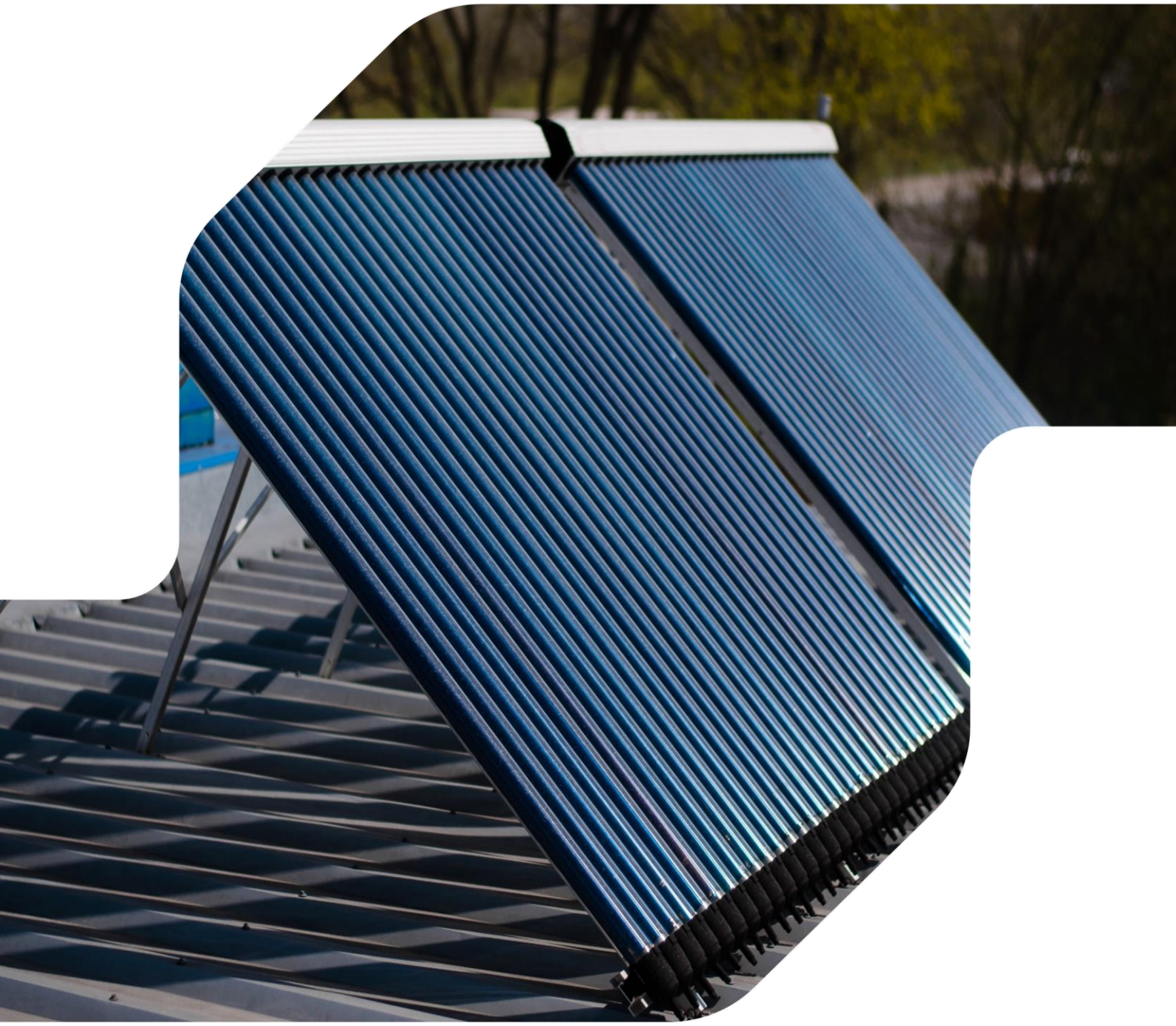
SUSTAINABLE ENERGY AUTHORITY OF IRELAND

Rialtas na hÉireann
Government of Ireland

Solar Thermal

Manual of Consenting Procedures



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Manual of Consenting Procedures

April 2025

Report prepared for SEAI by:
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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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Abbreviations

Abbreviation	Definitions
A	Amps
AA	Appropriate Assessment
ARCs	Activities Requiring Consent
BCA	Building Control Authority
BCA	Building Control Authority
BCMS	Building Control Management System
CPPA	Corporate Power Purchase Agreements
CEG	Clean Export Guarantee: The Clean Export Guarantee
CEMPs	Construction Environmental Management Plans
CHP	Combined Heat and Power
CIÉ	Córas Iompair Éireann
COR	Certificate of Registration
CPPA	Corporate Power Purchase Agreements
CRU	Commission for Regulation of Utilities
CSP	Concentrated Solar Power
DAFM	Department of Agriculture, Food and the Marine
DCCAE	Department of Communications, Climate Action and Environment
DSO	Distribution System Operator
DUoS	Distribution Use of System Agreement
EC	European Commission
EcIA	Ecological Impact Assessment
ECP	Enduring Connection Policy
EDEN	Environmental Data Exchange Network
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
ESB	Electricity Supply Board
EU	European Union
FRA	Floos Riska Assessment
GEP	Good Ecological Potential
GES	Good Ecological Status
IROPI	Imperative Reasons of Overriding Public Interest'
LFL	Limited Felling Licence
LVIA	Landscape and Visual Impact Assessment Landscape and Visual Impact Assessment
MRL	MapRoad Licensing
MW	Mega Watt
NIS	Natura Impact Statement
NPF	National Planning Framework
NPWS	National Parks and Wildlife Service
ORESS	Offshore Renewable Electricity Support Scheme
pSPA	proposed Special Protection Areas
PV	photovoltaic
RESS	Renewable Electricity Support Scheme

Abbreviation	Definitions
SAC	Special Areas of Conservation
SEAI	Building Control Authority
SME	Small and medium enterprises
SPA	Special Protection Areas
SRESS	Small-Scale Renewable Electricity Support Scheme
SSZ	Solar Safeguarding Zones Solar Safeguarding Zones
TIA	Traffic Impact Assessment
TPO	Tree Preservation Order
UK	United Kingdom
WFD	Water Framework Directive

1 Introduction

1.1 Purpose of this Guide

SEAI is the Single Point of Contact for guidance on the licensing and permitting requirements for renewable energy projects in Ireland. The aim of the initiative is to make it easier to find out what licences and permits may be required during the different stages of your solar thermal energy project. As part of this initiative, SEAI has produced an online tool. The online Licence and Permit finder tool is located at Renewable Energy Consenting | Single Point of Contact | SEAI. It allows you to search for licenses and permits that may be required for your project at relevant stages of development.

This guide 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 requirements in relation to the development of a solar thermal energy project in Ireland. This guide provides guidance and assists users in identifying the applicable consents and licences that may be required for the design and construction phase, operations and maintenance phase, and end-of-life procedures for solar thermal energy projects. It is important to note that SEAI has no decision-making role in the consenting process but is available to provide guidance and support in navigating and understanding it.

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.

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 supports the pursuit of a greener future, where homes and industries are powered by the sun's warmth, fostering a more harmonious relationship between the built world and the natural environment. As solar thermal technology continues to advance, new innovations are addressing challenges related to energy storage, system efficiency, and integration with existing infrastructure.

Solar thermal panels employ advanced materials and engineering to optimise 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 convert sunlight into heat efficiently. 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 also capable of functioning efficiently in the Irish climate. 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 offers a fixed grant of €1,200 for the installation of a solar water heating system, an application of solar thermal technology. For more information about this grant, please visit the following page.

1.3 Solar Thermal Energy Project Stages

The life cycle of a solar thermal energy project has several phases.

Initial assessments are carried out during the feasibility phase to determine the project's viability. This can also provide insight into which permits/licences will be required, as these can vary based on project type and specific location. The planning and permitting phases, as well as the pre-construction phase, are where licences/permits and any relevant advance requirements are determined for the project. These phases can overlap and occur simultaneously. The successful completion of the project is followed by commissioning, during which final tests are conducted.

Licences or permits may be required during the project's operation to ensure continuous maintenance is permitted. Finally, decommissioning a project will also require licensing/permitting, depending on whether the project will be removed, extended, or replaced. The following sections of this manual outline each phase of the life cycle, including relevant permits, licences, regulatory requirements, and schemes associated with each phase.

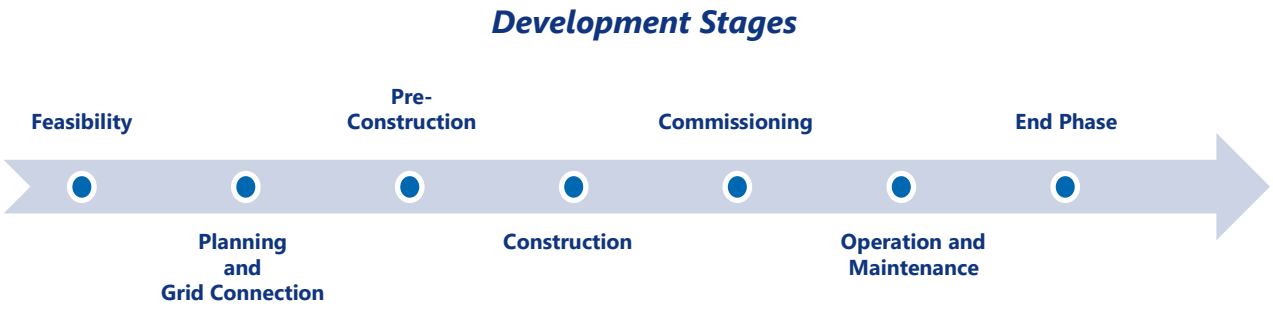

Figure 1-1: Solar Thermal Energy Project - General Development Stages

2 Design and Construction Phase

2.1 Site Selection and Feasibility

The first phase of a solar thermal energy project is feasibility and design. Many of these considerations can be assisted by your contractor; however, before selecting a contractor, it is best to have an idea of the size of solar thermal installation you require, based on your heat requirements and the proposed position of the installation.

For your convenience, the SEAI also facilitates One Stop Shops for solar thermal 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 energy projects is detailed below. If you are only considering a small-scale, self-consumption project, please continue to **Section 2.10.2.**

2.2 Commercial Feasibility

The feasibility of a solar thermal project is vital, as it 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 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 points are, therefore, potential guidelines only when examining the feasibility of a selected site. Depending on the type of project you are seeking to construct, feasibility considerations may differ:

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

Local Authorities may also have published information on the construction of solar energy developments in the area, which may impact planning decisions or serve as helpful guidance. Generally, a multidisciplinary team will be best placed to guide feasibility studies across various fields, including planning, engineering, financial consultants, and developers.

The outcome of feasibility assessments will help determine the necessary licences/permits for your project; therefore, it is important to consider your project's specific assessment needs to ensure preparation for the planning and permitting phases.

Developing a project plan that maps out all the stages needed to realise your project, moving toward design, is important. A consent plan will be an essential tool in understanding the potential timelines, project milestones, and stages whereby permissions are required to proceed with various elements of your project,

allowing you to plan accordingly.

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

2.3 Constraints Identification

A constraint identification and mapping exercise is a useful method for identifying and visually presenting constraints that may exist for a specific site. This can show existing infrastructure and features, such as sensitive areas and houses, etc. This will enable a solar thermal energy developer to visually identify specific constraints, rank them, and facilitate better siting of project infrastructure.

2.4 Routes to Market for Sale of Electricity

There are a number of options to consider when exploring potential avenues for selling electricity generated from a commercial solar thermal energy project.

2.4.1 Clean Export Guarantee

The Clean Export Guarantee (CEG) tariff provides an opportunity for micro- and small-scale generators in Ireland to receive payment from their electricity supplier for all excess renewable electricity they export to the grid. This remuneration is intended to reflect the wholesale market value of the electricity.

For further information, please visit the CRU website at the following link: https://www.cru.ie/consumer-information/microgeneration/

2.4.2 Small-Scale Renewable Electricity Support Scheme (SRESS)

The Small-Scale Renewable Electricity Scheme (SRESS) is a non-auction renewable electricity initiative run by the Department of Environment, Climate and Communications. Designed specifically for community, farm, and SME projects with a capacity between 50 kW and 6 MW, SRESS offers a simpler, non-competitive route to market. It aims to facilitate community participation by providing an easier pathway compared to the competitive RESS auction process, allowing farmers, businesses, and others to maximise their involvement in the energy transition.

For further information, please click on the following link: https://www.gov.ie/en/publication/96110-small-scale-generation/

Community projects are also supported through the SEAI Community Enabling Framework. For more information, please click the following link: https://www.seai.ie/plan-your-energy-journey/for-your-community/enabling-framework

2.4.3 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 solar energy, to help Ireland meet its domestic and European Union carbon reduction targets by 2030.

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

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.

For further information on the RESS process, including the latest auctions and up-to-date details, please click

on the following link: https://www.gov.ie/en/publication/36d8d2-renewable-electricity-support-scheme/

2.4.4 Corporate Power Purchase Agreements (CPPA)

Another potential market route is through a Corporate Power Purchase Agreement (CPPA). This is an arrangement where a corporate entity, such as a company, procures renewable electricity directly from a generator through a contractual agreement. It serves as an alternative for projects excluded from ORESS, unsuccessful in ORESS, or where the ORESS terms and conditions are not commercially viable.

For further information, please visit the following page: https://www.gov.ie/en/publication/a0d2e-renewable-electricity-corporate-power-purchase-agreements-roadmap/

2.4.5 Merchant Market

The 'merchant' market or open market pricing is another option for selling electricity generated. However, the relatively lower price, volatility, and associated risk are not desirable sources of income for early-stage renewable projects seeking financing. Ultimately, after government supports or CCPA expire, most projects will likely end up operating in the merchant market.

2.5 Enabling Tasks

After a potential project and site pass 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.

It is important to consider the need for community engagement early in the process. New renewable energy developments, especially those located near residential areas, often raise concerns from residents for several reasons, including concerns about the impact on visual amenity, conservation, and issues such as glint and glare. There may be valid concerns from residents that can be addressed early in the process, which can help avoid negative community interaction later on and foster community buy-in, including involving the community in the process before any statutory requirements are met. 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.

2.6 Design Stage

For larger-scale projects, following the kick-off and feasibility stages, you may move on to the design phase of the project. Depending on the scale, specific surveys may be necessary to inform the design process. You may need to undertake an Environmental Impact Assessment (EIA), 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.

2.7 Policy and Legislation

A crucial aspect of any renewable energy project is to understand the relevant EU, national, regional, and

local planning policies and legislation that underpin a project's development. Some of the key policy and legislation documents that will need to be considered are set out below.

European Legislation and Policy:

- 2030 EU Climate and Energy Framework
- European Green Deal
- Renewable Energy Directive 2018/2001/EU
- EU Fit for 55 Package

National Legislation:

- Planning and Development Act 2000, as amended
- National Planning and Development Policy
- National Planning Framework (NPF)
- Climate Action Plans

Relevant Regional and Local Planning and Development Policies and Strategies:

- Regional Spatial and Economic Strategies
- County Development Plans

It is crucial to clearly demonstrate how a proposed project aligns with the relevant policies. Your planning and environmental advisors can provide guidance on all applicable legislation and policies relevant to your project.

2.8 Community Engagement

It is important to consider the need for quality community engagement early in the design and planning process.

New renewable energy source developments, particularly those situated near residential areas, often raise concerns among residents. Common concerns generally relate to noise, visual, and environmental impacts.

It is recommended that these concerns be addressed early in the process, as this can help to avoid negative community interaction at a later stage and foster community acceptance. Identifying key public stakeholders and community leaders is an important task to undertake as early as practicable. This early engagement has been shown to improve the acceptance of renewable energy projects.

2.9 Planning and Environmental Assessments

When applying for planning permission for your project, the Planning Authority, or your technical advisors should be able to provide guidance on the assessments that may be required to support your planning application. This will be dependent on the nature, extent, and location of your project.

Larger projects will likely require a full Environmental Impact Assessment Report (EIAR). This will be discussed further in the following sections. Smaller projects that do not meet the EIA threshold criteria may still require additional assessments and reports to be submitted in support of your planning application.

The typical environmental assessments required for solar thermal energy projects are listed below. Please note this is not an exhaustive list, and further consultation with the Planning Authority and project-specific scoping with your technical advisors is highly recommended.

- Environmental Baseline Surveys
- Screening for EIA and/or Environmental Statement/Report and/or EIAR
- Appropriate Assessment (AA) Screening Report and/or a Natura Impact Statement (NIS) Report
- Water Framework Directive (WFD) Assessment
- Ecological Impact Assessment (EcIA)
- Archaeological & Built Heritage Impact Assessment
- Glint and Glare Assessment
- Landscape and Visual Impact Assessment (LVIA)
- Flood Risk Assessment (FRA)
- Traffic Impact Assessment (TIA)

Notwithstanding that smaller projects may be exempt from the requirement for planning permission (see Section 2.10.1) it is important to carefully consider the location and siting of solar thermal energy works. Installations in proximity to priority habitats or European-designated sites, such as Special Protection Areas for birds or Special Areas of Conservation, may not be suitable. Old barns, mature broadleaf forests and hedgerows, for example, may contain protected or priority species. If in doubt, it is best to seek ecological advice when siting a solar thermal energy project of its planning exemption status.

2.9.1 Environmental Baseline Surveys

Large-scale projects such as solar thermal energy developments will require several assessments to be carried out to support their statutory permit applications. The requirements for these assessments can be discussed with your technical advisors.

Environmental baseline surveys will need to be undertaken as part of the assessment process. These surveys provide vital information for the development of a project. In some cases, two years of survey data may be required. Environmental assessments are generally carried out in tandem with the design process.

The following sections summarise the environmental assessments likely to be required.

2.9.2 Environmental Impact Assessment Report (EIAR)

2.9.2.1 Overview

In accordance with Directive 2011/92/EU, as amended by Directive 2014/52/EU, projects that are likely to have significant effects on the environment by virtue of their nature, size, or location must be subject to an EIA. EIA stands for the process of carrying out an Environmental Impact Assessment. The Environmental Impact Assessment Report (EIAR) is the principal document on which the EIA process is based, which is prepared by the developer.

The EIAR must identify, describe, and assess likely significant effects, both direct and indirect, of the project on the environment. It is important to note that the EIA is an iterative process and should be integrated into the design process. Through considered design and site selection, it may be possible to avoid, prevent or reduce adverse impacts on the environment, and this is a key requirement of the EIA process.

For a planning application, it is the responsibility of the relevant Planning Authority to carry out an assessment of the information provided in the EIAR and come to a reasoned conclusion on the project's impacts on the environment.

For further information in relation to EIAR, please refer to the following documents:

Guidelines on the information to be contained in Environmental Impact Assessment Reports May 2022

Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018)

2.10.2.2 EIA Screening - Mandatory EIA Thresholds

EIA Screening is the process of deciding whether a development requires an EIA to be carried out. The EIA Screening exercise first assesses the development to ascertain if it is subject to Mandatory EIA, using classifications defined in the EIA Directive (projects listed in Annex I of the EIA Directive are subject to an EIA).

If the project is not listed in Annex I, and no mandatory EIA is required, the EIA Screening process progresses to consider projects listed under Annex II of the EIA Directive. Projects listed in Annex II of the EIA Directive are subject to an EIA if (i) they exceed certain thresholds (set out in Annex II and by each Member State); or (ii) if they do not meet or exceed the threshold but where the project is deemed likely to have significant environmental effects, with regards to the project's scale, nature, location, and context.

2.9.2.2 EIA Screening - Sub-threshold EIA

Proposed energy developments below the mandatory thresholds but that may be likely to have significant environmental effects may also require an Environmental Impact Assessment (EIA) and should, therefore, be screened for EIA to determine whether the project is likely to have a significant impact on the environment. These projects may be referred to as "sub-threshold" projects. In the case of sub-threshold development, it is advisable that developers consult with the Planning Authority regarding the possible need for an EIAR.

Helpful guidance can be found in the following document: Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development Aug 2003.

2.9.2.3 Scoping

Scoping is an important stage that takes place early in the EIA process. It provides an opportunity for both developers and the Competent Authority to determine those key environmental impacts and issues of concern that are likely to be of the utmost importance to the Project proposal's decision-making and eliminates those that are less of a concern. In other words, Scoping defines the EIAR's content and ensures that the environmental assessment is focused on the Project's most significant effects on the factors listed in Article 3 of the Directive, and that time and money are not spent on unnecessary examinations. It also reduces the likelihood that competent authorities will need to request additional information from developers after the EIAR has been prepared and submitted.

The EIA scoping exercise should assist in identifying relevant data gaps which need to be filled by further field surveys. Surveys over a prolonged period (e.g. in some cases, for periods of up to 2-3 years) may be required to inform some of the relevant baseline elements. This has implications for the timeframe within which the application for consent can be submitted.

If EIA is required, the developer can request a written scoping opinion from the Planning Authority on the information to be contained in the EIAR. This is an opportunity for the Planning Authority, the developer and the developer's technical advisers to discuss the scope and level of detail of the environmental information to be submitted in the EIAR.

2.9.2.4 Public Consultation

Public consultation is a key consideration for development projects, and it is important that stakeholders are brought into the process at an early stage. Public concerns raised through the consultation process may be brought into the EIA scoping and be addressed in the EIAR, as applicable. Public Information events may be held, where the project may present the plans and invite feedback from the local community. It will be necessary to set up a system to record such feedback or a website where key project documents such as scoping reports, the EIAR, maps, and application documents may be viewed. As part of the EIA process, it is

necessary to place public notices informing the public when an application and EIAR have been submitted to the competent authorities.

2.9.2.5 Consultation with Prescribed Bodies

Prior to the submission of a planning application for a planning application, there is a requirement for the developer to notify a specified list of Prescribed Bodies about the proposal. Upon receipt of an application that is accompanied by an EIAR, there is a requirement for competent authorities to consult with authorities likely to be concerned by the project by reason of their specific environmental responsibilities or local and regional competences and to give them an opportunity to make submissions/observations on the information supplied by the developer and on the request for development consent.

2.9.2.6 EIA Assessment and Determination

Once the EIAR has been completed and the application documentation prepared, the application is submitted to the Competent Authority for assessment and determination. The applicant and the Competent Authority must comply with relevant statutory provisions that may apply in relation to documentation, public notices, consultation, and processing of the application. If, during the assessment, the Competent Authority determines that the information presented in an EIAR is not sufficient for it to decide, then the developer may be asked to provide further information.

2.10.3 Appropriate Assessment (AA) under the Habitats and Birds Directives

The Habitats Directive (92/43/EEC) and the Birds Directive (2009/147/EC) seek to maintain, and where necessary, restore the favourable conservation status of designated natural habitats and species throughout member states. Designated Special Areas of Conservation (SAC), Special Protection Areas (SPA), candidate Special Areas of Conservation (SAC) and proposed Special Protection Areas (pSPA) are collectively known as European Sites. The most important ecological sites are designated as European Sites under provisions of Irish legislation transposing these Directives. Together, these sites form part of the Natura 2000 network of comparable sites throughout Ireland and other European Member States.

Article 6(3) of the Habitats Directive requires an AA of plans and projects that are likely to have significant effects on any European Site. A Competent Authority cannot agree to the plan or project until it has ascertained that it will not adversely affect the integrity of the site concerned.

2.10.3.1 Screening for Appropriate Assessment (Stage 1)

Under the Habitats Directive, it is the Competent Authority's responsibility to complete the Screening for AA and issue its determination whether an AA is required. To support this, the applicant must submit a Screening for AA Report. The report should include all supporting information necessary for the Competent Authority to reach a 'Screening for AA Determination', including the applicant's own conclusion/determination in relation to screening.

The Report should be completed to meet the requirements of the Habitats Directive, EU and National guidance documents, transposing legislation, and relevant domestic and European case law.

The Competent Authority will publish a Screening for AA Determination, which will either inform the applicant that their application has been 'screened-in' for AA or that it has been 'screened-out' and does not require a (Stage 2) AA to be carried out.

2.10.3.2 Appropriate Assessment (Stage 2)

If likely significant effects cannot be ruled out at the (Stage 1) Screening stage, the Competent Authority is required to carry out a (Stage 2) AA. To inform this process, the Applicant will have to prepare a Natura Impact Statement (NIS) Report. If the Applicant has already determined to their satisfaction that, in all likelihood, a Stage 2 AA will be required and has prepared a NIS Report in anticipation of being requested to do so, they may submit it at the initial application stage.

2.10.3.3 Alternative Solutions (Stage 3)

Stage 3 of the AA process arises wherever consideration must be given to alternative locations and processes that would avoid any impact identified in Stage 2. It is only required wherever any impact arising at Stage 2 cannot be avoided.

2.10.3.4 Imperative Reasons for Overriding Public Interest (Stage 4)

In the event that the AA concludes that adverse impacts upon the integrity of a European Site cannot be ruled out or that the integrity of such a European site will be adversely affected and where it has been demonstrated that there are no alternative solutions, Article 6(4) of the Habitats Directive allows for derogation for 'Imperative Reasons of Overriding Public Interest' (IROPI). There are limitations on the reasons applicable where priority habitats, as defined in the Directive, are affected.

IROPI is complex process where it must be shown that public interest clearly outweighs the long-term conservation interests of the protected site. These have only been sought and granted in very rare instances in Ireland and are only considered as a very last resort. Where it is considered that IROPI applies to an infrastructural project, a statement of the case is prepared by the competent authority and referred to the Minister for his/her consideration. The Minister will consider whether the compensatory measures proposed as part of the development are sufficient to ensure that the overall coherence of the Natura 2000 network is protected, and this may involve consultation with the European Commission. Once the Minister issues a notice to the competent authority with respect to whether compensatory measures are sufficient or not, the competent authority will then determine the planning application.

2.9.3 Water Framework Directive (WFD) Assessment

Since 2000, the WFD [Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 Establishing a Framework for Community Action in the Field of Water Policy] has been the main law for water protection in Europe. It applies to inland, transitional, and coastal waters in addition to groundwaters.

An objective of the WFD is to achieve the protection of aquatic ecology and habitats, drinking resources and bathing waters through river basin management planning and monitoring. This objective is summarised as Good Ecological Status (GES) and Good Ecological Potential (GEP) for artificial or heavily modified water bodies.

An assessment of how the solar thermal energy project may impact relevant water bodies will need to be carried out before the submission of a planning application, and a WFD Assessment report should also accompany the application.

2.9.4 Ecological Impact Assessment (EcIA)

EcIA is *"a process of identifying, quantifying and evaluating potential effects of development-related or other proposed actions on habitats, species and ecosystems"*[1].

An EcIA can help competent authorities understand ecological issues to determine a project for consent. EcIA is not a statutory requirement on its own; however, if conducted under EIA, then it must follow EIA Regulations. EcIA is an evaluation process undertaken to support a range of assessments. An EcIA report (or the ecological chapter of an EIAR) should describe the significant effects of a project so that all interested parties understand the implications of what is proposed.

For further information in relation to EcIA, please refer to the following document: EcIA-Guidelines-v1.3-Sept-2024.pdf

[1] EcIA-Guidelines-v1.3-Sept-2024.pdf

2.9.5 Archaeological & Built Heritage Impact Assessment

An archaeological and built heritage impact assessment ensures that a development respects the area's cultural heritage, as outlined in the Planning and Development Act 2000 (as amended) and the National Monuments Act.

Further details about the assessment process and the several key stages involved are described here: Archaeological and Built Heritage Assessment | SEAI

2.9.6 Glint and Glare Assessment

A glint and glare assessment is a technical evaluation conducted to understand the potential impact of reflective surfaces such as solar thermal panels. These assessments typically support planning permission for ensuring that new developments are designed with consideration for their environmental and social impact.

2.9.7 Landscape and Visual Impact Assessment (LVIA)

LVIA is a tool used to identify and assess the significance of and the effects of change resulting from development on both the landscape as an environmental resource in its own right and on people's views and visual amenity. LVIA may be carried out either formally, as part of an EIA, or informally, as a contribution to the 'appraisal' of development proposals and planning applications. LVIA applies to all projects that could require a formal EIA but also includes projects that may be assessed informally.

Further information can be found here: guidelines-for-landscape-and-visual-impact-assessment-third-edition-2013.pdf

2.9.8 Flood Risk Assessment (FRA)

An FRA is the process of identifying, analysing, and evaluating the potential risks of flooding in an area. It helps communities understand where floods may occur, how severe the floods could be, and what impact they can have on people, property, and the environment.

Planning authorities will introduce flood risk assessment as an integral and leading element of their development planning functions under the Planning Code, at the earliest practicable opportunity, in line with the requirements of the Guidelines, which can be found at the link below. Planning authorities will assess planning applications for development in accordance with the provisions of these Guidelines following the guidance of their own or any OPW Strategic Flood Risk Assessment and the application of the sequential approach and, if necessary, the Justification Test required by these Guidelines.

Further information can be found here: www.gov.ie/The Planning System and Flood Risk Management - Guidelines for Planning Authorities

2.9.9 Traffic Impact Assessment (TIA)

A TIA is a comprehensive review of all the potential transport impacts of a proposed development or re-development, with an agreed plan to mitigate any adverse consequences. All new developments will generate trips on the existing transport network, either by car, commercial vehicle, cycling, walking or public transport. In cases where a proposed development is of a size or type that would generate significant additional trips on adjoining transport infrastructure, this additional demand may necessitate changes to the road layout or public transport service.

It is essential that the developer or promoter should provide a full and detailed assessment of how the trips to and from the development might affect the transport network. The assessment should be an impartial description of the impacts of the proposed development and should outline both its positive and negative aspects.

Further information can be found here: TII - Traffic and Transport Assessment Guidelines

2.10 Planning Permission

2.10.1 Planning Exempted Development

Using the *SEAI Single Point of Contact Renewable Energy* online tool can help inform you about whether planning permission will be required, based on some information about your proposed project.

Generally, planning permission is not required for the installation of solar thermal energy projects in most cases, as these development works are classified as 'exempted development', such as those in houses and projects where the primary use of the installation is for heat consumption within the curtilage of the subject site. If the project is primarily for a use other than self-consumption, planning permission is required. There are specific regulations and design regulations that govern exempted development solar energy projects.

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.

It is important to note that the new Planning and Development Act 2024 was signed into law in October 2024. This brings reforms to existing planning arrangements and associated planning regulations. However, it is still being implemented. This is expected to take at least 18 months, and this will be supplemented and supported by updated planning regulations, which will take some time to be adopted. Until such a time, the current planning regulations remain relevant, but you are advised to consult with your planning advisor on this matter.

Current 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)	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.
	The solar thermal panels shall be a minimum of 50 cm from the edge of a roof on which it is mounted.
	Any free-standing solar thermal installation shall not be placed or erected forward of the front wall of the house.

Houses	
Placing or erection of a solar thermal installation within the curtilage of a house	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 m^2.
	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 m^2.
	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.
	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 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.	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 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.
	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.
	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.

Industrial Buildings	
	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 m^2.
	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.
	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 m^2.
	The height of any free-standing solar thermal installation shall not exceed 2.5 m at its highest point above ground level.

Industrial Buildings	
	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**
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.	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 roof and the solar thermal panels shall not exceed: 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.
	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.
	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 on a flat roof shall be a minimum of 2 m from the edge of the roof on which it is mounted.

Business Premises/Light Industrial Buildings	
	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 m^2.
	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**
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	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.

Apartment Buildings	
apartments of a solar thermal installation.	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.

Table 5: Services Buildings - Solar Thermal Exempted Development Regulations

Service Buildings[2]	
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 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 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.

[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.

Service Buildings[2]	
	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 m^2.
	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/Holdings[3]	
Description of Development	**Design Regulations**
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.	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 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.
	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).
	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 an agricultural building/holding of a solar thermal installation.	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.
	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 m^2.
	The height of any free-standing solar thermal installation shall not exceed 2.5 m at its highest point above ground level.

[3] *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/Holdings[3]	
	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 75m^2.
	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.

2.10.2 Households and Self-Consumption Projects

Using the *SEAI Single Point of Contact Renewable Energy* online tool can help inform you as to whether planning permission will be required based on some information about your proposed project. 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.

2.10.3 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, the development of solar PV is more restricted, due to concerns about glare and glint from the reflective panels impacting aircraft. Houses are not impacted by these restrictions, but other kinds of structures are.

A map series was published alongside the regulations, along with an interactive map, which is available here.

2.10.4 Commercial and Large-Scale Projects

For commercial and larger-scale projects, planning permission is required. Commercial projects include any and all projects, including those where the primary purpose is not for the provision of electricity.

Planning permission is ordinarily sought from the relevant local Planning Authority; however, if the proposed project will generate 300 MW or more, it meets the criteria of a 'Strategic Infrastructure Development', which is applied for directly from An Bord Pleanála.

2.10.5 The Planning Process

The process of applying for planning permission is outlined briefly below. Further information in relation to the planning process for solar thermal energy projects can be found on the SEAI website. When applying for planning for your project, particular regard will need to be given to existing local and national policy, plans and guidelines concerning solar thermal energy development in Ireland.

Further information on Planning considerations can be found in the SEAI document *Community Toolkit - Planning Process*.

2.10.5.1 Pre-Application Consultation meetings

In advance of making your planning application, you will need to have a pre-application consultation meeting with the Planning Authority. This will give you the opportunity to introduce your project and put forward key information and details about your project, and seek the Planning Authority's guidance or opinions on certain matters. Indeed, there may be a need for a series of meetings, depending on the complexity of your project.

These meetings will allow you to steer your project and ensure you include sufficient details in your planning application to assist the Planning Authority in assessing your application.

Meetings may include:

- Overall concept and design, consultation to date, etc.
- EIAR Screening, EIAR Methodology and Scoping, if applicable
- Any other issue where clarity or guidance is required
- The required content of the planning pack
- The appropriate scale for various drawings

2.10.5.2 Planning Application

In order to make a valid planning application, you will likely require the services of a professional team of experts to guide you, particularly with the more complex projects. The planning application pack that is submitted as part of the application must contain the following documents at a minimum:

- Completed Planning Application Form and all associated appendices
- The Planning Application Fee

- A copy of the Site Notice and the Newspaper Notice
- All required drawing, plans, particulars and information. This may include survey reports, technical reports, including any environmental reports and assessments as advised by your professional advisors, and the Planning Authority.

2.10.5.3 Public Consultation

As part of the assessment process, all applications and supporting documentation will be made available for public scrutiny both in soft copy and in hard copy. The public will have a specified period of time from the date of publication of the planning application notice to make a submission or observation in relation to the development and the documentation provided by the applicant to the Planning Authority.

2.10.5.4 Request for Additional Information

Where the Planning Authority considers the application or the EIAR to be inadequate in identifying or describing significant effects on the environment arising from the proposed development, it must require the applicant to submit further information within a specified period to ensure the completeness and quality of the EIAR and to facilitate the reaching of a reasoned conclusion of the significant effects on the environment of the proposed development. If deemed necessary by the Planning Authority, the applicant can also be required to provide a Clarification of Additional/Further Information.

2.10.5.5 Decision of the Planning Authority

The Planning Authority may grant or refuse a planning application, with or without conditions. Conditions may include agreeing on certain details post consent, such as Construction Environmental Management Plans (CEMPs), method statements for particular works, noise limits or restrictions on the timeframe permissible for construction works, for example.

2.10.5.6 Oral Hearing

Wherever the consideration of a planning application concerns An Bord Pleanála, the Board can decide to hold an oral hearing with or without someone requesting it. The Board normally decides to hold an oral hearing wherever it believes that doing so would be helpful to understand a particularly complex case. Oral hearings can also be held where the Board considers there to be significant national, regional or local issues involved.

An oral hearing is a public meeting to allow relevant issues in a case to be discussed and examined in an open forum. Anyone can attend, but only participants who are taking part in the case can be involved in the discussion. Oral hearings are sometimes held to help a Planning Inspector to gather more information on a planning case from relevant participants.

2.10.5.7 Judicial Review

A judicial review is a mechanism whereby a person can challenge decisions made by public bodies in the exercise of their duties. A judicial review is made through the High Court. A judicial review is not concerned with the merits of a particular decision but rather the lawfulness of how a decision was made. The aim of a judicial review is to ensure that public functions are carried out fairly.

In practical terms what this can mean for a project promoter is that it may be used by the applicant to challenge a decision such as the refusal of planning consent if there were sufficient grounds to do so arising. A judicial review can also be taken against the grant of permission by a third party. Wherever a judicial review arises, it may lead to delays and project uncertainty until the judicial review process has concluded. Judicial review risks will need to be considered in any consents planning for a project.

Further information on the judicial review process can be found at:
https://www.citizensinformation.ie/en/government-in-ireland/how-government-works/standards-and-accountability/judicial-review-public-decisions/

2.11 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.

2.12 Pre-Construction Phase

In preparation for construction, some permits may need to be obtained in advance of works, or there may be conditions of a permit, such as planning permission, that must be complied with in advance of construction works commencing. This section includes those permits potentially required in advance of construction commencing, depending on the specifics of your project. Some of the permits listed in this section may, in reality, only be obtained during the construction phase, in advance of a specific activity to be undertaken by the contractor, and some permits or licences will need to be obtained prior to the commencement of construction works. This will depend on how the works are scheduled for your project. A project *Permits, Licence Consents and Notifications Register* is a useful way of scheduling and tracking your permit requirements.

2.12.1 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 typically agreed upon at this point, as necessary.

2.12.2 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 the conditions of a planning permission may result in an enforcement action.

2.12.3 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 related to a 7-day notice are outlined 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 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

2.12.4 Licences, Permits and Certificates

The following are suggested-only licences, permits, and/or certificates that may be generally required at the commencement of a solar thermal energy installation's construction.

These may be subject to change by approved guidance and legislation when it comes into force during the project's pre-construction commencement phase.

2.12.4.1 Road Opening/Closing Licence

For any works in a public area, including digging up a public road, footpath, or grass verge, an Application for a T2-T3 Road Opening Licence is required. Works could relate to:

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

Applications for Road Opening Licenses can be applied through MapRoad Licencing, the national system for the management and processing of roadworks applications. To apply for access to the MapRoad Licencing system, a Registration Form must first be submitted to the Road Management Office.

If works relate to more than 1 road/street or involve a length >200m or are complex by involving rail

crossings, bridges, or sites of engineering difficulty, an accompanying T1 Notification of Intent to Perform Large or Complex Road Works is required.

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 in advance to the relevant Local Authority. Local Authorities vary in the amount of advanced time an application should be submitted prior to works commencing. Check with the relevant authority to ensure the application is submitted within the required timeframe.

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 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.

Recommended Reading in relation to Road Opening/Closing Licences is:

- MapRoad Licencing User Tutorials
- MapRoad Licencing FAQs

2.12.4.2 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 Office of Public Works (OPW).

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 OPW Guide to Applying for Consent under Section 50 of the Arterial Drainage Act, 1945 for further information on the requirements and considerations for making the application.

Recommended Reading in relation to Section 50 Licences is:

- Consent Requirements – Construction/Alteration of Watercourse Infrastructure

2.12.4.3 Certificate of Registration

A Certificate of Registration (COR) is required for waste activities set out in Part II of the Third Schedule of the Waste Management (Facility Permit and Registration) Regulations 2007 (S.I. No. 821/2007), as amended. An application must be submitted to the relevant Local Authority. If an AA is required, submissions must also be made with the EPA.

The EPA has literature and guidance on waste disposal and licencing requirements. It is also required to provide guidance on determining the need for permitting and information can be requested via the following email address: licensing@epa.ie.

Recommended Reading in relation to CORs is:

- EPA: Certificate of Registration (COR)

2.12.4.4 Waste Disposal Licence/Permit

Waste disposal and recovery activities in Ireland require authorisation in accordance with the Waste Management Act 1996, as amended. 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 Environmental Protection Agency (EPA). It is also required to provide guidance on determining the need for permitting and information can be requested via email: licensing@epa.ie.

Recommended Reading in relation to Waste Disposal Licence / Permit is:

- EPA - Determining who needs a waste licence
- EPA – How to apply for a licence

2.12.4.5 Activities Requiring Consent (ARCs) & Ministerial Consent

Activities Requiring Consent (ARCs) are specific activities which have the potential to damage European Sites i.e. Natura 2000 Sites. While ARCs are not prohibited activities, consent must be granted by the Minister for Housing, Local Government and Heritage or by another relevant public authority prior to works commencing. A list of 39 ARC's has been published ranging from ploughing and harrowing, to clearing vegetation or landfilling. This prior consent requirement ensures that the Minister (or the relevant competent authority) carries out the necessary environmental assessment to determine if the activity can take place and if any conditions should be attached to any consent given.

Prior to designating a new site as an SAC or SPA, information on the ARC(s) (if any) attached to the site will be communicated to the landowner (and where known, the relevant occupier or user of the land)) in the form of a 'site pack' along with a public notification. SACs and SPAs are afforded protection from the time of public notification of the intention to designate the site.

For Natural Heritage Areas (NHAs), certain works will require consent. Permission to carry out works on an NHA is required (under Regulation 19 of the Wildlife Act 2000, as amended). The works which require the consent of the Minister are found at Schedule 2 of the statutory instrument (SI) designating the relevant NHA.

For further information, guidance, and application forms, please see: NPWS Activities Requiring Consent.

2.12.4.6 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.

2.12.4.7 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**.

There are two types of permits, depending on the location and size, both of which can also be required.

An Abnormal Load Permit is required for any vehicle that exceeds the maximum height, length, width, and weight as permitted in S.I. No. 5/2003 Road Traffic (Construction and Use of Vehicles Regulations). For full specifications on exceeded maximums, see the RSA Guidelines on Maximum Weights and Dimensions of Mechanically Propelled Vehicles and Trailers, Including Manoeuvrability Criteria. Applications must be made directly to the relevant Local Authority of the development and where vehicles will be passing through. The permit can have a maximum validity of 12 months or can be time/occasion limited upon granting by the Local Authority.

If transport not exceeding 27.4m in length and 4.3m in width takes place on major 'inter-urban' routes or to Cork, Rosslare or Ringaskiddy Ports, an additional Permit for Specialised Vehicles is required. This is issued by An Garda Síochána. Further information can be found in the Garda Guidelines for Operators (Movement of Abnormal Loads).

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

2.12.4.8 Fire Safety Certificate

A Fire Safety Certificate is required when 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 comply 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.

2.12.4.9 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.

2.12.4.10 Tree Licensing

2.12.4.10.1 Felling Licence

As part of site works, the felling of trees for site clearance, cable installation, access, or maintenance, a Felling Licence may be required. This is administered by the Forest Service, which operates under the Department of Agriculture, Food and the Marine (DAFM).

Where a project involves a large area of forestry and or felling of several trees, this often triggers the requirement for replacement trees of suitable species or mix thereof to be planted on "*bare plantable lands*" elsewhere via an Afforestation Licence; please see **Section 2.12.4.10.2** for further information.

A valid licence must be obtained before any felling commences unless such works fall under exempted categories.

Exemptions from securing a Felling Licence apply to the following common scenarios:

- A tree in an urban area, provided it is not under a protection order;
- A tree within 30m 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 10m 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 20cms in diameter when measured 1.3m 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:
    1. It does not form part of a decorative avenue or ring of trees;
    2. Its volume does not exceed $3m^3$;
    3. The removal of trees for use on the farm does not exceed $15m^3$ in any period of 12 months.

It should be noted that the three above exemptions do not apply in all circumstances, for example, when trees are more than 150 years old or are close to certain protected structures, monuments, archaeological sites, or specific environmentally sensitive areas. If you live in an urban area, you may need to contact the Local Authority to see if there is a Tree Preservation Order (TPO) on the tree. TPOs may apply to other significant or important trees, so it is important to check. For further details 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);
- National Parks and Wildlife Service (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).

At present, each licence application costs €20. A tree felling licence, once granted, is valid for a period of 10 years and can be extended up to 5 further years. Applications should be sent alongside accompanying maps to by email to: felling.forestservice@agriculture.gov.ie.

Please see the sections below on the specific examples of licensing works and how to apply. Further guidance, application templates, and information can be found at DAFM Tree Felling Licences.

The required felling licences should be applied for as early as possible. This will minimise delays by giving the Forest Service timely notice of the full felling requirements. It also lessens the risk of commitments being made by the developer before felling licences are granted. However, it should be noted that under the Forestry Act, 1946, the validity of a LFL is currently limited to 2 years. As soon as planning permission is granted for the development by the Local Authority or An Bord Pleanála, a copy of the full planning permission should be submitted to support the felling licence application(s).

Licences must be secured before felling can take place. It should be noted that it can take up to 12 months to secure the necessary approvals from the Forest Service. The Forestry Division's Tree felling and management

website contains the most up-to-date information, including the felling licence application form and guidance notes.

Teagasc also has additional useful information on the legal requirements for felling as well as guidance and sample applications.

Recommended Reading in relation to Felling Licences and associated requirements is:

- Teagasc: Legal requirements for afforestation
- DAFM: Forestry Standards Manual

2.12.4.10.2 Afforestation Licence

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 hectares (or approximately 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 licence is necessary when a developer seeks to replant trees which were felled during a site development. As part of a Felling Licence application, afforestation plans can also be set out and therefore requests for both licences can be made together. For the proposed afforestation of alternative lands, approval must be obtained before the associated felling licence can be granted. Proposed alternative land, which must be suitable land that has never been the subject of an afforestation in the past, should be submitted for afforestation approval as early as possible, ideally at the same time as the Felling Licence application is submitted.

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.

Afforestation Applications should be sent alongside accompanying maps to the Forestry Division of the DAFM by email to: felling.forestservice@agriculture.gov.ie.

Please refer to the sections below for specific examples of licensing works and instructions on how to apply. Further guidance, application templates, and information can be found at DAFM Tree Felling Licences.

Recommended Reading in relation to Afforestation Licences can be found at: Teagasc: Felling and Reforestation Policy

2.12.4.11 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 document[4] 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.

The National Parks and Wildlife Service (NPWS) is the responsible body for administering Annex IV protection for Ireland. Applications must be submitted directly to the NPWS and require an accompanying Ecologist's Report. Application Forms for Derogation Licences can be found at NPWS: Application for Derogation Licence and should be submitted to: wildlifelicence@npws.gov.ie.

Recommended Reading in relation to Derogation Licences is:

- Guidance on the Strict Protection of Certain Animal and Plant Species under the Habitats Directive in Ireland
- Guidance on the Strict Protection of Animal Species
- Notifiable Actions for Listed Habitats and Species

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	

2.12.4.12 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 further information.

2.12.4.13 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 authority[5].

Even when planning permission is granted, the wildlife legislation applies. **Works which would capture or**

[4] European Commission Guidance document. Available online at: https://environment.ec.europa.eu/topics/nature-and-biodiversity/habitats-directive_en [accessed August 2023].
[5] National Parks and Wildlife Service (NPWS), under EC (Birds and Natural Habitats) Regulations 2011-2021.

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'[6] should also be referred to when carrying out works which may disturb them.

2.12.4.14 License for the Removal of Invastive 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.

At any stage of a project, where invasive alien plant species are encountered, a licence for the removal/movement of invasive species from the site is required. A request for licensing must be sent to: wildlifelicence@npws.gov.ie. If 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, check with the relevant Local Authority on available facilities.

When submitting your application for a licence, it should include:

- Detailed methods of removal, transportation and treatment of the species;
- Information on the bio-security measures;
- Management plan; and
- Timeframe for carrying out the work.

Recommended Reading regarding the Removal of Invasive Alien Species is:

- National Biodiversity Data Centre: Invasive Alien Species in Ireland
- NPWS: EU Regulation on Invasive Alien Species

2.12.4.15 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.

[6] NPWS Bat Mitigation Guidelines for Ireland. Available online at: https://www.npws.ie/sites/default/files/publications/pdf/IWM134.pdf

Such consent may be in the form of notifiable actions or licences. Further permission may then be required in exceptional cases (e.g., the 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.

2.12.4.16 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 for further information.

2.12.4.17 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 2000, 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 proposed solar thermal 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.

Licencing is managed by the NPWS and applications must be sent to: wildlifelicence@npws.gov.ie. Further guidance and application forms can be found at NPWS: Capture/Kill Protected Wild Animals for Educational or Scientific Purposes.

2.12.4.18 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					

2.12.4.19 Water Abstraction Registration

By law, if you abstract 25 m^3 (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 m^3 (25,000 litres) of water or more per day must be registered, unless the abstraction is a one-off occurrence with a duration of 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/).

2.12.4.20 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.

2.12.4.21 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 Act (1987).

Licences are issued by the National Monuments Service.

2.12.4.22 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. An 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 is 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.

2.13 Construction Phase

2.13.1 Outline of Construction

Construction works are likely to commence by setting up site compounds and establishing equipment and material set-down areas, waste management infrastructure, site offices and welfare facilities. Further geotechnical site investigations may also be necessary at this point.

Once safe access has been established to the site, the contractors will begin with site preparation works, clearing, levelling and preparing the ground for the installation of any required foundations for the equipment and structures associated with the solar thermal energy facility.

Throughout the construction stage, the project is monitored by various specialists to ensure it is constructed safely, correctly and in compliance with the planning conditions and design requirements. This can include community liaison officers, ecologists, archaeologists, etc., alongside construction monitoring carried out by various engineers to ensure the project is constructed in accordance with the relevant specifications and standards, approved design and contracts.

Depending on the scale and complexity of the solar thermal energy project, various permits may be required during the construction phase. Maintaining compliance with the permits granted to the project is crucial.

2.13.2 Planning Permission Conditions

Upon a grant of planning permission, there will almost certainly be planning conditions imposed by the Planning Authority, which may cover a range of matters.

There will likely be conditions that 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 Planning Authority may deploy Site Inspectors to ensure compliance with planning conditions, and other site matters within its jurisdiction.

2.13.3 Commissioning

Following the construction of a solar thermal energy facility, it must then be commissioned. This process applies to all installations, regardless of size; however, for large and commercial projects, it is generally a more formal procedure.

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 Operating & Maintenance Phase

3.1 Recurring Licences

Some licences and consents may not have a duration that covers the entire lifespan of a solar thermal project, and 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.

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 Road Opening/Closing Licence

During the operation and maintenance of solar thermal installations, a temporary road closure is needed in conjunction with a road opening licence or for other works.

Please refer to **Section 2.12.4.1** for further information about Road Opening/ Closing Licences.

3.1.2 Tree Felling Licence(s)

During the operation of a solar thermal energy installation, it may be necessary to fell trees to ensure an unimpeded light source for the safe and optimal operation of the solar panels.

Please refer **Section 2.12.4.10** for further information about licence to fell trees.

3.1.3 Derogation Licence

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

Please refer to **Section 2.12.4.11** for further information.

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

During the operation and maintenance of solar thermal installations, it may be necessary to carry out works which may damage, destroy or disturb breeding or resting places of bat species.

Please refer to **Section 2.12.4.13** for further information about derogation licences for bat species.

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

During the operation and maintenance of a solar thermal energy installation, it may be necessary to carry out works which may interfere with or destroy the breeding places of any wild animals.

Please refer to **Section 2.12.4.12** for further information.

3.1.4 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.

Please refer to **Section 2.12.4.4** for further information about Waste Disposal Licences and Permits.

3.1.5 Disability Access Certificate (potentially required for the converter station)

A revised Disability Access Certificate (DAC) is required where significant revision is made to the design or works or a material alteration to or a material change of use of a building in respect of which a DAC has been

granted by a Building Control Authority, which is the Local Authority for the respective involved.

Please refer to **Section 2.12.4.9** for further information about Disability Access Certificates.

3.1.6 Water Abstraction Registration

In the cases where a one-off water abstraction licence was applied for and deregistered but is required to be used again, the licence must be re-applied for.

For further information on water abstraction licences, please refer to **Section 2.12.4.19.**

3.2 Other Licences

3.2.1 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 (**Section 2.12.4.1**).

The Section 48 wayleave consent is applied for through the CRU, by submitting a Section 48 Application Form. At present there is no application fee. It should be noted that letters of consent from the landowners in addition to a copy of their connection offer are required as part of the application. If the land that is affected is a tramway or railway consent will also be required from CIÉ. A copy of the route map is also required to be submitted along with the application.

Applications should be submitted at least 2 months prior to when the applicant intends to use the consent. The CRU will acknowledge only fully completed applications within 10 working days of receiving them. Once the CRU acknowledge an initial application the CRU will review it, contact will be made if the CRU requires clarifications or additional information. For further information or queries related to Section 48 please contact the CRU at: consentapplication@cru.ie.

Recommended Reading on Section 48 Applications is:

- Guidance Note on Section 48 and Section 49 Applications

3.2.2 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 CRU by submitting a 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. It should be noted that letters of consent from the landowners in addition to a copy of their connection offer are required as part of the application. A photocopy of the route map is also required to be submitted along with the application.

Applications should be submitted at least 2 months prior to when the applicant intends to use the consent. The CRU will acknowledge only fully completed applications within 10 working days of receiving them. Once the CRU acknowledge an initial application the CRU will review it, contact will be made if the CRU requires clarifications or additional information. For further information or queries related to section 49 please contact the CRU at: consentapplication@cru.ie.

Recommended Reading on Section 49 Applications is:

- Guidance Note on Section 48 and Section 49 Applications

4 End Phase

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 Considerations

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

4.1.2 Previously Exempted Development

For many smaller-scale projects, such as a home solar thermal energy installation, when installed, they would have been exempt from 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.

4.1.3 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 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.

4.1.4 Licences

The decommissioning phase of a project may require reapplication for licences applied for during the pre-construction phase, along with additional licences. Please refer to **Section 2.12.**

4.2 Lifespan Extension

Generally, manufacturers of solar thermal equipment will specify an operational lifespan for 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 another body, such as the consenting Local Authority, which may specify, through planning permission, a lifespan for an installation. Unless specified by a statutory body, it is ultimately up to the owner to determine the lifespan of the installation. 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 exempt from 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

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 2.10.2.** 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 require 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 the 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/

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