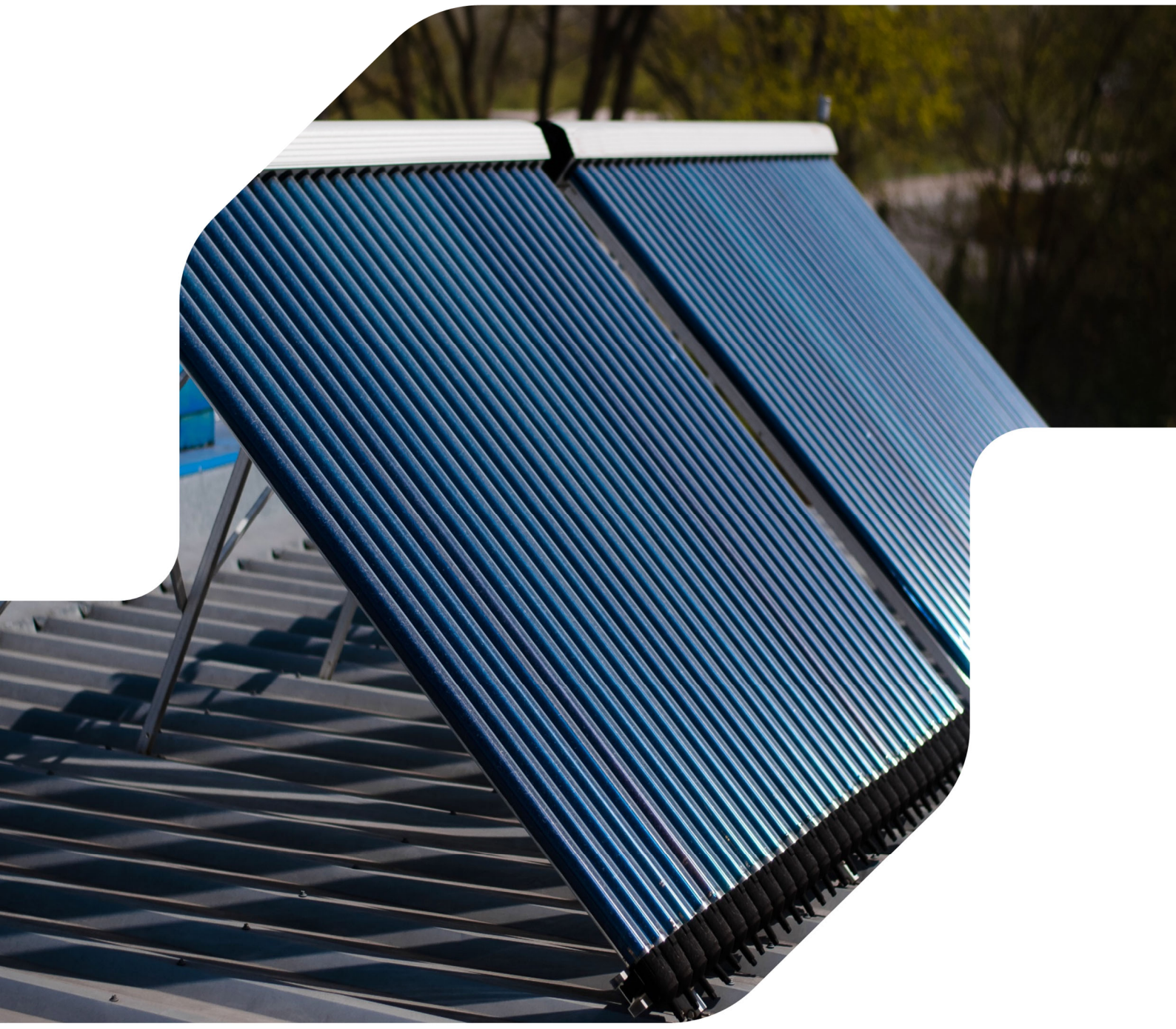


Solar Thermal

Manual of Consenting Procedures



Solar Thermal

Manual of Consenting Procedures

10 January 2024

Report prepared for SEAI by:
RPS Group
IE000527 10 January 2024



Disclaimer

The information contained in this report is for general information purposes only, and should not be construed as legal and/or professional advice on any matter and may not address the specific circumstances of a particular individual or organisation and is provided on an “as is” and “as available” basis” and without warranties express or implied.

While every effort has been made to ensure the accuracy of the contents of this report, SEAI accepts no responsibility or liability whatsoever to any party for any loss or damage claimed to arise from any interpretation or use of the information contained in this report, or reliance on, or action taken by any person or organisation, wherever they are based, as a result, direct or otherwise, of, information contained in, or accessed through, this report, whether such information is provided by SEAI or by a third party. Delivery of this report does not establish a client relationship between SEAI and the recipient of the report. The recipient uses this report strictly at its own risk and SEAI takes no responsibility for its contents and disclaims any responsibility to update the report.

Public disclosure authorised. This report may be reproduced in full or, if content is extracted, then it should be fully credited to SEAI and this disclaimer should be published on any such extracted content.

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.

© Sustainable Energy Authority of Ireland

Reproduction of the contents is permissible provided the source is acknowledged.

Contents

1	Introduction	4
1.1	Purpose of Manual	4
1.2	An Introduction to Solar Thermal Energy	4
2	Design and Construction Stage	5
2.1	Feasibility and Design Phase	5
	2.1.1 Commercial Feasibility	5
	2.1.2 Enabling Tasks	5
	2.1.3 Design	6
2.2	Planning Phase	6
	2.2.1 Households and Self-Consumption Projects	6
	2.2.2 Commercial and Large-Scale Projects	14
	2.2.3 Solar Safeguarding Zones	15
2.3	Grid Connection	15
2.4	Pre-Construction	15
	2.4.1 Renewable Energy Support Scheme	15
	2.4.2 Project Financing	16
	2.4.3 Planning Permission Amendment and Conditions	16
	2.4.4 Appointment of Construction Contracts	16
	2.4.5 Preconstruction licences	16
2.5	Construction	25
	2.5.1 Planning Permission Conditions	25
	2.5.2 Commissioning	25
3	Operations and Maintenance Stage	26
3.1	Licences	26
	3.1.1 Ecological Consents, Notifiable Actions/ Consents/ Derogations Licences	26
	3.1.2 Tree Felling Licence(s)	26
	3.1.3 Removal of Invasive Alien Species	26
4	Project End Stage	27
4.1	Decommissioning	27
	4.1.1 Planning	27
	4.1.2 Licences	27
4.2	Lifespan Extension	28
	4.2.1 Planning	28
	4.2.2 Licences	29
4.3	Re-Powering	29
	4.3.1 Planning	29
	4.3.2 Licences	29
5	Other Useful Resources	30

Tables

Table 1: Housing - Solar Thermal Exempted Development Regulations.....	7
Table 2: Industrial Buildings - Solar Thermal Exempted Development Regulations.....	7
Table 3: Business Premises / Light Industrial Buildings - Solar Thermal Exempted Development Regulations	9
Table 4: Apartment Buildings - Solar Thermal Exempted Development Regulations.....	11
Table 5: Services Buildings - Solar Thermal Exempted Development Regulations	11
Table 6: Agricultural Buildings/Holdings Buildings Solar Thermal Exempted Development Regulations.....	13
Table 7: Breakdown of the current rate of fees for a 7-day Notice Application	17
Table 8: Annex IV Species	21
Table 9: Current list of Protected Animal Species in Ireland	23

1 Introduction

1.1 Purpose of Manual

This manual has been produced to accompany the *SEAI Single Point of Contract Renewable Energy* online tool. It provides a more detailed overview of specific technological, legislative, and regulatory information in relation to solar thermal energy. This manual provides guidance and assists users in navigating which consents and licenses are required for the installation, operation, maintenance, and project end procedures of projects for solar thermal energy.

Solar thermal projects can vary in scale and output, and so there are different scales of regulation relevant to a specific project. Larger commercial ventures will require more consents and licenses than a domestic solar thermal 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 Thermal Energy

In the pursuit of efficient and sustainable energy solutions, solar thermal panels have emerged as a promising technology that harnesses the sun's radiant heat to generate usable energy. Unlike solar photovoltaic (PV) systems that convert sunlight directly into electricity, solar thermal panels focus on capturing the sun's thermal energy to produce heat for various applications. This innovative approach offers an environmentally friendly and cost-effective alternative to traditional heating methods, contributing to both energy conservation and reduced greenhouse gas emissions.

Solar thermal panels employ advanced materials and engineering to optimize heat capture and transfer. These panels, also known as solar collectors, come in various designs, each tailored to specific applications such as domestic hot water, space heating, and even industrial processes.

The fundamental principle behind solar thermal panels involves the absorption of sunlight by specially designed surfaces, known as absorbers, within the collectors. These absorbers are often coated with selective materials that have high absorption and low emission properties, allowing them to efficiently convert sunlight into heat. Once absorbed, the energy is transferred to a heat transfer fluid, which circulates through the system and carries the captured heat to a storage or distribution system.

Solar thermal panels can be classified into several types based on their design and usage. Flat-plate collectors are perhaps the most common, consisting of an insulated box with a dark absorber plate covered by a transparent glass or plastic cover. These collectors are suitable for residential applications such as water heating and space heating. Concentrated Solar Power (CSP) systems, use mirrors or lenses to focus sunlight onto a small area, generating higher temperatures for industrial processes.

One of the key advantages of solar thermal panels is their ability to provide consistent and reliable heat, especially in regions with abundant sunlight, however, they are very capable of functioning efficiently in the Irish climate too. They are particularly effective in reducing the energy demands of water heating, a significant portion of household energy consumption. Installing a solar thermal system helps to reduce energy bills by offsetting either electricity consumption, or fossil fuel consumption, depending on the chosen application.

The SEAI offer a fixed grant of €1,200 for the installation of a solar water heating system (an application of solar thermal technology). More information about this grant can be found [here](#). As solar thermal technology continues to advance, new innovations are addressing challenges related to energy storage, system efficiency, and integration with existing infrastructure.

By harnessing the sun's heat, solar thermal panels contribute to a more sustainable energy landscape. Their utilisation helps reduce the reliance on fossil fuels, which are not only finite but also contribute to environmental degradation and climate change. This technology assists in the pursuit of a greener future, where homes and industries are powered by the warmth of the sun, fostering a more harmonious relationship between the built world and the natural environment.

2 Design and Construction Stage

2.1 Feasibility and Design Phase

The first phase of a solar thermal project is feasibility and 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 thermal installation you require, depending on your heat requirements and the proposed position of the array.

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 thermal projects is detailed below. If you are only considering a small scale, self-consumption project, please continue to **Section 0**.

2.1.1 Commercial Feasibility

The feasibility of a solar thermal 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, taking into account 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 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 for 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 the 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 Design

For larger scale projects, following the kick-off and 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.

2.2 Planning Phase

2.2.1 Households and Self-Consumption Projects

Generally, planning permission is not required for the installation of solar thermal 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 heat consumption within the curtilage of the subject site. If the project is primarily for 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 property owner, as the property owner 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 PV 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 thermal 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 Thermal Exempted Development Regulations

Houses	
Description of Development	Design Regulations
Placing or erection of a solar thermal installation on a roof of a house, or on a roof of any ancillary buildings within the curtilage of a house (not including apartments)	<p>The distance between the plane of the roof and the solar thermal shall not exceed 50 cm in the case of a flat roof or 15 cm in any other case.</p> <p>The solar thermal panels shall be a minimum of 50 cm from the edge of a roof on which it is mounted.</p>
Placing or erection of a solar thermal installation within the curtilage of a house	<p>Any free-standing solar thermal installation shall not be placed or erected forward of the front wall of the house.</p> <p>The total aperture area of any free-standing solar thermal panels taken together with any other such existing free-standing panels shall not exceed 25 m².</p> <p>The placing or erection of any free-standing solar thermal 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 m².</p> <p>The height of any free-standing solar thermal installation shall not exceed 2.5 m at its highest point above ground level.</p> <p>The placing or erection of any free-standing solar thermal installation within an Architectural Conservation Area shall only be exempted development if those works would not materially affect the character of the area.</p> <p>Development under this Class which causes hazardous glint and/or glare shall not be exempted development and any solar thermal 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.</p>

Table 2: Industrial Buildings - Solar Thermal 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 thermal installation.	<p>Where such development is located within a solar safeguarding zone, the planning authority for the area shall be notified in writing no later than four weeks after the commencement of such development and such notification shall include details regarding the location and scale of the development.</p> <p>The distance between the plane of the roof and the solar thermal panels shall not exceed 2 m in the case of a flat roof or 1.2 m in any other case.</p> <p>The solar thermal panels shall be a minimum of 2 m in the case of a flat roof or 50 cm in any other case from the edge of the roof on which it is mounted.</p>

Industrial Buildings

Development shall not be exempted development where the highest part of the solar thermal installation exceeds the highest part of any roof that is not a flat roof (excluding any chimney).

Any ancillary equipment associated with solar thermal 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 thermal panels on a flat roof shall not exceed 1.6 m above roof level.

Any ancillary equipment associated with solar thermal panels on a flat roof shall be a minimum of 2 m 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 thermal 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 thermal 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 thermal 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 four 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 thermal panels taken together with any other such existing wall mounted panels shall not exceed 75 m².

The distance between the plane of the wall and the solar thermal collector panels shall not exceed 15cm.

The solar thermal 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 thermal 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 thermal 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 thermal 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 four 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 thermal 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 thermal panels taken together with any other such existing free-standing panels shall not exceed 75 m².

The height of any free-standing solar thermal installation shall not exceed 2.5 m at its highest point above ground level.

The placing or erection of any free-standing solar thermal 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 thermal collector 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 thermal collector 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 Thermal Exempted Development Regulations

Business Premises / Light Industrial Buildings	
Description of Development	Design Regulations
<p>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 thermal installation.</p>	<p>Where such development is located within a solar safeguarding zone, the planning authority for the area shall be notified in writing no later than four weeks after the commencement of such development and such notification shall include details regarding the location and scale of the development.</p>
	<p>The distance between the plane of the roof and the solar thermal panels shall not exceed:</p> <ul style="list-style-type: none"> a. for a business premises, 1.2 m in the case of a flat roof or 15 cm in any other case. b. for a light industrial building, 2 m in the case of a flat roof or 50cm in any other case.
	<p>The solar thermal panels shall be a minimum of 2 m in the case of a flat roof or 50 cm in any other case from the edge of the roof on which it is mounted.</p>
	<p>Development shall not be exempted development where the highest part of the solar thermal installation exceeds the highest part of any roof that is not a flat roof (excluding any chimney).</p>

Business Premises / Light Industrial Buildings

Any ancillary equipment associated with solar thermal 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 thermal panels on a flat roof shall not exceed 1.6 m above roof level.

Any ancillary equipment associated with solar thermal on a flat roof shall be a minimum of 2 m 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 thermal 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 thermal 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 thermal 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 four 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 thermal 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 thermal panels taken together with any other such existing free-standing panels shall not exceed 75 m².

The height of any free-standing solar thermal installation shall not exceed 2.5 m at its highest point above ground level.

The placing or erection of any free-standing solar thermal 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 thermal 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 thermal 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 Thermal Exempted Development Regulations

Apartment Buildings	
Description of Development	Design Regulations
<p>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 thermal installation.</p>	<p>Where such development is located within a solar safeguarding zone, the planning authority for the area shall be notified in writing no later than four weeks after the commencement of such development and such notification shall include details regarding the location and scale of the development.</p>
	<p>The distance between the plane of the roof and the solar thermal panels shall not exceed 1.2 m in the case of a flat roof or 15 cm in any other case.</p>
	<p>The solar thermal panels shall be a minimum of 2 m in the case of a flat roof or 50 cm in any other case from the edge of the roof on which it is mounted.</p>
	<p>Any ancillary equipment associated with solar thermal panels shall not be placed or erected on a wall or any roof that is not a flat roof.</p>
	<p>The height of any ancillary equipment associated with solar thermal panels on a flat roof shall not exceed 1.6 m above roof level.</p>
	<p>Any ancillary equipment associated with solar thermal panels on a flat roof shall be a minimum of 2 m from the edge of the roof on which it is mounted.</p>
	<p>No sign, advertisement or object not required for the functioning or safety of the solar thermal installation shall be attached to or exhibited on such installation.</p>
<p>Development under this Class which causes hazardous glint and/or glare shall not be exempted development and any solar thermal 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.</p>	

Table 5: Services Buildings - Solar Thermal Exempted Development Regulations

Service Buildings ¹	
Description of Development	Design Regulations
<p>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 thermal installation.</p>	<p>Where such development is located within a solar safeguarding zone, the planning authority for the area shall be notified in writing no later than four weeks after the commencement of such development and such notification shall include details regarding the location and scale of the development.</p>

¹ *Educational, Health Centre / Hospital, Recreational / Sports Facilities, Places of Worship, Community Centre / Facility, Library and Sites providing gas, electricity, telecoms, water services, wastewater services operated by a statutory undertaker.

Service Buildings¹

The distance between the plane of the roof and the solar thermal panels shall not exceed 1.2 m in the case of a flat roof or 15 cm in any other case.

The solar thermal panels shall be a minimum of 2 m in the case of a flat roof or 50 cm in any other case from the edge of the roof on which it is mounted.

Any ancillary equipment associated with solar thermal 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 thermal panels on a flat roof shall not exceed 1.6 m above roof level.

Any ancillary equipment associated with solar thermal panels on a flat roof shall be a minimum of 2 m 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 thermal 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 thermal 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 thermal installation.

Any free-standing solar thermal 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 thermal panels taken together with any other such existing free-standing panels shall not exceed 75 m².

The height of any free-standing solar thermal installation shall not exceed 2.5 m at its highest point above ground level.

The placing or erection of any free-standing solar thermal 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 thermal 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 thermal 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 Buildings/Holdings Buildings Solar Thermal Exempted Development Regulations

Agricultural Buildings / Holdings²	
Description of Development	Design Regulations
<p>The placing or erection on a roof of an agricultural building, or on a roof of any ancillary buildings within the curtilage of an agricultural holding, of a solar thermal installation.</p>	<p>Where such development is located within a solar safeguarding zone, the planning authority for the area shall be notified in writing no later than four weeks after the commencement of such development and such notification shall include details regarding the location and scale of the development.</p>
	<p>The distance between the plane of the roof and the solar thermal panels shall not exceed 1.2 m in the case of a flat roof or 15 cm in any other case.</p>
	<p>The solar thermal panels shall be a minimum of 2 m in the case of a flat roof or 50 cm in any other case from the edge of the roof on which it is mounted.</p>
	<p>Development shall not be exempted development where the highest part of the solar thermal collector installation exceeds the highest part of any roof that is not a flat roof (excluding any chimney).</p>
	<p>Any ancillary equipment associated with solar thermal panels shall not be placed or erected on a wall or any roof that is not a flat roof.</p>
	<p>The height of any ancillary equipment associated with solar thermal panels on a flat roof shall not exceed 1.6 m above roof level.</p>
	<p>Any ancillary equipment associated with solar thermal panels on a flat roof shall be a minimum of 2 m from the edge of the roof on which it is mounted.</p>
<p>The placing or erection within the curtilage of an agricultural building/holding of a solar thermal installation.</p>	<p>No sign, advertisement or object not required for the functioning or safety of the solar thermal installation shall be attached to or exhibited on such installation.</p>
	<p>Development under this Class which causes hazardous glint and/or glare shall not be exempted development and any solar thermal 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.</p>
	<p>Any free-standing solar thermal 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.</p>
	<p>The total aperture area of any free-standing solar thermal panels taken together with any other such existing free-standing panels shall not exceed 75 m².</p>
	<p>The height of any free-standing solar thermal installation shall not exceed 2.5 m at its highest point above ground level.</p>

² *Educational, Health Centre / Hospital, Recreational / Sports Facilities, Places of Worship, Community Centre / Facility, Library and Sites providing gas, electricity, telecoms, water services, wastewater services operated by a statutory undertaker.

Agricultural Buildings / Holdings²

The placing or erection of any free-standing solar thermal 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 thermal 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 thermal 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 building, or on a wall of any ancillary buildings within the curtilage of an agricultural building/holding of a solar thermal installation.

The total aperture area of any wall mounted solar thermal collector panels taken together with any other such existing wall mounted panels shall not exceed 75m².

Where such development is located within a solar safeguarding zone, the planning authority for the area shall be notified in writing no later than four 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 wall and solar thermal collector panels shall not exceed 15cm.

The solar photo-voltaic or solar thermal collector panels shall be a minimum of 50cm from the edge of the wall on which it is mounted.

Any ancillary equipment associated with solar thermal collector panels shall not be placed erected on a wall or any roof that is not a flat roof.

No sign, advertisement or object not required for the functioning or safety of the solar thermal collector 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 thermal collector 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 heat within the curtilage of the site. Planning permission is sought from the relevant local authority ordinarily, however if the project proposed will generate 300MW (heat equivalent) 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 5 km around airports and airfields, and 3 km 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

As solar thermal collectors are designed to provide hot water through heat harnessed from the sun they are not calibrated for electrical collection or outputs. As such licences for grid connections are not required for this type of renewable energy project.

2.4 Pre-Construction

2.4.1 Renewable Energy 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 onshore wind farms. 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

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 Amendment and Conditions

As the planning phases may take place over an extended period of time, there is a possibility that an amendment may be required to the consented development agreed with the Local Authority, due to 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, where required (formal applications process where requested details are 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 an enforcement action.

2.4.4 Appointment of Construction Contracts

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 thermal solar panels and civil engineering works; or
2. Separate contracting, where individual aspects are contracted out to specific companies.

Typically, where a thermal solar development follows the turnkey route, the solar thermal panel provider will lead and subcontract various aspects to companies that would be deemed appropriate for the installation of the equipment.

Maintenance contracts are also usually agreed at this point where necessary.

2.4.5 Preconstruction licences

The following licences are suggested licences only. They will be updated in accordance with the approved guidance and legislation when it comes into force.

2.4.5.1 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 the Building Control Section of the Local Planning Authority, giving notice of the intention to start work.

The Building Control Authority must receive a Commencement Notice 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 online 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 7**.

Table 7: Breakdown of the current rate of fees for a 7-day Notice Application

Submission of a 7 Day Notice in Respect of:	Current Rate of Fees
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 on 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

2.4.5.2 Road Opening / Closing Licence

A temporary road closure may be needed in conjunction with a road opening licence. To comply with statutory requirements, **an application for a temporary road closure should be submitted 8 weeks in advance** to the relevant Local Authority.

A 'Road Opening Licence' is required 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 Licences can be applied through the [MRL website](#). You must register with the 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, (also known as 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.

2.4.5.3 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 various items or equipment, including the following which may be relevant to a Solar thermal 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.

2.4.5.4 Abnormal Loads Permit (Permit for Specialised Vehicles)

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. 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.

2.4.5.5 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.

2.4.5.6 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 Disability Access 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](#).

2.4.5.7 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 from 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.

2.4.5.7.1 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 a 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 authority³.

³ National Parks and Wildlife Service (NPWS), under EC (Birds and Natural Habitats) Regulations 2011-2021.

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'⁴ should also be referred to when carrying out works which may disturb them.

2.4.5.8 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. The Minister for Agriculture Food and the Marine grant this, and it 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 m of a building but excluding any building built after the trees were planted;
- A tree less than five 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 m 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 cms in diameter when measured 1.3 m 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 m³; and
 - the removal of trees for use on the farm does not exceed 15 m³ 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](#).

⁴ NPWS Bat Mitigation Guidelines for Ireland. Available online at: <https://www.npws.ie/sites/default/files/publications/pdf/IWM134.pdf>

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); and
- 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.

2.4.5.9 Derogation Licence

A derogation licence may be required when removing vegetation in preparation for tree felling. 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 document⁵ 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 and Porpoises	
Whales	
Marine Turtles	

⁵ European Commission Guidance document. Available online at: https://environment.ec.europa.eu/topics/nature-and-biodiversity/habitats-directive_en [accessed August 2023].

2.4.5.10 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 regulations that deal specifically with this scheduled list of species are:

- Regulation 49: Prohibition of introduction and dispersal of certain listed species;
- 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 the 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 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.

2.4.5.11 Ecological Consents, Notifiable Actions/ Consents/ Derogations Licences

If you are intending to develop on or in an area where wildlife could be impacted, consent may be required. Such consent may be in the form of notifiable actions or licences. Further permission may then be required in exceptional cases (e.g., species is threatened or in poor condition), when handling or movement of the protected species is necessary.

For the full breakdown and detail on the various activities that constitute a notifiable action for listed habitats and species please refer to the NPWS page here: <https://www.npws.ie/farmers-and-landowners/notifiable-actions/listed-habitats-and-species>.

2.4.5.12 Licence To Take or Interfere with Protected Plant Species for Scientific, Educational, or Other Such Purposes

As per the Flora (Protection) Order (2022), If any protected plant species is known/found/noted to be present in an area that is proposed to be developed, a licence to interfere with these species is required Under Section 21 of the Wildlife Act. Under Section 21, it is an offence for a person to cut, pick, uproot or otherwise take, purchase, sell or be in possession of any plant whether whole or part, of a species mentioned in the Order, or wilfully to alter, damage, destroy or interfere with the habitat of such a species, except under licence of the Minister, and then, strictly for scientific, educational or other such purposes.

A licence to take or interfere with protected plant species for scientific, educational, or other such purposes can be applied for through the granting authority, the NPWS. In the absence of any viable alternative, licences are granted where no significant damage will be caused to the conservation status of the species and where the adverse impact on the local population of species is kept to a minimum. Applications will only be considered if a licence is required for scientific, educational or other such purposes.

See <https://www.npws.ie/licencesandconsents/disturbance/protected-plant-species#:~:text=Under%20Section%2021%20it%20is,under%20licence%20of%20the%20Minister%2C> for further information.

2.4.5.13 Capture/Kill Protected Wild Animals for Education or Scientific Purposes Licence

A 'Capture/Kill Protected Wild Animals for Education or Scientific Purposes Licence' is required for all survey and monitoring of all protected species, **even where animals will not be handled** (under Section 23 and Section 34 of the Wildlife Act 1976 (as amended)).

Although the application form/licence refers to 'capture or killing of protected wild animals', licences are required to investigate sites where protected species are found. Due to the various protected species' status as threatened and or in poor condition, it is only in exceptional cases that handling, or movement of animals is licenced. Licences will only be granted if the licenced activity will result in no significant adverse impact on the conservation of the species. For example, if the freshwater pearl mussel is suspected to occur in an aquatic habitat impacted by a development, this licence would be required to potentially translocate this species to an appropriate location. The decision for granting the licence will be made by the wildlife licence unit through the NPWS.

See the [application forms](#) and further information.

2.4.5.14 Licence To Photograph or Film a Protected Wild Animal or Bird

In general, a licence is not required for photography/filming of protected wild animals or birds provided that there will be no risk of disturbance to the breeding place of any animal, a nest containing eggs or unflown young of any bird. However, **if you intend to photograph a protected wild animal or bird on or near the breeding place of such an animal or bird, you should apply for this licence.**

For a person to take or make photographic, video or other pictures of a protected wild animal of a species specified in the licence, on or near the breeding place of such an animal, a licence may be issued by the Minister (Under Section 23 (6)(b) of the Wildlife Act, 1976 (as amended)). Applications for permissions are made on a standard application form ([Licence to Photograph/Film a Protected Wild Animal](#)) and submitted to the wildlife licence unit of the National Parks and Wildlife service.

For a person to take or make photographic, video or other pictures of a protected bird of a species specified in the licence, or a wild bird of a species specified in the licence on or near a nest containing eggs or unflown young, a licence may be issued by the Minister (Section 22 (9)(f) of the Wildlife Act, 1976 (as amended)). Applications for permissions are made on a standard application form ([Licence to Photograph or Film a Protected Wild Bird](#)) and submitted to the wildlife licence unit of the National Parks and Wildlife service.

Animal species protected under the Wildlife Act are listed **Table 9**.

Table 9: Current list of Protected Animal Species in Ireland

Mammals			Amphibians	Reptiles	Fish	Invertebrates
All Bat Species	Otter	All Seal Species	Natterjack Toad	Common Lizard	Basking Shark	Freshwater Crayfish
Badger	Pine Marten	All Whale Species	Common Frog	Leatherback Turtle		Freshwater Pearl Mussel
All Deer Species	Red Squirrel	All Dolphin Species	Common Newt			Kerry Slug
All Hare Species	Pygmy Shrew	All Porpoise Species				
Hedgehog	Stoat					

2.4.5.15 Water Abstraction Registration

By law, if you abstract 25 m³ (25,000 litres) of water or more per day, you must register this abstraction with the Environmental Protection Authority (EPA) (e.g., used for dust suppression). Although not a licence (which is under development) failure to register can incur a Class A fine (a fine not exceeding €5,000). Requirements are set out in the [Water Environment \(abstractions and Associated Impoundments\) Bill 2022](#).

The development of a register of water abstractions is a requirement of EU law under the Water Framework Directive (2000/60/EC). New abstractions must be registered within one month of the start of the abstraction. If you reported your water abstraction to a public authority (such as your Local Authority) in the past, you must also register your water abstraction with the EPA.

Temporary abstraction of 25 m³ (25,000 litres) of water or more per day must be registered, unless the abstraction is a one-off occurrence with a duration no more than 24 hours that is not going to be repeated at any regular or irregular interval. For all other temporary abstractions, a point of abstraction must be identified, and the maximum abstraction should be used when registering. When a one-off temporary abstraction ceases, it should be de-registered. This will be required for water abstraction to feed an industrial process or to dewater a groundwater body to facilitate a deep excavation during construction. If you have any queries regarding this licence you can contact the EPA at edenabstractionsupport@epa.ie and licencing is administered by the EPA via the EDEN portal (<https://www.edenireland.ie/>).

2.4.5.16 Ministerial Consent for works at/near a National Monument

Ministerial consent may be required when digging for foundations at or near a known national monument. Section 14 of the National Monuments Act 1930 (as amended) requires that the consent of the Minister is required for archaeological works at or near a national monument in the ownership or guardianship of the Minister or a local authority or to which a preservation order applies. A minimum of two months written notice is required, by the applicant. The Minister is required to consult with the Director of the National Museum of Ireland in relation to such an application for consent.

2.4.5.17 Detection Device Consent (Archaeological)

Consent to use a detection device may be required when digging for foundations in the vicinity of a known heritage site to rule out or determine if there are further archaeological objects of interest.

A detection device is defined as '*a device designed or adapted for locating any metal or mineral on or in the ground, on, in or under the seabed or on or in land covered by water but does not include a camera*'.

Section 2 of the National Monuments Act 1987 (as amended) requires that consent must be obtained for the use of a detection device to search for archaeological objects at a specified place or for the use and possession of a detection device at a place protected under the National Monuments Acts (1987). Licences are issued by the [National Monuments Service](#).

2.4.5.18 Excavation Licence (Archaeological)

An excavation licence consent is required before digging at a heritage site can commence. Section 26 of the National Monuments Act 1930 (as amended) requires that excavations for archaeological purposes must be carried out by archaeologists acting under an excavation licence. Excavation Licence will likely be accompanied by an Excavation Risk Assessment process as Construction Regulations require contractors to guard against the dangers from a fall or dislodgement of material in an excavation.

An excavation licence can only be held by an appropriately experienced and competent Archaeologist who are competent in archaeological excavation techniques, and conversant with Irish archaeology.

The Safety, Health and Welfare at Work Act 2005 requires a risk assessment to be performed by contractors before undertaking excavation work.

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 specify 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 Commissioning

Following the construction of a Solar thermal 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 collect heat 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 Thermal project, as such may require further attention from the owner/operator. This may be because of the legislative basis for the consents or as a change of legal circumstance or an environmental change over time.

3.1 Licences

Depending on the placement of the project the below licences and or additional licences may or may not be required for the safe operation and maintenance of the site. It is the responsibility of the owner/operator of the solar thermal site to keep up to date/abreast of the relevant necessary licences.

3.1.1 Ecological Consents, Notifiable Actions/ Consents/ Derogations Licences

If you are intending to develop on or in an area where wildlife could be impacted, consent may be required. Such consent may be in the form of notifiable actions or licences. Further permission may then be required in exceptional cases (e.g., species is threatened or in poor condition), when handling or movement of the protected species is necessary. For the full breakdown and detail on the various activities that constitute a notifiable action for listed habitats and species please refer to the [NPWS](#) page.

3.1.2 Tree Felling Licence(s)

During operation of a solar thermal installation, it may become necessary to fell trees to ensure that there is an unimpeded light source for the safe and optimal operation of the solar panels. Please refer **Section 2.4.5.8** for further information about licence to fell trees.

3.1.3 Removal of Invasive Alien Species

During operation of a solar thermal installation, it may become necessary to remove invasive species if they are discovered during routine maintenance or surveys, thus requiring an associated licence. Please refer to **Section 0** for further information about Licences to remove invasive species.

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 thermal 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 thermal 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 thermal 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 thermal 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 a planning consent, 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 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 of 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

The decommissioning phase of a project may require reapplication for licences applied for during the pre-construction phase along with additional licences.

4.1.2.1 Afforestation Licence (Technical Approval)

An Afforestation Licence “provides the permission to plant all or part of the areas specified, and the areas planted meet scheme requirements”⁶. 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>.

4.1.3 Other Licence(s)

In addition to the above licence other licences may apply such as abnormal load or road closures if the site is to be fully decommissioned – these licences will be subject to the conditions laid out under planning.

4.2 Lifespan Extension

Generally, manufacturers of solar thermal 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 body, such as the consenting Local Authority, which may specify through planning permission, 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.

⁶ Technical Approval is granted by the Minister for Agriculture, Food and the Marine provides authority (under Section 7 of the Forestry Act 2014, as amended)

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

As project extension entails the use of the equipment for a slightly longer period of time the licences would fall under the operation and maintenance remit. For further information on operation and maintenance licences please refer back to **Section 3** of this document.

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 thermal, repowering would likely see the panels used upgraded for ones that are more efficient ones, allowing for more energy to be captured using the same area. This may also necessitate the upgrading of associated ancillary equipment.

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 0**. 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

With the exception of the certificates that will not be required for renewal (e.g., Disability Access Certificate) it is likely that the remaining licences will require renewal or reapplication. It is recommended that you consult with the various granting authorities regarding re-powering of your project and seek advice as to whether renewal/reapplication is required.

5 Other Useful Resources

SEAI Solar Thermal Grant: <https://www.seai.ie/grants/home-energy-grants/solar-water-heating-grant/>

SEAI A Homeowner's Guide to Solar Thermal for Hot Water: <https://www.seai.ie/publications/Homeowners-Guide-To-Solar-Thermal.pdf>

European Solar Thermal Industry Federation: <https://solarheateurope.eu/welcome-to-solar-heat-europe/>

Energy Saving Trust (Note: UK Source): <https://energysavingtrust.org.uk/advice/solar-water-heating/>

Back page



Rialtas na hÉireann
Government of Ireland

Sustainable Energy Authority of Ireland

Three Park
Place Hatch
Street Upper
Dublin 2
Ireland
D02 FX65

w: www.seai.ie

e: info@seai.ie

t: 01 8082100

