leading to significant investments in research, development, and implementation. In Ireland, solar PV has an important role in working toward achieving our climate action commitments. There are a wide range of applications for this technology, which are discussed in more detail throughout this manual.

2 Design and Construction Stage

2.1 Feasibility and Design Phase

The first phase of a small-scale solar PV project is design. Much of these considerations can be assisted by your contractor, however, before a contractor is selected, it is best to have an idea of what size solar PV installation you require, depending on your electricity consumption and the proposed position of the array. You may also wish to consider the pattern of your electricity usage as other accompanying systems such as small battery storage may be a cost-effective solution for you. Excess electricity generated from a solar PV system can be fed back to the grid if you have a smart electricity meter installed. More information about feeding electricity back to the grid can be found in resources provided by your electricity provider.

It is also a good idea to consider financing pathways and potential long-term savings that can be achieved by such a project. The SEAI provides a very useful SEAI Solar Electricity Calculator, which can help to better estimate the time period that your project will take to break-even on investment through savings made – an average household installation's investment costs are covered (on average) after only 7 years. The SEAI also provide grants for the installation of solar PV. More information can be found here.

For your convenience the SEAI also facilitates One Stop Shops for solar PV installation, which will cover required assessments for grants, grant applications and contractor works. More information about One Stop Shops can be found here.

Information related to larger commercial solar PV projects is detailed below. If you are only considering a small scale, self-consumption project, please continue to **Section 2.2.1.**

2.1.1 Commercial Feasibility

The feasibility of a solar PV project is vital, as this will determine if the project should be pursued or not, regardless of whether it is a commercial or community-based endeavour. A potential site should be identified, considering matters such as land ownership and local planning restrictions, details of which can be found in the relevant local Development Plan. Other high-level considerations such as the proximity to appropriate grid infrastructure and site access can help to inform site location considerations.

Once a potentially suitable site has been identified, appropriate feasibility studies should be undertaken. You will need to identify the relevant professional advisory team to support you in conducting feasibility studies.

The following items should be considered when examining the feasibility of an identified site:

- Site area;
- Average sun/daylight exposure;
- Site aspect;
- Available land and land ownership status;
- Ground conditions;
- Existing and future grid infrastructure;
- Community acceptance and buy-in;
- Public Road Access;
- Existing and planned solar PV projects in the area; and
- Proximity to sites sensitive to glint and glare (residential areas, airports, helipads, etc.).

Local Authorities may also have published information on the construction of solar PV developments in the area, which may impact planning decisions or serve as helpful guidance. Generally, a multi-disciplined team will be best placed to guide feasibility studies, across fields such as planning, engineering, financial consultants, developers, etc.

It is then important to develop a project plan that maps out all the stages needed to realise your project moving toward design.

2.1.2 Enabling Tasks

After a potential project and site passes feasibility screening, enabling tasks must be undertaken to transition toward the planning and pre-construction phases. These tasks include:

- Land lease options / Purchasing;
- Options to access the site;
- Community engagement; and
- On-site sunlight monitoring

Some of these may take place in conjunction with the planning phase also. It is important to consider the need to community engagement early in the process. New renewable energy developments, especially in proximity to residential dwellings, frequently encounter concerns from residents for a number of reasons, including concerns about impact on visual amenity, conservation, glint, and glare, etc. There may be valid concerns from residents that can then be addressed early in the process, which can help to avoid negative community interaction later in the process, as well as fostering community buy-in, including the community in the process before any statutory requirements. This early engagement has been shown to improve the acceptance of renewable energy developments in the surrounding area. Identifying key public stakeholders and community leaders is an important task to undertake as early as practicable.

2.1.3 Community Solar PV Projects

Community groups can come together to enter the Solar PV energy market, alongside commercial entities. The process for getting a project constructed is similar to a commercial venture, in terms of ensuring an appropriate site is selected, and moving forward to navigate the planning system, however there are some additional points to note about community Solar PV energy projects.

Governance of a community wind energy project has a defined structure, that will assist in ensuring a successful delivery of the project, and securing available government supports. Please consult resources published by the SEAI in relation to community wind energy projects, such as the *Community Energy Resource Toolkit: Solar PV*, which is available here. The toolkit provides helpful advice in navigating the process as a community group. A key difference to note between community projects versus commercial ventures relates to an upper limit for capacity placed on community led projects of 5 Mega Watts (hereafter, MW), with regard to participating in the Renewable Energy Support Scheme (RESS) (Please see **Section 2.4.1** for more detailed information about the RESS)

2.1.4 Design

For larger scale projects, following the feasibility stage, you may look toward the design of the project. Depending on the scale you may need to undertake an Environmental Impact Assessment which involves conducting a range of environmental studies in order to inform the design of the project in line with relevant environmental regulations. Prior to undertaking these studies, you may need to apply for certain licences and permits based on the specifics of your chosen site and the project you are proposing, such as environmental derogation licences, ecological consents, archaeological excavation licences if near a national monument or detection device consents. The project is then designed by your technical team, following relevant planning regulations, and other environmental regulations, and you can then review the financial viability of the project based on that design, which will be more accurate than previous estimates.

2.2 Planning Phase

2.2.1 Households and Self-Consumption Projects

Generally, planning permission is not required for the installation of solar PV in many cases, as these development works are classed as 'exempted development'. Only houses and projects in which the primary use of the installation is for the provision of electricity within the curtilage of the subject site. If the project is primarily for selling to the grid or another use other than self-consumption, planning permission is required. There are specific regulations and design regulations that govern exempted development solar projects.

Using the *SEAI Single Point of Contact Renewable Energy* online tool can help to inform you as to whether planning permission will be required based on some information about your proposed project. Projects that can be classed as exempted development must be compliant with the design regulations as set out in the following tables. Your contractor will generally be aware of these design requirements, however, ultimately the responsibility for compliance with planning legislation remains with the applicant, as the applicant is liable for planning violations. Please note that for planning purposes, when considering area restrictions ("shall not exceed 25 square metres" for example), you must include any existing solar thermal collection installations on the site, as they are classed as the same technology.

The design regulations outlined below are derived from *Planning and Development Act 2000 (Exempted Development) (No. 3) Regulations 2022*. The text included in the table is not the precise wording as set out by law but has instead been edited for easier reading. The legal text as written may be viewed here.

Solar PV Exempted Development Regulations:

- Table 1: Houses
- Table 2: Industrial Buildings
- Table 3: Businesses / Light Industrial Buildings
- Table 4: Apartment Buildings
- Table 5: Service Buildings
- Table 6: Agricultural Buildings / Holdings

Table 1: Housing Solar PV Exempted Development Regulations

Houses	
Description of Development	**Design Regulations**
Placing or erection of a solar PV installation on a roof of a house, or on a roof of any ancillary buildings within the curtilage of a house (not including apartments)	The distance between the plane of the roof and the solar photo-voltaic shall not exceed 50cm in the case of a flat roof or 15cm in any other case.
	The solar photo-voltaic panels shall be a minimum of 50cm from the edge of a roof on which it is mounted.
Placing or erection of a solar PV installation within the curtilage of a house	Any free-standing solar photo-voltaic installation shall not be placed or erected forward of the front wall of the house.
	The total aperture area of any free-standing solar photo-voltaic panels taken together with any other such existing free-standing panels shall not exceed 25 square metres.
	The placing or erection of any free-standing solar photo-voltaic installation shall not reduce the remaining area of private open space, reserved exclusively for the use of the occupants of the house, to the rear or to the side of the house to less than 25 square metres.
	The height of any free-standing solar photo-voltaic installation shall not exceed 2.5 metres at its highest point above ground level.
	The placing or erection of any free-standing solar photo-voltaic installation within an Architectural Conservation Area shall only be exempted development if those works would not materially affect the character of the area.
	Development under this Class which causes hazardous glint and/or glare shall not be exempted development and any solar photo-voltaic panels which are causing hazardous glint and/or glare shall either be removed or be covered until such time as a mitigation plan to address the hazardous glint and/or glare is agreed and implemented to the satisfaction of the Planning Authority.

Table 2: Industrial Buildings Solar PV Exempted Development Regulations

Industrial Buildings	
Description of Development	**Design Regulations**
The placing or erection on a roof of an industrial building, or on a roof of any ancillary buildings within the curtilage of an industrial building of a solar photo-voltaic installation.	Where such development is located within a solar safeguarding zone, the Planning Authority for the area shall be notified in writing no later than 4 weeks after the commencement of such development and such notification shall include details regarding the location and scale of the development.
	The distance between the plane of the roof and the solar photo-voltaic panels shall not exceed 2 metres in the case of a flat roof or 1.2 metres in any other case.
	The solar photo-voltaic panels shall be a minimum of 2 metres in the case of a flat roof or 50cm in any other case from the edge of the roof on which it is mounted.
	Development shall not be exempted development where the highest part of the solar photo-voltaic installation exceeds the highest part of any roof that is not a flat roof (excluding any chimney).
	Any ancillary equipment associated with solar photo-voltaic panels shall not be placed or erected on a wall or any roof that is not a flat roof.
	The height of any ancillary equipment associated with solar photo-voltaic panels on a flat roof shall not exceed 1.6 metres above roof level.
	Any ancillary equipment associated with solar photo-voltaic panels on a flat roof shall be a minimum of 2 metres from the edge of the roof on which it is mounted.
	No sign, advertisement or object not required for the functioning or safety of the solar photo-voltaic installation shall be attached to or exhibited on such installation.
	Development under this Class which causes hazardous glint and/or glare shall not be exempted development and any solar photo-voltaic panels which are causing hazardous glint and/or glare shall either be removed or be covered until such time as a mitigation plan to address the hazardous glint and/or glare is agreed and implemented to the satisfaction of the Planning Authority.
The placing or erection on a wall of an industrial building, or on a wall of any ancillary buildings within the curtilage of an industrial building of a solar photo-voltaic installation.	Where such development is located within a solar safeguarding zone, the Planning Authority for the area shall be notified in writing no later than 4 weeks after the commencement of such development and such notification shall include details regarding the location and scale of the development.
	The total aperture area of any wall mounted solar photo-voltaic panels taken together with any other such existing wall mounted panels shall not exceed 75 square metres.
	The distance between the plane of the wall and the solar photo-voltaic panels shall not exceed 15cm.
	The solar photo-voltaic panels shall be a minimum of 50cm from the edge of the wall on which it is mounted.
	No sign, advertisement or object not required for the functioning or safety of the solar photo-voltaic installation shall be attached to or exhibited on such installation.
	Development under this Class which causes hazardous glint and/or glare shall not be exempted development and any solar photo-voltaic panels which are causing hazardous glint and/or glare shall either be removed or be covered until such time as a mitigation plan to address the hazardous glint and/or glare is agreed and implemented to the satisfaction of the Planning Authority.
The placing or erection within the curtilage of an industrial building, of a solar photo-voltaic installation.	Where such development is located within a solar safeguarding zone, the Planning Authority for the area shall be notified in writing no later than 4 weeks after the commencement of such development and such notification shall include details regarding the location and scale of the development.

Industrial Buildings	
	Any free-standing solar photo-voltaic installation shall not be placed or erected forward of the front wall of the industrial building.
	The total aperture area of any free-standing solar photo-voltaic panels taken together with any other such existing free-standing panels shall not exceed 75 square metres.
	The height of any free-standing solar photo-voltaic installation shall not exceed 2.5 metres at its highest point above ground level.
	The placing or erection of any free-standing solar photo-voltaic installation within an Architectural Conservation Area shall only be exempted development if those works would not materially affect the character of the area.
	No sign, advertisement or object not required for the functioning or safety of the solar photo-voltaic installation shall be attached to or exhibited on such installation.
	Development under this Class which causes hazardous glint and/or glare shall not be exempted development and any solar photo-voltaic panels which are causing hazardous glint and/or glare shall either be removed or be covered until such time as a mitigation plan to address the hazardous glint and/or glare is agreed and implemented to the satisfaction of the Planning Authority.

Table 3: Business Premises / Light Industrial Buildings Solar PV Exempted Development Regulations

Business Premises / Light Industrial Buildings	
Description of Development	**Design Regulations**
The placing or erection on a roof of a business premises or light industrial building, or on a roof of any ancillary buildings within the curtilage of a business premises or light industrial building of a solar photo-voltaic installation.	Where such development is located within a solar safeguarding zone, the Planning Authority for the area shall be notified in writing no later than 4 weeks after the commencement of such development and such notification shall include details regarding the location and scale of the development.
	The distance between the plane of the roof and the solar photo-voltaic panels shall not exceed: a. For a business premises, 1.2 metres in the case of a flat roof or 15cm in any other case. b. For a light industrial building, 2 metres in the case of a flat roof or 50cm in any other case.
	The solar photo-voltaic panels shall be a minimum of 2 metres in the case of a flat roof or 50cm in any other case from the edge of the roof on which it is mounted.
	Development shall not be exempted development where the highest part of the solar photo-voltaic installation exceeds the highest part of any roof that is not a flat roof (excluding any chimney).
	Any ancillary equipment associated with solar photo-voltaic panels shall not be placed or erected on a wall or any roof that is not a flat roof.
	The height of any ancillary equipment associated with solar photo-voltaic panels on a flat roof shall not exceed 1.6 metres above roof level.
	Any ancillary equipment associated with solar photo-voltaic on a flat roof shall be a minimum of 2 metres from the edge of the roof on which it is mounted.
	No sign, advertisement or object not required for the functioning or safety of the solar photo-voltaic installation shall be attached to or exhibited on such installation.

Business Premises / Light Industrial Buildings	
	Development under this Class which causes hazardous glint and/or glare shall not be exempted development and any solar photo-voltaic panels which are causing hazardous glint and/or glare shall either be removed or be covered until such time as a mitigation plan to address the hazardous glint and/or glare is agreed and implemented to the satisfaction of the Planning Authority.
The placing or erection within the curtilage of a business premises or light industrial building of a solar photo-voltaic installation.	Where such development is located within a solar safeguarding zone, the Planning Authority for the area shall be notified in writing no later than 4 weeks after the commencement of such development and such notification shall include details regarding the location and scale of the development.
	Any free-standing solar photo-voltaic installation shall not be placed or erected forward of the front wall of the business premises or light industrial building.
	The total aperture area of any free-standing solar photo-voltaic panels taken together with any other such existing free-standing panels shall not exceed 75 square metres.
	The height of any free-standing solar photo-voltaic installation shall not exceed 2.5 metres at its highest point above ground level.
	The placing or erection of any free-standing solar photo-voltaic installation within an Architectural Conservation Area shall only be exempted development if those works would not materially affect the character of the area.
	No sign, advertisement or object not required for the functioning or safety of the solar photo-voltaic installation shall be attached to or exhibited on such installation.
	Development under this Class which causes hazardous glint and/or glare shall not be exempted development and any solar photo-voltaic panels which are causing hazardous glint and/or glare shall either be removed or be covered until such time as a mitigation plan to address the hazardous glint and/or glare is agreed and implemented to the satisfaction of the Planning Authority.

Table 4: Apartment Buildings Solar PV Exempted Development Regulations

Apartment Buildings	
Description of Development	**Design Regulations**
The placing or erection on a roof of a building comprising apartments, or on a roof of any ancillary buildings within the curtilage of a building comprising apartments of a solar photo-voltaic installation.	Where such development is located within a solar safeguarding zone, the Planning Authority for the area shall be notified in writing no later than 4 weeks after the commencement of such development and such notification shall include details regarding the location and scale of the development.
	The distance between the plane of the roof and the solar photo-voltaic panels shall not exceed 1.2 metres in the case of a flat roof or 15cm in any other case.
	The solar photo-voltaic panels shall be a minimum of 2 metres in the case of a flat roof or 50cm in any other case from the edge of the roof on which it is mounted.
	Any ancillary equipment associated with solar photo-voltaic panels shall not be placed or erected on a wall or any roof that is not a flat roof.
	The height of any ancillary equipment associated with solar photo-voltaic panels on a flat roof shall not exceed 1.6 metres above roof level.
	Any ancillary equipment associated with solar photo-voltaic panels on a flat roof shall be a minimum of 2 metres from the edge of the roof on which it is mounted.
	No sign, advertisement or object not required for the functioning or safety of the solar photo-voltaic installation shall be attached to or exhibited on such installation.

Apartment Buildings	
	Development under this Class which causes hazardous glint and/or glare shall not be exempted development and any solar photo-voltaic panels which are causing hazardous glint and/or glare shall either be removed or be covered until such time as a mitigation plan to address the hazardous glint and/or glare is agreed and implemented to the satisfaction of the Planning Authority.

Table 5: Services Buildings Solar PV Exempted Development Regulations

Service Buildings	
Description of Development	**Design Regulations**
The placing or erection on a roof of a services building, or on a roof of any ancillary buildings within the curtilage of a services building, of a solar photo-voltaic installation.	Where such development is located within a solar safeguarding zone, the Planning Authority for the area shall be notified in writing no later than 4 weeks after the commencement of such development and such notification shall include details regarding the location and scale of the development.
	The distance between the plane of the roof and the solar photo-voltaic panels shall not exceed 1.2 metres in the case of a flat roof or 15cm in any other case.
	The solar photo-voltaic panels shall be a minimum of 2 metres in the case of a flat roof or 50cm in any other case from the edge of the roof on which it is mounted.
	Any ancillary equipment associated with solar photo-voltaic panels shall not be placed or erected on a wall or any roof that is not a flat roof.
	The height of any ancillary equipment associated with solar photo-voltaic panels on a flat roof shall not exceed 1.6 metres above roof level.
	Any ancillary equipment associated with solar photo-voltaic panels on a flat roof shall be a minimum of 2 metres from the edge of the roof on which it is mounted.
	No sign, advertisement or object not required for the functioning or safety of the solar photo-voltaic installation shall be attached to or exhibited on such installation.
	Development under this Class which causes hazardous glint and/or glare shall not be exempted development and any solar photo-voltaic panels which are causing hazardous glint and/or glare shall either be removed or be covered until such time as a mitigation plan to address the hazardous glint and/or glare is agreed and implemented to the satisfaction of the Planning Authority.
The placing or erection within the curtilage of a services building of a solar photo-voltaic installation.	Any free-standing solar photo-voltaic installation shall not be placed or erected forward of the front wall of the building or site.
	The total aperture area of any free-standing solar photo-voltaic panels taken together with any other such existing free-standing panels shall not exceed 75 square metres.
	The height of any free-standing solar photo-voltaic installation shall not exceed 2.5 metres at its highest point above ground level.
	The placing or erection of any free-standing solar photo-voltaic installation within an Architectural Conservation Area shall only be exempted development if those works would not materially affect the character of the area.
	No sign, advertisement or object not required for the functioning or safety of the solar photo-voltaic installation shall be attached to or exhibited on such installation.
	Development under this Class which causes hazardous glint and/or glare shall not be exempted development and any solar photo-voltaic panels which are causing hazardous glint and/or glare shall either be removed or be covered until such time as a mitigation plan to address the hazardous glint and/or glare is agreed and implemented to the satisfaction of the Planning Authority.

Table 6: Agricultural Building / Holding Solar PV Exempted Development Regulations

Agricultural Building / Holding	
Description of Development	**Design Regulations**
The placing or erection on a roof of an agricultural structure, or on a roof of any ancillary buildings within the curtilage of an agricultural holding of a solar photo-voltaic installation.	Where such development is located within a solar safeguarding zone, the Planning Authority for the area shall be notified in writing no later than 4 weeks after the commencement of such development and such notification shall include details regarding the location and scale of the development.
	The distance between the plane of the roof and the solar photo-voltaic panels shall not exceed 1.2 metres in the case of a flat roof or 15cm in any other case.
	The solar photo-voltaic panels shall be a minimum of 2 metres in the case of a flat roof or 50cm in any other case from the edge of the roof on which it is mounted.
	Development shall not be exempted development where the highest part of the solar photo-voltaic installation exceeds the highest part of any roof that is not a flat roof (excluding any chimney).
	Any ancillary equipment associated with solar photo-voltaic collector panels shall not be placed or erected on a wall or any roof that is not a flat roof
	The height of any ancillary equipment associated with solar photo-voltaic panels on a flat roof shall not exceed 1.6 metres above roof level.
	Any ancillary equipment associated with solar photo-voltaic panels on a flat roof shall be a minimum of 2 metres from the edge of the roof on which it is mounted.
	No sign, advertisement or object not required for the functioning or safety of the solar photo-voltaic installation shall be attached to or exhibited on such installation.
	Development under this Class which causes hazardous glint and/or glare shall not be exempted development and any solar photo-voltaic panels which are causing hazardous glint and/or glare shall either be removed or be covered until such time as a mitigation plan to address the hazardous glint and/or glare is agreed and implemented to the satisfaction of the Planning Authority.
The placing or erection on a wall of an agricultural structure, or wall of any ancillary buildings within the curtilage of an agricultural holding of a solar photo-voltaic installation.	The total aperture area of any wall mounted solar photo-voltaic panels taken together with any other such existing wall mounted panels shall not exceed 75 square metres.
	The distance between the plane of the wall and the solar photo-voltaic panels shall not exceed 15cm.
	The solar photo-voltaic panels shall be a minimum of 50cm from the edge of the wall on which it is mounted.
	No sign, advertisement or object not required for the functioning or safety of the solar photo-voltaic installation shall be attached to or exhibited on such installation.
	Development under this Class which causes hazardous glint and/or glare shall not be exempted development and any solar photo-voltaic panels which are causing hazardous glint and/or glare shall either be removed or be covered until such time as a mitigation plan to address the hazardous glint and/or glare is agreed and implemented to the satisfaction of the Planning Authority.
The placing or erection within the curtilage of an agricultural holding, of a solar photo-voltaic installation.	Where such development is located within a solar safeguarding zone, the Planning Authority for the area shall be notified in writing no later than 4 weeks after the commencement of such development and such notification shall include details regarding the location and scale of the development.
	Any free-standing solar photo-voltaic installation shall not be placed or erected forward of the front wall of the nearest agricultural structure, within the curtilage of the agricultural holding, to a public road.

Agricultural Building / Holding
The total aperture area of any free-standing solar photo-voltaic panels taken together with any other such existing free-standing panels shall not exceed 75 square metres.
The height of any free-standing solar photo-voltaic installation shall not exceed 2.5 metres at its highest point above ground level.
The placing or erection of any free-standing solar photo-voltaic installation within an Architectural Conservation Area shall only be exempted development if those works would not materially affect the character of the area.
No sign, advertisement or object not required for the functioning or safety of the solar photo-voltaic installation shall be attached to or exhibited on such installation.
Development under this Class which causes hazardous glint and/or glare shall not be exempted development and any solar photo-voltaic panels which are causing hazardous glint and/or glare shall either be removed or be covered until such time as a mitigation plan to address the hazardous glint and/or glare is agreed and implemented to the satisfaction of the Planning Authority.

2.2.2 Commercial and Large-Scale Projects

For commercial and larger scale projects, planning permission is required. Commercial projects include any project where the primary purpose is *not* for provision of electricity within the curtilage of the site. Planning permission is sought from the relevant Local Authority ordinarily, however, if the project proposed will generate 300 MW or greater, it meets the criteria of a 'Strategic Infrastructure Development', which is applied for directly from An Bord Pleanála.

2.2.3 Solar Safeguarding Zones

Solar Safeguarding Zones (SSZ) are areas designated that relate directly to the exempted development of solar installations. SSZs are buffers of 5km around airports and airfields, and 3km around helipads (both private and public such as at hospitals). Within SSZs exempted development of solar PV is more restricted, due to concerns about glare and glint from the reflective panels impacting aircrafts. Houses are not impacted by these restrictions, but other kinds of structures are.

A map series was published alongside the regulations, in addition to an interactive map, which is available here.

2.3 Grid Connection Offer

Depending on the scale of your project, one or more of the following Grid Connection Offers / Electrical Licences **(Sections: 2.3.1 - 2.3.15).**

2.3.1 Micro-Generation Grid Connection Offer

Micro-Generation means the generation of electricity by equipment installed in homes or small businesses. Where this electricity originates from a renewable source, such as solar (i.e., photovoltaic "PV" panels), from small wind turbines, from hydro or from micro-renewable combined heat and power (CHP) then the electricity is regarded as renewable.

The term "Micro-Generation" is sometimes used to refer to generation capacity of up to 1,000 kW (i.e. 1 MW), though this broader range can include mini-scale and small-scale as well as micro-scale generation (see examples of Micro-Generation systems in **Table 7.**

Micro-Generation installations are defined as follows:

- Only ***one customer*** is involved;
- Only ***one installation*** is involved; and

Where multiple customers on the same housing scheme are involved, in planned [green field] multiple installations such as new housing schemes, where it is planned to have Micro-Generation or installed where there is a penetration level expected to reach 40% of the capacity in kVA of the existing MV/LV substation that supplies the estate or scheme.

Table 7: List of Micro-Generator

Micro-Generators
Wind power (Turbines)
Solar power (PV panels)
Small hydroelectric schemes
Micro combined-heat-and-power (CHP)
Combined renewable Micro-Generator and storage systems

To participate in grid connection Micro-Generation the customer shall complete the Micro-Generation Installation Notification Form (Form: NC6, available on www.esbnetworks.ie).

If ESB Networks become aware of any technical or location specific reason, why installation should not proceed, then ESB Networks shall inform the customer within 20 working days of receipt of the notification. If no such notice, or request for Type Test certification, or instruction to suspend installation, is received by the customer within this period, then the installation may proceed without any further correspondence with ESB Networks. Full conditions of Micro-Generation connection and operation are available from ESB networks.

2.3.2 Mini-Generation Grid Connection Offer

Mini-Generation grid connections are for small scale electricity generation primarily for self-consumption and is defined as a source of inverter connected electrical energy and all associated equipment, in the following ranges:

- Greater than 25 A up to and including 72 A 1 at low voltage [230 V]2, when the DSO network connection is single-phase.
- Greater than 16 A up to and including 72 A at low voltage [230 V/400 V]3, when the DSO network connection is three-phase.

Where multiple generating sources [of the same or varied technologies] are on the same site and share access to the same Distribution System Operator (DSO) network connection point, the aggregate rating shall not exceed:

- 72 A 4 single-phase at low voltage, when the DSO network connection is single-phase; and
- 72 A per phase at low voltage, when the DSO network connection is three-phase.

The Mini-Generation process shall require an application for connection to ESB Networks, whereupon a network study shall be carried out locally by ESB networks and the conditions for connection advised in the Connection Offer. For installations in existing premises, the customer shall complete the Mini-Generation installation application form (Form: NC7, available on www.esbnetworks.ie) and provide with the application form, a Type Test Certificate from a recognised laboratory confirming compliance with I.S. EN 50549-1 for the proposed Mini-Generator and confirming the appropriate Interface Protections have been applied (see section 2.2 of ESB networks conditions).

Following receipt of application and application fee, ESB Networks shall assess the network for the proposed connection and contact the customer with any associated connection limitations or costs (where requested). No works shall progress until the conditions in the Connection Offer have been met and any ESB Networks construction work has been completed.

After installation, the installer shall carry out any relevant on-site commissioning tests to ensure satisfactory operation of the generator. Once confirmation of the installation has been received by ESB Networks (email to dsominigeneration@esb.ie) the connection on the DSO system can be completed. Until confirmation of the installation has been received by ESB Networks, the offered MEC (Maximum Export Capacity) (and ELS (Export Limiting Scheme), if applicable) shall not become active. The period of validity of the Connection Offers shall be as stated in the Connection Offer.

2.3.3 Small Scale Grid Connection Offer

For Small Scale Generation connections, the Installed Generation Capacity is not permitted to be greater than the Maximum Import Capacity (MIC), and consequently the MEC (Maximum Export Capacity) cannot be greater than the MIC. If you wish for ESB Networks to assess the connection for the MEC level proposed, but where no reinforcements apply, please email: dsosmallscalegeneration@esb.ie. The MEC level proposed will be assessed and a quotation issued for the costs of any reinforcements proposed.

To make a small scale Grid Connection, an application must be made to ESB networks completing an NC8 form for inverter connections or an NC5 form for synchronous connections. Once the forms are emailed to dsosmallscalegeneration@esb.ie along with all required documentation (ESB networks small scale information for further detail). This will be verified for completeness, accuracy and compliance, and an invoice will then be issued for the relevant application fee. Once the invoice is paid the application can be deemed complete.

ESB Networks will then need to carry out a full technical assessment of a connection point prior to issuing a connection offer in order to ensure connection capacity is not exceeded and that grid safety, stability and reliability are maintained and to establish the nature of any upgrade works required to the system to facilitate the connection. Currently due to a high demand the average period for the connection offer documents to issue is 3 to 6 months from payment of the application fee, however for a small number of complex applications this stage may take longer.

2.3.4 ECP Cat A Grid Connection Offer

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.

ECP Category A is for generation, storage and other system services technology projects (MEC >0.5 MW). Applications for this grid connection offer will occur in batches with application windows occurring annually.

An application fee applies for projects with MEC>500 kW (0.5 MW) which is €2,000. Successful applicants will be prioritised by largest renewable energy generation (first 25), then by planning permission grant date. Each batch application may set its' own generation priorities. A full list of all DSO (Distribution System Operator) ECP applicants is available from ESB networks.

To make a grid connection application Form NC5 should be used where an applicant has identified their specific generator manufacturer detail and would like their technical study processed using the specified data provided by the applicant. Form NC5A is a shortened version of this form and may be used where the specific generator manufacturer detail is unknown at time of application. Therefore, the technical study is completed using assumed data and the applicant is required to provide their specific data a year in advance of energisation. Fully completed application forms can be sent via email with all relevant documentation to DSOGenerators@esb.ie.

2.3.5 ECP Cat B Grid Connection Offer

Enduring Connection Policy (ECP) Category B is open to the following projects:

- Small projects i.e., MEC greater than 6 kW/11 kW and less than or equal to 500 kW;
- DS3 system services trial projects - up to 500 kW; and
- Auto producers.

Applicants who have an existing application which has been received complete (along with the appropriate application fee) by the Systems Operators, will be processed throughout the calendar year. These applicants will be prioritised by when the existing application was received complete. Where any relevant details

pertaining to their project have changed, the existing Applicants must submit a new application form under ECP-2.1 for the same site location (grid coordinates) and technology type. The applicants may apply to reduce their MEC.

To make a grid connection application Form NC5 should be used where an applicant has identified their specific generator manufacturer detail and would like their technical study processed using the specified data provided by the applicant.

Form NC5A is a shortened version of this form and may be used where the specific generator manufacturer detail is unknown at time of application. Therefore, the technical study is completed using assumed data and the applicant is required to provide their specific data a year in advance of energisation.

Fully completed application forms can be sent via email with all relevant documentation to: DSOGenerators@esb.ie.

2.3.6 ECP Cat C Grid Connection Offer

Enduring Connection Policy (ECP) Category C is open to the following projects:

- Community-Led Projects where MEC greater than 0.5 MW and less than or equal to 5 MW; and
- Community-Led Projects meeting the 100% community owned status, as outlined the in the ECP-2 Clarification Note (CRU/21/069).

Category C (Community-led) applicants must be 100% community owned and can apply on an ongoing basis throughout the calendar year. Once the application fee deposit has been paid and the applications have been accepted, the Distribution System Operator (DSO) (ESB Networks) will conduct a detailed study and confirm the connection method and connection cost. This will be issued as a "connection assessment." Community-led renewable energy projects will also not need planning permission prior to applying for a grid connection. Planning permission will, however, be required before a grid connection offer is issued.

To make a grid connection application Form NC5 should be used where an applicant has identified their specific generator manufacturer detail and would like their technical study processed using the specified data provided by the applicant.

Form NC5A is a shortened version of this form and may be used where the specific generator manufacturer detail is unknown at time of application. Therefore, the technical study is completed using assumed data and the applicant is required to provide their specific data a year in advance of energisation. Community led projects must include a Declaration Form with their application. Fully completed application forms can be sent via email with all relevant documentation to DSOGenerators@esb.ie.

2.3.7 EirGrid Grid Connection Offer

Projects with total export capacity of under 40 MW at a single location should initially apply to ESB Networks for a Distribution Connection. Projects with over 40 MW total export capacity at a single location should initially apply to EirGrid for a Transmission Connection.

When submitting a new application to EirGrid as Transmission System Operator (TSO), the application must be accompanied by all supporting documentation as requested, including two signed copies of the EirGrid standard confidentiality agreement and the first instalment of €7,000 (inclusive of VAT) of the application fee. The total application fee is dependent on the size of the plant (taking into account the MEC and MIC values) and whether shallow connection works are involved in dealing with the capacity required.

For application forms for an EirGrid ECP (Enduring Connection Policy) and details of the application process consult the EirGrid website and any queries can be directed to OPMO@eirgrid.com.

2.3.8 Notification of Intention to Construct or Reconstruct, and/or to Generate Electricity from a Generation Station not exceeding 10 MW

Under the Electricity Regulation Act 1999 (Section14(1A)) Order 2022, it is necessary to apply to the Commission for Regulation of Utilities (CRU) prior to commencing works to construct or reconstruct and or to generate electricity from a generation station not exceeding 10 MW.

Before applying for a licence all new applicants or applicants with novel or complex applications should apply for a pre-submission meeting with the CRU. To contact the CRU for a pre-submission meeting use: licensing@cru.ie.

Prior to the meeting it would be beneficial to the applicant to review the application: Generators not exceeding 10 MW application form.

2.3.9 Licence to Generate

A Licence to Generate is a mandatory licence for anyone wishing to supply electricity to final customers (a final customer is defined as a customer purchasing electricity for his own use), it is applied for through the Commission for Regulation of Utilities (CRU), (Section 14(1)(b), (c) or (d) of Electricity Regulation Act 1999, as amended). This licence is a requirement all electricity generators, with generating capacity >10 MW, as per the Electricity Regulation Act.

Before applying for a licence all new applicants or applicants with novel or complex applications should apply for a pre-submission meeting with the Commission for Regulation of Utilities (CRU). To contact the CRU for a pre-submission meeting use: licensing@cru.ie.

Please refer to the Guidance Notes: Licence to Generate, for further detailed information and the most up to date fees related to the application.

2.3.10 Licence to Supply

A Licence to Supply is a mandatory licence for anyone wishing to supply electricity to final customers (a final customer is defined as a customer purchasing electricity for his own use), it is applied for through the Commission for Regulation of Utilities (CRU), (Section 14(1)(b), (c) or (d) of Electricity Regulation Act 1999, as amended).

The CRU grants revokes and enforces these licences. The current fee for the licence to supply is €254 and can be applied for through the CRU application form. An Electricity Supply Licence will be valid for 15 years.

For further information and details on supporting documentation please refer to the CRU Electricity Supply website: https://www.cru.ie/regulations-policy/licences/electricity-supply/.

2.3.11 Authorisation to Construct or Reconstruct a Generating Station

This authorisation allows a person to construct or reconstruct a generating station, it is applied for through the Commission for Regulation of Utilities (CRU) (Section 16 of Electricity Regulation Act 1999, as amended). It is an offence to construct or reconstruct a generating station for the purpose of supply to final customers without the required Authorisation. An exception to this is where the proposed generation station has a capacity of less than or equal to 1 MW.

There are two separate applications for authorisation to construct or reconstruct generating stations that are less than 40 MW, or exceed 40 MW. If you are applying for both a Licence and Authorisation at the same time, use a Dual application form (less than 40 MW or exceeds 40 MW).

Before applying for a licence, all new applicants or applicants with novel or complex applications should apply for a pre-submission meeting with the Commission for Regulation of Utilities (CRU). To contact the CRU for a pre-submission meeting use: licensing@cru.ie.

For further information and details on supporting documentation and most up-to-date fee requirements please refer to the CRU guidance notes on the Authorisation to Construct.

2.3.12 Wayleave Consent: Section 48 to Lay Electric Cables

Wayleave Consent: Section 48 refers to the power to lay electric cables (Section 48 of Electricity Regulation Act 1999, as amended). It is granted to lay electric cables across or under any street, road, railway or tramway, and the right to break up any street, road, railway or tramway for that purpose. This licence is separate to other agreements such as the Road Opening Licence.

The Section 48 wayleave consent is applied for through the Commission for Regulation of Utilities (CRU), see Section 48 Application Form. At present there is no application fee.

For further information or queries related to Section 48 please contact the CRU at: consentapplication@cru.ie.

2.3.13 Wayleave Consent: Section 49 to Lay Electric Cables

Wayleave Consent: Section 49 refers to the power to lay electric lines (Section 49 of Electricity Regulation Act 1999, as amended). This is granted to lay lines across or under any land not being a street, road, railway, or tramway.

The Section 49 wayleave consent is applied for through the Commission for Regulation of Utilities (CRU), see Section 49 Application Form. At present, there is no application fee.

Should the electric lines be required to go through private land a yearly agreement has to be reached between the asset owner and the landowner for the duration of the project. This is a separate requirement from the section 49 application.

For further information or queries related to Section 49 please contact the CRU at: consentapplication@cru.ie.

2.3.14 Transmission Use of System (TUoS) Agreement

This is a mandatory agreement that is required to obtain access to Transmission Use of System (TUoS) and transport electricity to and/or from the generation plant through the transmission system. This is regulated under Section 14(1)(b), (c), (d) or (h) of Electricity Regulation Act 1999, and Section 34 of Electricity Regulation Act 1999, as amended.

Suppliers and generators seeking to use the Transmission System will be required, prior to using the Transmission System, to enter into a Transmission Use of System Agreement (TUoS) with EirGrid Group. This agreement must be in place before a supplier or generator can participate in the Single Electricity Market (SEM)

2.3.15 Distribution Use of System (DUoS) Agreement

Obtain access to Distribution system and transport electricity to and/or from the generation plant through the distribution system, Section 14(1)(b), (c), (d) or (h) of Electricity Regulation Act 1999, and Section 34 of Electricity Regulation Act 1999 A DUoS charge is a fee that ESB Networks charges your Electricity Supplier for use of the Electricity Distribution System.

For further Information on DUoS agreements please refer to: https://cruie-live-96ca64acab2247eca8a850a7e54b-5b34f62.divio-media.com/documents/cer08204.pdf

2.4 Pre-Construction

2.4.1 Renewable Electricity Support Scheme

The Renewable Electricity Support Scheme (RESS) is a government initiative introduced by the Department of Communications, Climate Action and Environment (DCCAE). Its primary goal is to promote the generation of renewable energy, such as wind and solar power, in order to help Ireland, meet its domestic and European Union carbon reduction targets by the year 2030.

The scheme aims to create a more favourable environment for renewable energy projects and incentivize their development. It operates through a competitive auction system where companies involved in various renewable industries, such as wind and solar power, can participate.

Some of the key features of the RESS are highlighted below:

1. **Auction System:** RESS establishes an auction system for renewable energy projects, including solar PV installations. Companies in the renewable energy sector can participate in these auctions, where they bid to provide a specific amount of renewable energy to the grid.
2. **Auction Quantity:** The government plans to auction off about 3,000 gigawatt-hours (GWh) of renewable energy capacity. This auctioned capacity will be allocated to bidders based on their cost-efficiency, with the most cost-efficient projects being chosen first.

3. **Efficiency Focus:** Unlike the previous Renewable Energy Feed-In Tariff (REFIT) scheme, which guaranteed a fixed price for electricity generated, RESS emphasizes efficiency and cost-effectiveness. Only the most efficient and cost-competitive projects will be selected through the auction process, which will drive bidding companies to offer their most competitive prices.
4. **Guaranteed Price:** Successful bidders in the RESS auction will be guaranteed a minimum price for their generated electricity over a 15-year period. This provides financial stability for the projects.
5. **Price Flexibility:** The bid price set by the participants in the auction serves as both their minimum guaranteed price and their maximum price. If a project earns more per unit of electricity than their bid price, they must pay back the excess to consumers, which helps in reducing overall energy prices.
6. **Inflation Handling:** Unlike some other European markets, the RESS does not index-link prices to inflation. This means that the bid price offered by providers will remain fixed for the 15-year duration of the scheme, regardless of inflation fluctuations.
7. **Eligibility:** Only projects with planning permission and a grid connection offer can participate in the **auction.**
8. **Diverse Supply:** RESS aims to diversify the sources of renewable energy by incorporating offshore wind projects, which were traditionally more challenging to implement. The scheme also includes provisions for solar energy projects.
9. **Community Focus:** RESS includes a provision for community-led projects, setting aside capacity for smaller players and excluding competition from larger energy corporations. This helps promote a more inclusive and diverse renewable energy landscape.
10. **Timeline:** At the time of writing, two RESS auctions have taken place successfully, with RESS-3 taking place in Q3 of 2023.

The RESS Scheme provides solid financial stability to a renewable project, allowing for more solid private investment, by guaranteeing a financial return on investment, while simultaneously working to achieve better value for Irish electricity consumers.

2.4.2 Project Financing

Provided a project has achieved planning permission, a grid connection offer, and a commercial offer to sell electricity to the national grid, financing will need to be secured. There are various ways a renewable energy project can be funded, such as equity funding, bank loans, or a combination of the two. Typically, loans are required to be repaid prior to the end of the RESS fixed price, as this provides certainty for the lender, which helps to reduce the cost of borrowing through the reduced risk on investment.

2.4.3 Planning Permission Amendments and Conditions

Due to the requirement of needing planning permission and a grid connection offer to successfully enter an RESS auction, followed by securing funding, which can all take an extended period of time, there is a possibility that an amendment may be required to the consented development agreed with the Local Authority, as the design may have alterations or technological improvements.

Pre-construction, some conditions within the planning permission applied by the Local Authority or An Bord Pleanála must be sufficiently discharged (formal applications process where details requested are provided to comply), where required. This may include the likes of providing more specific details of design, or similar details. Failure to discharge planning conditions as specified by condition of a planning permission may result in enforcement action.

2.4.4 Appointment of Construction Contractors

Pre-construction, contractors will need to be appointed to carry out the delivery of the development. There are two broad categories of contracting options:

1. Turnkey contracting, which sees a single company handling all PV panels, electrical and civil engineering works; or

2. Separate contracting, where individual aspects are contracted out to specific companies.

Typically, where a solar PV development follows the turnkey route, the PV panel provider will lead, and sub-contract the electrical and civil engineering works to companies that would be deemed appropriate for the installation of their equipment.

Maintenance contracts are also usually agreed at this point, where required.

2.4.5 Pre-Construction Licencing

2.4.5.1 Road Opening / Closing Licence

At times, a temporary road closure is needed in conjunction with a road opening licence, or for other works. To comply with statutory requirements, **an application for a temporary road closure should be submitted 8 weeks in advance** to the relevant Local Authority.

You need a licence called a 'Road Opening Licence' for any works in a public area, to dig up a public road, footpath or grass verge, for works such as:

- Water/Sewer Connections;
- Lowering of footpaths;
- Footpath reconstruction; and
- Pipelaying;

Applications for Road Opening Licenses can be applied through the MRL website. You must register with Road Management Office: http://www.rmo.ie/non-registered-users.html online MRL System to apply for a Road Opening Licence.

Temporary Road Closures are on occasion required to facilitate road works. Completed **application forms must be submitted 5 weeks prior to the road closure** to the relevant Local Authority. Advertisement costs must be covered by the applicant.

In conjunction with the above licences the following licences should also be applied for where works take place on or near public roads or pathways: a Hoarding/Scaffolding Licence and a Signage licence. A hoarding/scaffolding licence is required to facilitate building works and to ensure safety for the public. Completed **application forms must be submitted 3 weeks prior to works commencing** to the relevant Local Authority. A Signage licence is also required to authorise the use of advertisement signs/structures on public roads, (aka Directional Signs). Completed application forms must be submitted for assessment.

It will be necessary to check with the relevant Local Authority what the current fees are for the different permit applications.

2.4.5.2 Section 254 Licence (Items on Public Roads)

A Section 254 Licence applies to all appliances, cables, signs, street furniture or other items on public roads. You will need to apply to the relevant Local Planning Authority to place on, under, over or along a public road numerous items or equipment, including the following which may be relevant to a Solar PV project:

- A fence, scaffold or hoarding,
- A cable, wire or pipeline,
- Over ground electronic communications infrastructure and any associated physical infrastructure such as A telephone pole or cabinet, or
- Any other appliance, apparatus or structure specified in regulations made by the Minister for Housing, Planning and Local Government or by an Act of the Oireachtas that requires a licence.

To apply for a Licence, you will need to complete the application form and submit that form to the Planning Authority along with:

- A Site Location Map - 1:2,500 scale;
- A Site Layout Plan showing location of proposed appliance(s)/apparatus(s)/structure(s);
- Drawing(s) to scale of proposed appliance(s)/apparatus(s)/structure(s);
- The appropriate licence fee;

- Copy of Insurance Confirmation indemnifying the relevant County Council against claims arising out of any accidents to persons or property;
- Written legal consent of the landowner; and
- A copy of the site notice.

2.4.5.3 Section 50 Licence for the Construction, Replacement or Alteration of Bridges and Culverts

A Section 50 Licence is required when applying for consent to replace or alter a bridge or culvert is applied for through the Commissioners of Public works.

Section 50 of the Arterial Drainage Act, 1945 requires that:

> *"No Local Authority, no railway company, canal company or other similar body, and no industrial concern shall construct any new bridge or alter, reconstruct, or restore any existing bridge over any watercourse without the consent of the Commissioners or otherwise than in accordance with plans previously approved of by the Commissioners."*

The Office of Public Works is responsible for the implementation of the regulations in the Arterial Drainage Act, 1945, including Section 50.

Please refer to the Section 50 brochure for further information on the requirements and considerations for making the application.

2.4.5.4 Fire Safety Certificate

A Fire Safety Certificate is required where the applicant proposes a new building, a new building extension, material alterations to an existing building or a change of use of an existing building. The application is made through the Building Control Authority (BCA) in the local City or County Council. If the building or works complies with the requirements of Part B of the Second Schedule of the Building Regulations 1997, the BCA will issue a Fire Safety Certificate.

A Fire Safety Certificate application should be made by a Fire Safety Consultant, Architect or Engineer who is familiar with the Building Regulations and the procedure for applying for a Fire Safety Certificate. The fees for the application vary based on the type of application required (normal, 7-day notice or regularisation application).

A valid Fire Safety Certificate application must include:

- A completed application form;
- Relevant fire safety drawings in duplicate;
- A fire safety report in duplicate;
- Site location maps in duplicate; and
- The appropriate fee.

Please refer to Part II of the Building Control Regulations for further information and exemptions.

2.4.5.5 Disability Access Certificate

To determine if your project requires a Disability Access Certificate, please refer to the Building Control (Amendment) Regulations 2018 Article 20D, Part 4.

It is best practice to apply for your Disability Access Certificate at the same time you are applying for your Fire Safety Certificate. If both applications are prepared at the same time by the same person, the drawings can be co-ordinated prior to submission. A Disability Access Certificate application should be made by an appropriate consultant, architect or engineer who is familiar with the Building Regulations and the procedure for applying for a disability access certificate.

A valid Fire Safety Certificate application must include:

- A completed application form;
- Relevant fire safety drawings in duplicate;
- A disability access report in duplicate;

- Site location maps in duplicate; and
- Providing the application is lodged at the same time as the Fire Safety Certificate application a €500 fee applies, otherwise it's currently €800 per building.

To determine if your project may be exempt from the necessity of obtaining a disability access certificate please refer to the Manual for the Reuse of Existing Buildings.

2.4.5.6 Certificate of Registration

A Certificate of Registration is granted by the relevant Local Authority in area the works will be carried out. The waste activities that require a Certificate of Registration are listed in Part II of the Third Schedule of the Waste Management (Facility Permit and Registration) Regulations 2007, (S.I. No. 821 of 2007) as amended. To aid in rapid determination, if the project or development requires a Certificate of Registration please refer to the following Decision tree.

Contact your Local Authority if you wish to apply for a Certificate of Registration.

2.4.5.7 Waste Disposal Licence/Permit

Waste disposal and recovery activities in Ireland require authorisation in accordance with the Waste Management Act 1996 as amended. To determine if the activity that is being carried out requires a waste licence please refer to the EPA services. A waste licence is a single licence which deals with emissions from an activity and the environmental management of the facility. Waste licences are issued through the EPA.

2.4.5.8 Derogation Licence

A derogation licence may be required when removing vegetation in preparation for tree felling/afforestation. Derogation licences are licences to disturb or interfere with protected plant and animal species. A number of plant and animal species are legally protected in Ireland. Some of these species are included in a system of Strict Protection pursuant to the requirements of Articles 12, 13 and 16 of the Habitats Directive (92/43/EEC) and are sometimes referred to as Annex IV species. The list of Annex IV species which occur in Ireland and its waters is set out in **Table 8**. The European Commission Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC (October 2021) should also be consulted for further information.

Table 8: Annex IV Species

Annex IV Species	
Animals	**Plants**
All bat species	Killarney Fern
Otter	Slender Naiad
Natterjack Toad	Marsh Saxifrage
Kerry Slug	
Dolphins, Whales and Porpoises	
Marine Turtles	

2.4.5.8.1 Derogation Licence to Disturb Bats or their Breeding or Resting Places

At present there are nine confirmed resident bat species in Ireland. All bats are listed on Annex IV of the EU Habitats Directive. Under the Irish law that implements this directive, both the bats themselves and their roosts are protected, as such it is an offence to disturb or interfere with them without an appropriate licence. If any bat species is suspected to inhabit structure (e.g., trees, bat boxes, buildings, stone bridges etc.) in any area proposed for development, a derogation licence to disturb bats, their breeding or resting places may be required by the granting authority.

Even when planning permission is granted, the wildlife legislation applies. **Works which would capture or kill them, damage or destroy their roosts or disturb them at important parts of their life cycle cannot take place without obtaining a *second derogation licence***. This licence is issued when planning permission is given under Regulation 54 of the Regulations, and strict criteria must be met before such a licence can be approved. 'Bat Mitigation Guidelines for Ireland' should also be referred to when carrying out works which may disturb them.

2.4.5.9 Tree Felling Licence(s)

If as part of the project requirements an individual or project developer determines that there is a need for the felling of trees for the purposes of (not limited to) site clearance, safe cable installation or maintenance purposes a Felling Licence may be required. This is granted by the Minister for Agriculture, Food and the Marine provides authority under Section 7 of the Forestry Act 2014 to fell or otherwise remove a tree (singular) or trees (multiple) and to thin a forest. All those involved in tree felling must ensure that a felling licence has been issued before any felling is carried out, unless they are satisfied that the felling is exempted. It is the responsibility of the landowner and or the person felling the tree to ensure that an exemption applies. A tree felling licence once granted is valid for a period of ten years and can be extended up to five further years.

Exemptions apply to the following common scenarios:

- A tree in an urban area provided it is not under a protection order;
- A tree within 30 metres of a building but excluding any building built after the trees were planted;
- A tree less than 5 years of age that came about through natural regeneration and removed from a field as part of the normal maintenance of agricultural land - but not where the tree is standing in a hedgerow;
- A tree uprooted in a nursery for transplantation;
- A tree of the willow or poplar species planted and maintained solely for fuel under a short rotation coppice;
- A tree outside a forest within 10 metres of a public road and which, in the opinion of the owner is dangerous to persons using the public road because of its age or condition;
- A tree outside a forest of the hawthorn or blackthorn species;
- A tree outside a forest in a hedgerow and felled for the purposes of its trimming, provided that the tree does not exceed 20 centimetres in diameter when measured 1.3 metres from the ground;
- A tree outside a forest the removal of which is specified in a grant of planning permission;
- A tree outside a forest on an agricultural holding removed by the owner for use on that holding, provided:
  - it does not form part of a decorative avenue or ring of trees;
  - its volume does not exceed 3 cubic metres;
  - the removal of trees for use on the farm does not exceed 15 cubic metres in any period of 12 months.

It should be noted that the three above exemptions do not apply in all circumstance, for example when trees are more than 150 years old or are close to certain protected structures, monuments, archaeological sites, specific environmentally sensitive areas. If you live in an urban area, you may need to contact your Local Authority to see if there is a preservation order on the tree. For further detail on these exemptions please refer to: Tree Felling Guidance Ireland.

Certain bodies are exempted from the requirement for a felling licence, these include but are not limited to:

- Bord Gáis (Section 27, Gas Act, 1976);
- Aer Rianta (Section 46, Air Navigation and Transport (Amendment) Act, 1998);
- CIÉ or any other railway undertaking (Section 49, Transport (Railway Infrastructure) Act, 2001);
- CIÉ (Section 15, Transport (Dublin Light Rail) Act, 1996);
- Any telephone/mobile network operator (Section 58, Communications Regulation Act, 2002);
- The ESB (Section 45, Electricity Regulation Act, 1999);
- NPWS (Section 72, Wildlife (Amendment) Act, 2000);

- Minister for Defence (Section 7, Defence (Amendment) Act, 1987);
- Inland Fisheries Act (Section 59, Inland Fisheries Act, 2010).

Further information on tree felling can be found online at https://www.agriculture.gov.ie.

At present, each tree felling licence application costs €20.

2.4.5.10 Licence To Interfere with or Destroy the Breeding Places of Any Wild Animals

If you are intending to develop in an area to be known for breeding places of any wild animals, a licence 'To Interfere with or Destroy the Breeding Places of Any Wild Animals' may be required to proceed. A licence may be required by the granting authority, National Parks and Wildlife Service (NPWS) (Section 23 (5) (d) of the Wildlife Act 1976 as amended), the legislation states that any person who wilfully interferes with or destroys the breeding place or resting place of any protected wild animal, shall be guilty of an offence.

See https://www.npws.ie/licences-disturb-or-interfere-protected-plant-and-animal-species for a further information.

2.4.6 Commencement Notice / 7-Day Notice

In accordance with the Building Control Regulations, you are obliged to submit a *Commencement Notice* or a *7-Day Notice Application Form* with a *Seven Day Statutory Declaration* prior to commencement of the development to Building Control Section of the Local Planning Authority, giving notice of the intention to start work.

A Commencement Notice must be received by the Building Control Authority not less than 14 days and not more than 28 days before you wish to commence.

Additional documentation may be required to be submitted with the completed Commencement Notice; and this should be completed on-line on the National BCMS (Building Control Management System. An online system (BCMS) for lodging commencement notices and 7 Day Notices and complying with the various new requirements is available at www.localgov.ie.

The fees relating to a 7-day notice are set out in **Table 9.**

Table 9: Breakdown of the current rates and fees for a 7-day Notice Application

Submission of a 7 Day Notice in Respect of:	
a) Work in connection with the construction or extension of a building	€250, or €5.80 for each square metre of floor area being provided, whichever is the greater
(b) Work in connection with -	
(i) the material alteration of the interior of a building	€250, or €5.80 for each square metre of relevant floor area, whichever is the greater
(ii) the material alteration of the external surfaces of a building	€250
(iii) a combination of (i) and (ii) above	€250, or €5.80 for each square metre of relevant floor area, whichever is the greater
(c) A building in which a material change of use takes place	€250, or €5.80 for each square metre of relevant floor area, whichever is the greater
(d) Works or a building, where the building concerned will be used as an agricultural building	€130, or €1.60 for each square metre in excess of 300 square metres of -
	(i) gross floor area being provided,
	Or
	(ii) relevant floor area
	As the case may be, whichever is the greater

2.5 Construction

2.5.1 Planning Permission Conditions

Upon a grant of planning permission, there will almost certainly be planning conditions imposed by the Local Authority, which may cover a range of matters. There will likely be conditions that will cover matters during construction, such as working hours, which specifies the acceptable window of time when construction may take place, or other conditions in relation to noise from construction, dust generated, wheel washing, etc. These conditions must be strictly adhered to, as if a project is found to be in breach of conditions, a Local Authority may initiate enforcement proceedings.

The Local Authority may deploy Site Inspectors to ensure compliance with planning conditions, and other site matters under which the Local Authority has jurisdiction.

2.5.2 Outline of Construction

For smaller rooftop installations, installation has improved as deployment across Ireland has become more commonplace, and typically panel arrays can be installed over the period of one day. Further electrical work may take some time over the following days, seeing the panels connected to inverters and connect to the circuit of the building, and the electricity meter (where applicable for feeding to the national grid).

For large installations, such as a freestanding solar farm, construction can take a while longer following the consent and licencing process. Once construction is ready to commence, site clearance is the first stage, if required, preparing the site for construction. Access roads will be put in place allowing construction vehicles to access the site.

In parallel, two aspects of the project will usually start construction – The panel array racks, and the substation(s) required. These can be viewed as sperate projects by their nature, but of course they form part of the same project. The substation(s) will need to be ready for connection when the panel arrays are ready to be connected to the grid.

The racks are usually constructed by driving vertical supports into the ground, and connecting the supports with horizontal torque bars, which can be able to angle the panels using a small motor in some cases, to optimise the light exposure. The panels are mounted to the torque bars. The panels can then be connected in series as appropriate by electrical engineers and run to an inverter, which will convert the electricity from DC (Direct Current) to AC (Alternating Current), the type of electricity used in our homes and transmission lines. From the inverters, cables will then connect to the substation which will step the voltage of the electricity up to high voltage, suitable for transmission using longer distance transmission cables.

2.5.3 Commissioning

Following the construction of a Solar PV installation, it must then be commissioned. This takes place on all installations regardless of size, however, for large and commercial projects, this is generally a more formal process.

Commissioning involves a series of electrical testing, mechanical testing, performance evaluations and corrections reporting. The purpose is to ensure the equipment has been correctly installed and will operate safely and efficiently.

Provided a project passes the commissioning stage, it will then enter its operational stage, and begin to produce electricity for consumption or sale.

3 Operations and Maintenance Stage

Some licences and consents may not have a duration that covers the entire lifespan of a Solar PV project, and so may require further attention from the owner/operator. This may be as a result of the legislative basis for the consents, or as a change of legal circumstance, or an environmental change over time.

1.1 Licences

1.1.1 Derogation Licence

Over the course of operation, there may be a need to interfere with a protected species, if they happen to be interrupting safe and efficient operation of the Solar PV installation. As such, a Derogation Licence would be required.

Please refer to **Section 2.4.5.8** for further information about Derogation Licences.

1.1.2 Tree Felling Licence(s)

During operation, it may become necessary to engage in tree felling activity on the site of a Solar PV as trees mature and potentially encroach or obstruct panels.

Please refer to **Section 2.4.5.9** for further information about Tree Felling Licences.

1.1.3 Licence To Interfere with or Destroy the Breeding Places of Any Wild Animals

Similar to the case of Derogation Licences, during operation of a Solar PV installation, it may become necessary to interfere with, or destroy the breeding place of wild animals, thus requiring an associated licence.

Please refer to **Section 2.4.5.10** for further information about Licences to Interfere with or Destroy the Breeding Places of Any Wild Animals.

1.1.4 Derogation Licence to Disturb Bats or their Breeding or Resting Places

During operation of a Solar PV installation, it may become necessary to disturb bats and/or their breeding or resting places to ensure the safe and efficient operation of the Solar PV installation. This activity would require the associated licence.

Please refer to **Section 2.4.5.8.1** for further information about Derogation Licences to Disturb Bats or their Breeding or Resting Places.

4 Project End Stage

4.1 Decommissioning

Decommissioning refers to the cessation of energy production and the dismantling and removal of associated equipment and infrastructure.

4.1.1 Planning

When it comes time for decommissioning of a solar PV installation, consents required depend on whether or not planning permission was required in the first place, on construction of the project. Before embarking on decommissioning of a solar PV installation, please check all relevant planning permission documents from previous applications.

4.1.1.1 Previously Exempted Development

For many smaller scale projects, such as a home solar PV installation, when installed, they would have been exempted development (especially after 2022), meaning that planning permission was not required. There is no evidence that the decommissioning and removal of exempted development solar PV installations requires planning permission, provided these are the only works taking place. If there are any concerns regarding whether planning permission is required, you may contact your Local Authority and request a Section 5 Declaration, in which it will be determined if your works are exempt from planning permission or not.

4.1.1.2 Previously Consented Development

Typically projects that have been constructed following the procurement of planning permission, from either the Local Authority or An Bord Pleanála, will deal with decommissioning by condition. This means that within the conditions attached to the planning permission, it will directly set out how to carry out decommissioning and restoration of the site to its original condition. This is typically ordered after a set period of operation, and thus the decommissioning of the installation does not require further consent, as it has been provided for under the original application. If, however you wish to conduct works not specified within the condition, planning consent will be required for those works. A sample of what a condition might look like in relation to decommissioning is shown below:

> *"Within 6 months of the cessation of energy generation, or a period of 30 years and 6 months following completion of construction, whichever is the sooner, all foundations / anchors, access roads and infrastructure associated with the solar farm shall be dismantled and removed from the site and the site restored to its original condition, unless planning permission has been granted for the retention of the solar farm for a further period, prior to the expiration pf the 30 year period."*

Please note that there may be other conditions specified regarding the end of a project's lifespan, so please review relevant permissions carefully.

4.1.2 Licences

4.1.2.1 Notice to Close and Application to Terminate Connection Agreement

Notice of intention to stop/change electricity generation is a mandatory requirement as part of grid connection agreement.

The requested termination date must be in line with Grid Code requirements. For generators less than 50 MW the date must be at least two years after the deemed complete application date. For, generators greater than 50 MW installed capacity, the date must be at least three years after the deemed complete application date.

For further information on the steps required for a valid notice to close and application to termination connection agreement please refer to the EirGrid Group Plant Closure Process.

4.1.2.2 Commencement Notice / 7-Day Notice

In accordance with the Building Control Regulations, you are obliged to submit a *Commencement Notice* or a *7-Day Notice Application Form* with a *Seven Day Statutory Declaration* prior to commencement of the development to Building Control Section of the Local Planning Authority, giving notice of the intention to start work, including works for the decommissioning of an installation.

Please refer to for **Section 2.4.6** information about Commencement Notices / 7-Day Notices.

4.1.2.3 Road Opening / Closing Licence

As part of the decommissioning process, you may require a road closure to facilitate deconstruction.

Please refer to **Section 2.4.5.1** for further information about Road Opening / Closing Licences.

4.1.2.4 Abnormal Loads Permit

A 'Special Permit' is required for any haulage vehicles which are considered to be either: Wide, Long or Heavy and travelling on the roads within the relevant County Council administrative area. These vehicles may be required when transporting larger components by road following deconstruction. Completed application forms must be submitted 7 days prior to commencement of the journey.

It will be necessary to check with the relevant Local Authority what the current fees are for the different permit applications.

4.1.2.5 Waste Disposal Licence / Permit

Waste disposal and recovery activities in Ireland require authorisation in accordance with the Waste Management Act 1996 as amended. To determine if the activity that is being carried out requires a waste licence please refer to the EPA services. A waste licence is a single licence which deals with emissions from an activity and the environmental management of the facility. Waste licences are issued through the EPA.

4.1.2.6 Derogation Licence

Over the course of the decommissioning of a Solar PV installation, there may be a need to interfere with a protected species, if they happen to be interrupting safe and efficient operation of the Solar PV installation. As such, a Derogation Licence would be required.

Please refer to **Section 2.4.5.8** for further information about Derogation Licences.

4.1.2.6.1 Licence to Disturb Bats or their Breeding or Resting Places

During decommissioning of a Solar PV installation, it may become necessary to disturb bats and/or their breeding or resting places. This activity would require the associated licence.

Please refer to **Section 2.4.5.8.1** for further information about Derogation Licences to Disturb Bats or their Breeding or Resting Places.

4.1.2.7 Tree Felling Licence

During decommissioning, it may become necessary to engage in tree felling activity on the site of a Solar PV to facilitate deconstruction.

Please refer to **Section 2.4.5.9** for further information about Tree Felling Licences.

4.1.2.8 Afforestation Licences (Technical Approval)

An Afforestation Licence "*provides the permission to plant all or part of the areas specified, and the areas planted meet scheme requirements*". This is necessary for all afforestation projects where the area involved is greater than 0.1 hectare (approx. 0.25 acres). Afforestation is defined in the Forestry Act 2014 as, "*the conversion of land to a forest with a minimum area of 0.1 hectares and tree crown cover of more than 20 per cent of the total area, or the potential to achieve this cover at maturity*". Forest land is defined as land under trees with a minimum area of 0.1 hectare and tree crown cover of more than 20% of the total area (or the potential to achieve this cover at maturity).

This permit is necessary when a developer seeks to replant trees which were felled during a site development. For the proposed afforestation of alternative lands, approval must be obtained before the associated felling licence can be granted. Proposed alternative land should be submitted for afforestation approval as early as possible, ideally at the same time as the felling licence application is submitted. Afforestation approval must be applied for using the Afforestation Pre-Approval Form.

All afforestation projects (whether availing of a grant or not) must obtain prior written approval from the Department of Agriculture, Food and the Marine (DAFM) termed 'Technical Approval'. A technical approval confirms that the proposed forest detailed in the application complies with the silvicultural (control of the growth, quality and needs of the forest, of particular importance for timber production) and environmental requirements. This approval provides permission to plant all, or part of the areas specified in the application. Grant aided projects require a supplementary 'Financial approval' in conjunction with technical approval. This financial approval must be obtained before work can commence.

Further information on tree felling can be found online at https://www.agriculture.gov.ie.

4.1.2.9 Licence to Interfere with or Destroy the Breeding Places of Any Wild Animals

Similar to the case of Derogation Licences, during operation of a Solar PV installation, it may become necessary to interfere with, or destroy the breeding place of wild animals, thus requiring an associated licence.

Please refer to **Section 2.4.5.10** for further information about Licences to Interfere with or Destroy the Breeding Places of Any Wild Animals.

4.1.2.10 Licence for the Removal of Invasive Alien Species

Under the EC birds and Natural Habitats Regulations 2001 SI 477 of 2011, it is an offence to release or allow to disperse or escape, to breed, propagate, import, transport, sell or advertise species listed on Schedule 3 of the regulations without a Licence. The two regulations that deal specifically with this scheduled list of species are:

- Regulation 49: Prohibition of introduction and dispersal of certain listed species; and,
- Regulation 50: makes it an offence to or to intend to import, buy, sell, breed, transport and distribute listed animal or plant species or vector material; and
- Regulation 74: which sets out transitional provisions related to the commencement of Regulations 49 and 50

The following activities are expressly prohibited:

- Dumping invasive species cuttings in the countryside;
- Planting or otherwise causing to grow in the wild (hence the landowner should be careful not to cause further spread);
- Disposing of invasive species at a landfill site without first informing the landfill site that the waste contains invasive species material (this action requires an appropriate licence); and,
- Moving soil which contains specific invasive species in the Republic of Ireland unless under a licence from National Parks and Wildlife Service (NPWS).

See: https://biodiversityireland.ie/top10/10-most-unwanted-species/, for the current list of invasive species (for flora and fauna) in Ireland.

At any stage of a project, where invasive alien plant species are encountered, a licence (applied for through the Wildlife Licence Unit of the National Parks and Wildlife Service (NPWS)) for the removal/movement of invasive species from the site is required. In the event that herbicides or pesticides have been used, the contaminated materials may be classed as a hazardous waste or non- hazardous waste and will be required to be appropriately disposed of at an appropriately licenced facility.

4.2 Lifespan Extension

Generally, manufacturers of solar PV equipment will specify an operational lifespan of the equipment. This means the period after which the manufacturer recommends it be decommissioned or replaced. Sometimes the lifespan of an installation may be set by other bodies, such as the consenting Local Authority, which may specify through planning permission conditions, a lifespan of an installation. Unless specified by a statutory body, it is up to the owner to determine the lifespan of the installation ultimately, however it is recommended to have due regard to the manufacturer's instructions.

4.2.1 Planning

For smaller scale projects, including those that were exempted development and those that required planning permission at installation, there will likely not be any specific conditions in relation to the lifespan of the installation. Exempted development installations are only limited by the lifespan of the technology itself. The installation may remain in place for as long as the property owner wishes. For installations that required planning permission for construction, there may be a condition attached in relation to the lifespan of the installation. If there is, this must be complied with, however if not, the property owner may leave the installation in place according to their own wishes.

Regarding larger scale projects it is more likely that lifespan extension will be dealt with by condition, meaning that within the conditions attached to the original planning permission, it will directly set out how to carry out a lifespan extension. Typically, this will specify that further planning consent is required. If there is no specific condition, you may not require planning permission. If you have any doubts whether planning permission is required, you may contact your Local Authority and request a Section 5 Declaration, in which it will be determined if your works are exempt from planning permission or not.

4.2.2 Licences

4.2.2.1 Disability Access Certificate

Over the period of operation for a larger scale Solar PV installation, it may be required to re-obtain a Disability Access Certificate if there is a material alteration to the building itself where additional floor area is provided within an existing building, a subdivision of the building, or an extension of greater than 25m^2 occurs.

Please refer to **Section 2.4.5.7** for further information about Disability Access Certificates.

4.2.2.2 Derogation Licence

To facilitate a lifespan extension of a Solar PV installation, there may be a need to interfere with a protected species, if they happen to be interrupting safe and efficient operation of the Solar PV installation. As such, a Derogation Licence would be required.

Please refer to **Section 2.4.5.8** for further information about Derogation Licences.

4.2.2.2.1 Licence to Disturb Bats or their Breeding or Resting Places

During the lifespan extension of a Solar PV installation, it may become necessary to disturb bats and/or their breeding or resting places to ensure the safe and efficient operation of the Solar PV installation. This activity would require the associated licence.

Please refer to **Section 2.4.5.8.1** for further information about Derogation Licences to Disturb Bats or their Breeding or Resting Places.

4.2.2.3 Tree Felling Licence

To enable the lifespan extension of a Solar PV installation, it may become necessary to engage in tree felling activity on the site of a Solar PV as trees mature and potentially encroach or obstruct panels.

Please refer to **Section 2.4.5.9** for further information about Tree Felling Licences.

4.2.2.4 Licence to Interfere with or Destroy the Breeding Places of Any Wild Animals

Similar to the case of Derogation Licences, during lifespan extension of a Solar PV installation, it may become necessary to interfere with, or destroy the breeding place of wild animals, thus requiring an associated licence.

Please refer to **Section 2.4.5.10** for further information about Licences to Interfere with or Destroy the Breeding Places of Any Wild Animals.

4.3 Re-Powering

Re-powering means retrofitting and upgrading existing renewable energy installations with better equipment and technology, to improve the efficiency of the installation, while also allowing for an extended lifespan (given the newer infrastructure installed). For Solar PV, re-powering would likely see the panels used upgraded for ones that are more energy dense, allowing for more energy to be produced using the same area. This may also necessitate the upgrading of associated ancillary equipment such as transformers or inverters.

4.3.1 Planning

For smaller scale projects, specifically those that were classed as exempted development previously, planning permission is likely not required for re-powering. This is conditional on meeting the design regulations set out in **Section 2.2.1**. From a planning perspective, it is best to approach considering it like a new project, and so it would be useful to utilise the *SEAI Single Point of Contact Renewable Energy* online tool for guidance, in addition to complying with the regulations.

For projects that previously required planning permission, including larger scale installations, planning permission may be required.

The original planning permission may contain a condition specifying that any further works on the site requires further planning permission to be obtained. If there is no such condition, you may still require further planning permission, as the works required may be substantial. It is recommended that you consult with the Local Authority regarding re-powering, and potentially seek a Section 5 Declaration. It is likely that permission will be required, as re-powering may be classed as 'land use intensification'.

4.3.2 Licences

4.3.2.1 Grid Connection Offers

When re-powering a Solar PV installation, it may be required to obtain a further grid connection offer or electricity provision licences, suitable for the scale of your particular proposed project. Please refer to the previous sections listed below regarding the various grid connection offers available:

- Mini-Generation Grid Connection Offer: **Section 2.3.2**
- Small Scale Grid Connection Offer**: Section 2.3.3**
- ECP Cat A Grid Connection Offer**: Section 2.3.4**
- ECP Cat B Grid Connection Offer: **Section 2.3.5**
- ECP Cat C Grid Connection Offer: **Section 2.3.6**
- EirGrid Connection Offer: **Section 2.3.7**
- Notification of Intention to Construct or Reconstruct, and/or to Generate Electricity from a Generation Station not exceeding 10 MW: **Section 2.3.8**
- Licence to Generate: **Section 2.3.9**
- Licence to Supply: **Section 2.3.10**
- Authorisation to Construct or Reconstruct a Generating Station: **Section 2.3.11**
- Wayleave Consent: Section 48 to Lay Electric Cables: **Section 2.3.12**

- Wayleave Consent: Section 49 to Lay Electric Cables: **Section 2.3.13**
- Transmission Use of System (TUoS) Agreement: **Section 2.3.14**
- Distribution Use of System (DUoS) Agreement: **Section 2.3.15**

4.3.2.2 Commencement Notice / 7-Day Notice

In accordance with the Building Control Regulations, you are obliged to submit a *Commencement Notice* or a *7-Day Notice Application Form* with a *Seven Day Statutory Declaration* prior to commencement of the development to Building Control Section of the Local Planning Authority, giving notice of the intention to start work, including works for the re-powering of an installation.

Please refer to **Section 2.4.6** for further information about Commencement Notices / 7-Day Notices.

4.3.2.3 Abnormal Loads Permit (Permit for Specialised Vehicles)

You may encounter the need to transport abnormal load using specialist HGVs during re-powering of a Solar PV installation.

Please refer to **Section 4.1.2.4** for further information about Abnormal Loads Permits.

4.3.2.4 Section 254 Licence (Items on Public Roads)

During re-powering of a Solar PV installation, you may be required to place items or run temporary cables along a public road. Should this be the case, you will require a Section 254 Licence from the relevant Local Authority.

Please refer to **Section 2.4.5.3** for further information about Section 254 Licences.

4.3.2.5 Fire Safety Certificate

Given the nature of re-powering and the structural changes that will likely take place, you may require a new Fire Safety Certificate for the updated installation.

Please refer to **Section 2.4.5.4** for more information about Fire Safety Certificates.

4.3.2.6 Disability Access Certificate

Given the nature of re-powering and the structural changes that will likely take place, you may require a new Disability Access Certificate for the updated installation.

Please refer to **Section 2.4.5.6** for more information about Disability Access Certificates.

4.3.2.7 Derogation Licence

Over the course of the re-powering of a Solar PV installation, there may be a need to interfere with a protected species, if they happen to be interrupting safe activity of construction or impede the construction of the Solar PV installation. As such, a Derogation Licence would be required.

Please refer to **Section 2.4.5.8** for further information about Derogation Licences.

4.3.2.7.1 Licence to Disturb Bats or their Breeding or Resting Places

During the re-powering of a Solar PV installation, it may become necessary to disturb bats and/or their breeding or resting places to ensure the safe and efficient works. This activity would require the associated licence.

Please refer to **Section 2.4.5.8.1** for further information about Derogation Licences to Disturb Bats or their Breeding or Resting Places.

4.3.2.8 Tree Felling Licence

During re-powering, it may become necessary to engage in tree felling activity on the site of a Solar PV to facilitate deconstruction / construction.

Please refer to **Section 2.4.5.9** for further information about Tree Felling Licences.

4.3.2.9 Licence to Interfere with or Destroy the Breeding Places of Any Wild Animals

Similar to the case of Derogation Licences, during re-powering of a Solar PV installation, it may become necessary to interfere with, or destroy the breeding place of wild animals, thus requiring an associated licence.

Please refer to **Section 2.4.5.10** for further information about Licences to Interfere with or Destroy the Breeding Places of Any Wild Animals.

5 Other Useful Resources

https://www.seai.ie/publications/SEAI-Solar-PV-Guide-For-Business.pdf

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