SUSTAINABLE ENERGY AUTHORITY OF IRELAND

Rialtas na hÉireann
Government of Ireland

# Combined Heat and Power (CHP)

## Manual of Consenting Procedures

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### Disclaimer



### Sustainable Energy Authority of Ireland

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

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

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## Abbreviations

| Abbreviation | Definitions |
|---|---|
| AA | Appropriate Assessment |
| BCA | Building Control Authority |
| BCMS | Building Control Management System |
| CEG | Clean Export Guarantee |
| CEMP | Construction and Environmental Management Plan |
| CEP | Clean Export Premium |
| CER | Commission for Energy Regulation |
| CHP | Combined Heat and Power |
| CIÉ | Córas Iompair Éireann |
| COR | Certificate of Registration |
| CRU | Commission for Regulation of Utilities |
| DAFM | Department of Agriculture, Food and the Marine |
| DCCAE | Department of Communications, Climate Action and Environment |
| DS3 | Delivering a Secure, Sustainable (electricity) System |
| DSO | Distribution System Operator |
| DUoS | Distribution Use of System |
| EC | European Commission |
| ECP | Enduring Connection Policy |
| EDEN | Environmental Data Exchange Network |
| EEC | European Environment Agency |
| EIA | Environmental Impact Assessment |
| EIAR | Environmental Impact Assessment Report |
| ELS | Export Limiting Scheme |
| EPA | Environmental Protection Agency |
| ESB | Electricity Supply Board |
| ETS | Emissions Trading Scheme |
| EU | European Union |
| GHG | Green House Gas |
| GNI | Gas Networks Ireland |
| GWh | Gigawatt hours |
| HSA | Health and Safety Authority |
| IE | Industrial Emissions |
| IEL | Industrial Emissions Licence |
| IPC | Integrated Pollution Control |
| IAA | Irish Aviation Authority |
| kVA | Kilo-volt-amperes |
| kW | Kilo Watt |
| LV | Low Voltage |
| m | Meters |
| MAPP | Major Accident Prevention Policy |
| MEC | Maximum Export Capacity |
| MIC | Maximum Import Capacity |
| MRL | Map Roadworks Licencing |
| MSS | Micro-Generation Support Scheme |

| Abbreviation | Definitions |
|---|---|
| MV | Medium Voltage |
| MW | Mega watt |
| NC | New Connection (application form) |
| NIS | Natura Impact Statement |
| NPWS | National Parks and Wildlife |
| REFIT | Renewable Energy Feed-In Tariff |
| RESS | Renewable Energy Support Scheme |
| SAC | Special Area of Conservation |
| SEAI | Sustainable Energy Authority Ireland |
| SEM | Single Electricity Market |
| SI | Statutory Instrument |
| SID | Strategic Infrastructure Development |
| SPA | Special Protected Area |
| SSRH | Support Scheme for Renewable Heat |
| TSO | Transmission System Operator |
| TUoS | Transmission Use of System |
| V | Volts |
| VAT | Value Added Tax |

# 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 Combined Heat and Power (CHP) 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 licences 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 CHP 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 CHP 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 Combined Heat and Power (CHP)

CHP installations, often referred to as cogeneration systems, represent an innovative and sustainable approach to energy generation in Ireland. These systems are designed to simultaneously produce electricity and thermal energy (such as heat or steam) from a single energy source, typically natural gas, biomass, or waste heat. CHP installations may play a significant role in both large-scale industrial settings and microgeneration applications, contributing to energy efficiency, reduced emissions, and enhanced energy resilience. CHP plants typically achieve 20% to 25% higher efficiency compared to the combined efficiency of heat-only boilers and conventional power stations. CHP technology can be deployed quickly, cost-effectively, and with few geographic limitations. It is a mature technology that is easily understood and widely installed. CHP can be deployed at both large-scale and micro-generation scale, making it suitable for many different applications, including industrial, commercial, residential, or municipal, of all sizes.

CHP is used in many facilities, including commercial buildings, residential buildings, institutions, municipal facilities, and industrial facilities. A number of site-specific factors will determine if CHP might be a good technical and economic fit for your facility. These factors include operational hours, the facility's thermal energy requirements, and the prevailing utility rates for electricity and gas.

At the industrial and commercial scale, CHP installations in Ireland have been deployed in various sectors, including manufacturing, hospitals, care homes, and district heating. These systems capitalise on the efficiency gains achieved by utilising the waste heat produced during electricity generation for heating purposes, as they typically have higher than normal heat demands. In a country where space heating and hot water demands are substantial across many sectors, especially during colder months, large-scale CHP systems hold immense potential for reducing energy costs and greenhouse gas emissions.

By capturing and using heat that would otherwise be wasted, and by avoiding electricity distribution losses, CHP can achieve effective fuel efficiencies[1] of over 80%, compared to 50% for typical technologies (e.g., conventional electricity generation and an on-site boiler). Due to this increased efficiency, CHP systems can emit fewer carbon emissions than separate heat and electricity generation. Along with the listed benefits, CHP can deliver:

- Reduced energy costs;
- Improvement of carbon footprint;

[1] This is the percentage of potential energy of fuel converted to useable energy such as electricity and captured heat.

- Flexibility in operation, helping to manage energy demand and supply;
- Improvement in energy resilience;
- Future proofing your site from uncontrollable external energy factors; and
- Cogeneration of heat and electricity from a single fuel input.

CHP is suitable for a wide range of applications, particularly in situations where there is a high demand for both electricity and heat or hot water. It is already embedded across many sectors in Europe, including food, distilling, agriculture, and chemicals. Additionally, CHP is utilised in the supply chain of many more industries, such as packaging, food processing, and the automotive sector.

CHP projects can vary in scale and output, and so the level of regulation relevant to a specific project may vary. Larger commercial ventures will require additional consents and licenses than a domestic installation. However, it is important to ensure that any project, regardless of scale, is compliant with relevant legislation and regulations.

## 1.3 Combined Heat and Power Project Stages

The life cycle of a CHP 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.

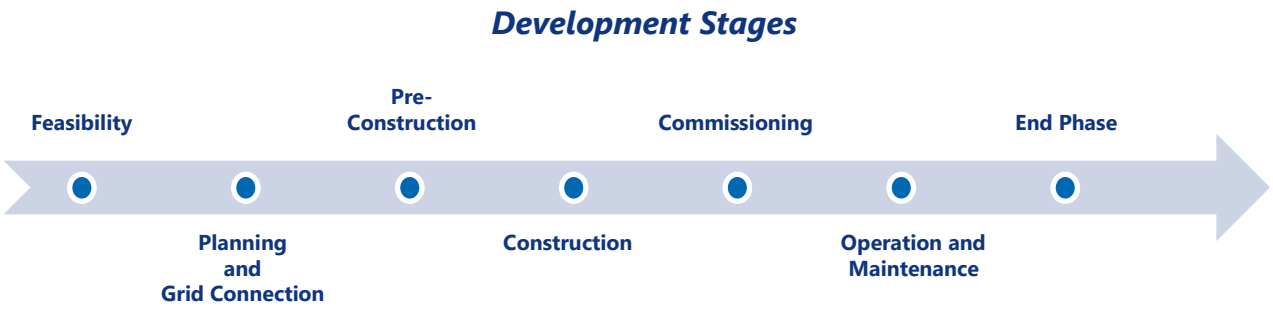


*Figure 1-1: CHP Project - General Development Stages*

# 2 Design And Construction Stage

## 2.1 Site Selection and Feasibility

The first phase of a CHP 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 CHP 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 CHP installation, which will cover required assessments for grants, grant applications, and contractor works. More information about One Stop Shops can be found here.

The design phase of the CHP system is influenced by various factors, particularly in terms of demand-side factors, such as electricity and heat requirements for consumers. It is advantageous for a project to be appropriately scaled and investigated to determine its suitability for your particular application. The requirements of your operation or intended use will determine the CHP technology that may be applied, which can vary widely. CHP systems range from small residential installations to mid-sized installations for facilities like care homes, hotels and leisure centres, to commercial plants that provide electricity directly to the national grid and distribute heat for district heating or industrial use. Fuel choice will be a key driver of the technology that may be used. For example, biomass CHP units may require additional safe storage space for fuel, such as wood pellets or wood chips, which may require additional yard space for deliveries or new buildings. Natural Gas CHP units may only require a natural gas supply line or storage tank. Biomass may be cheaper over the lifetime of the project, plus carbon dioxide emissions may be a key consideration for your business or application. It is important to develop clear objectives for your particular project.

SEAI has produced a useful document that outlines the various technical considerations for a biomass CHP project. Much of which will also be relevant to other CHP projects. For more information, please visit: https://www.seai.ie/sites/default/files/publications/SEAI-Biomass-CHP-Implementation-Guide.pdf

For smaller CHP applications, vendors or installers of the equipment can assess your needs based on your business or use case. Larger or more complex systems may require additional independent expertise and advice. Together, you will need to consider the available space and potential locations, the technology that may suit your needs, and the scale of your project to determine what is feasible in that context. It is then important to develop a project plan that sets out all the stages needed to realise your project

## 2.2 Technical Feasibility

As part of a technical feasibility assessment, the following items should be considered to help determine whether a CHP system is the most suitable solution for your energy efficiency needs, ensuring both financial viability and energy production efficiency.

Considerations:

- Available space/land and land ownership status;
- Electricity and heating requirements of your application;
- Electricity / Heat dependency;
- Identifying potential fuel sources, their availability, market and supply projections;
- Understanding and identifying the key risks associated with developing a CHP project;
- Possible planning restrictions for flue stack height, proximity to neighbouring properties;
- Potential noise sensitivities;
- Understanding the relevant EU Directives, polices and incentives for CHP systems

For larger or stand-alone installations:

- Proximity to protected areas (Special Areas of Conservation (SACs), Special Protected Areas (SPAs), etc.);
- Ground conditions;
- Existing and future grid infrastructure;
- Community acceptance and buy-in;
- Public Road Access; and
- Existing and planned energy projects in the area

Information provided by the relevant Local Authority should also be considered, as Local Authorities will have determined areas where energy land use is acceptable in principle for development, by means of zoning maps. The aim of the initial technical feasibility assessment will be to come up with an outline design(s) to enable a financial feasibility assessment to be carried out, and to assess the various possible solutions. These feasibility considerations typically require the services of a multidisciplinary team, including but not limited to developers, financial consultants, engineers, landowners, etc.

## 2.3 Commercial Feasibility

The financial feasibility of a CHP project will determine if the project should be pursued or not, regardless of whether it is a commercial or community-based endeavour. An initial financial assessment should be conducted to compare the various CHP system options with other potential technologies, aiming to establish a commercial case for CHP provisionally. It is recommended that this assessment cover the entire lifespan of the CHP system (e.g., a 20-year period). Techniques such as calculating the internal rate of return or the simple payback period can be utilised to assess viability.

The financial feasibility will need to consider:

- Capital Costs: These can be identified from similar installations, benchmark figures, or discussions with suppliers.
- Maintenance Costs: These include regular servicing, allowance for breakdowns and spare parts, and day-to-day tasks like boiler cleaning, ash removal, and attending to fuel blockages.
- Fuel Costs: To be determined through discussions with fuel suppliers, with quantities estimated from the site's heat and power demands and the system's efficiencies.
- Savings and income streams include:
- Fuel Cost Savings: From the existing fuel displaced, established from historical fuel invoices.
- Government Incentive Payments: Where applicable.
- Value of Heat Sales and Electricity Exports.
- Avoided Waste Disposal Costs: If the biomass system uses waste, it may offset other waste disposal costs.
- Avoided Costs of Standard Boiler Replacement: If applicable.

A sensitivity analysis should compare the impacts of various parameters on the feasibility of the CHP installation, particularly considering future fuel prices (biomass and existing fuels). It's noteworthy that biomass prices have shown greater stability compared to oil prices, although recent years have seen some volatility.

Financial assessments will need to be reviewed as the chosen design is brought through to the planning and detailed design phases.

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.

## 2.4 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 CHP developer to visually identify specific constraints, rank them, and facilitate better siting of project infrastructure.

## 2.5 Project Financing

Financing will need to be secured to develop a CHP project. Financing may be secured in stages, with funds allocated to support the early stages of concept development, followed by the planning and assessment stages, and finally, the construction stage.

There are various ways a project can be funded, such as debt financing, equity financing, bank loans, or a combination of all.

SEAI provides a Financing Renewable Energy framework for Community Generation Projects designed to guide community groups seeking to develop and invest in Renewable Energy Community Generation Projects in Ireland.[2] Typically, loans are required to be repaid prior to the end of the RESS fixed price (if participating), as this provides certainty for the lender, which helps to reduce the cost of borrowing through the reduced risk on investment. There are also a number of grants and support schemes that may be applicable to your project.

## 2.6 Support Schemes for CHP projects

Depending on the objectives of your project, the chosen CHP technology, and fuel type, there are several support schemes that may apply to your project. Consultation with the SEAI is advised to ensure you are aware of the support schemes that may be applicable to your particular CHP application. Some support schemes are aimed at renewable self-consumers of electricity who wish to sell excess electricity back to the grid, and some are aimed at community or commercial electricity production. Below are some examples;

### *2.6.1 Support Scheme for Renewable Heat*

The Support Scheme for Renewable Heat (SSRH) by the Sustainable Energy Authority of Ireland (SEAI) provides financial incentives to encourage businesses to switch from fossil fuels to renewable heating systems. The scheme offers two main types of support: an operational tariff for biomass and biogas heating systems, including CHP systems, and an installation grant for commercial heat pumps. The operational tariff supports the useable heat output of renewable systems for up to 15 years, making it applicable to new installations or conversions from fossil fuels to biomass or biogas CHP systems.

For more information, please check this: https://www.seai.ie/grants/business-grants/support-scheme-renewable-heat

[2] *https://www.seai.ie/publications/Community%20renewables%20toolkit%20financing*

### 2.6.2 Micro-Generation Support Scheme

The Micro-Generation Support Scheme (MSS) is a government incentive produced under the Climate Action Plan 2020 and the Programme for Government. Its goal is to support micro-generation for citizens and communities to generate their own renewable electricity for both self-consumption and export and includes combined heat and power as an eligible technology.

The technical requirements to qualify for the scheme include:

- Eligible Technology;
- Grid Connection details; and
- Measurement of export volumes.

The underlying principle for the MSS is that microgeneration projects should focus on self-consumption first and foremost, with the potential for export payments being an additional benefit but not the primary driver for engaging in micro-generation.

The MSS framework is also designed to work in tandem with the existing Clean Export Guarantee (CEG) tariff, which is an export payment for residual renewable electricity exported to the grid by renewables self-consumers and renewable energy communities.

Some key features that the MSS offers include:

- An Exchequer grant for small new domestic installations;
- An Exchequer grant for small new non-domestic installations up to 6kW in size; and
- A Feed-in-tariff, known as the Clean Export Premium (CEP), to provide support for installations greater than 6.0kW up to 50kW in size.

Further details can be found by clicking on the following link: https://www.gov.ie/en/publication/b1fbe-micro-generation/

### 2.6.3 Clean Export Guarantee (CEG)

The 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. Further information can be found on the CRU website.
https://www.cru.ie/consumer-information/microgeneration/

### 2.6.4 Renewable Electricity Support Scheme

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

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

Further information on the RESS process, including the latest auctions and up-to-date information, can be

found by clicking on the link below.

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

The RESS relates to larger-scale projects, and many CHP installations would likely not compete in these auctions (projects must produce at least 500kW). However, the option remains open for larger projects that wish to sell electricity to the grid.

### *2.6.5 High Efficiency CHP Certification*

The Commission for Regulation of Utilities (CRU) oversees the certification process for High Efficiency Combined Heat and Power (HE CHP) systems to ensure they meet the high-efficiency criteria set out in legislation. This involves submitting an application with relevant documentation, which the CRU reviews and assesses based on operational data over a twelve-month period.

In conjunction with the CEG programme, HE CHP systems that are certified can benefit from payments for the excess electricity they export to the grid. The CEG ensures that microgenerators, including HE CHP systems, are compensated for their exported electricity, promoting the use of renewable energy sources.

Further details can be found by clicking the following link: https://www.cru.ie/regulations-policy/licences/high-efficiency-chp/

## 2.7 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, if applicable;
- Options to access the site; and
- Community engagement.

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. The scale of the project will determine the extent of community engagement that may be required. Developments, especially those in proximity to residential dwellings, frequently generate concerns from residents for several reasons, including concerns about their impact on visual amenity, conservation, and emissions, among others. The resident concerns may be addressed early in the planning process, which can help avoid negative community interaction later in the process, as well as foster community buy-in and include the community before any statutory processes commence. 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.

## 2.8 Community CHP Projects

Community groups can come together to enter the energy market, alongside commercial entities with a CHP installation. Community groups bringing forward CHP projects, while possible in principle, are uncommon compared to community solar or onshore wind energy installations. The process for getting a project constructed is similar to any commercial venture. However, there is an additional point to note about community CHP energy projects.

A community CHP energy project typically follows a defined structure that will assist in ensuring a successful delivery of the project and securing available government support. Please consult resources published by the SEAI in relation to community energy projects. A key difference to note between community projects versus commercial ventures relates to an upper limit for capacity placed on community-led projects of 5 megawatts

(hereafter, MW), with regard to participating in the Renewable Energy Support Scheme (RESS)

## 2.9 Design Stage

Once a preferred option has been identified, a detailed design will need to be produced. This may involve the identification and appointment of suitable contractors or suppliers to complete the detailed design work and if applicable, prepare the design which will be submitted for planning consent.

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 etc. 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.

If connecting your project to the grid, it will be important to incorporate any grid connection requirements into the project design at an early stage. Consultation with ESB Networks or EirGrid is advised.

If applying for any government support incentives, it is important to consider any technical requirements that may need to be incorporated into the design. Similarly, it is important to consider any implications of any design changes to existing operational licences, such as the IPC licence or the Greenhouse Gas Permit.

## 2.10 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.

## 2.11 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.

## 2.12 Planning and Environmental Assessments

The requirement for environmental assessments will very much depend on the location and scale of the CHP project being considered. Some projects may be exempt from planning requirements (please see **Section 2.13.1).** Projects that will require planning permission may require supporting information to be submitted as part of the planning application.

The typical environmental assessments required for CHP 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
- Flood Risk Assessment (FRA)
- Traffic Impact Assessment (TIA)

It is unlikely that a CHP project, in isolation, will require a full Environmental Impact Assessment (EIA) (as defined under the regulations) due to the high threshold requirements for an EIA (300 MW for combustion installations). However, if CHP is proposed to be implemented in combination with a new large scale Anaerobic Digestion (AD) facility for example, or where the project is sufficiently large so as to potentially have likely significant effects, due to its location and extent, the planning authority may require an Environmental Impact Assessment Screening Report or an Environmental Impact Assessment Report to support the planning application.

Useful guidance can be found in the document below:

Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development Aug 2003.

### *2.12.1 Environmental Baseline Surveys*

Large-scale projects such as CHP 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.

### *2.12.2 Environmental Impact Assessment Report (EIAR)*

#### *2.12.2.1 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.

#### *2.12.2.2 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.

#### *2.12.2.3 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.

#### *2.12.2.4 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.

#### *2.12.2.5 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.

#### *2.12.2.6 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.

### *2.12.3 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 CHP 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.

### 2.12.4 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"*[3].

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

### 2.12.5 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

### 2.12.6 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

### 2.12.7 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 -

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

Guidelines for Planning Authorities

### 2.12.8 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

## 2.13 Planning Permission

### 2.13.1 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.

A CHP project may be exempted development, that is development which does not require planning permission, or planning permission may be required. CHP may be exempted if it forms part of an existing business, industry or agricultural activity for which planning permission is not required by virtue of the size and physical characteristics of the system proposed. Please see the criteria in the sections below.

It is important to note that planning consent only has jurisdiction over the construction of the CHP installations and does not mean that a connection to the electricity grid offer will be granted by relevant authorities, as this is a separate matter. For larger projects, securing planning permission will be required before a Grid Connection Application can be lodged. However, consultation is advised at an early stage to ensure any technical requirements are incorporated into the design.

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.

### 2.13.2 Businesses, Industry and Agriculture: Exempted Development

In Ireland, planning regulations exemptions for CHP installations have been designed to simplify the adoption and installation of CHP technology. These exemptions allow small-scale CHP systems to be installed without the need for full planning permission, provided they meet certain criteria, such as size and location restrictions. This streamlined process reduces administrative burdens and encourages the uptake of CHP systems, supporting the country's renewable energy goals and promoting sustainable energy solutions. Exemptions may apply where a CHP installation is proposed within the curtilage of industrial, light industrial / business premises, or an agricultural holding. However, it is worth noting that there are many other considerations relating to exempted development, and you may still require planning permission, even if your project meets the criteria listed in this section. It is recommended to conduct a planning review of your proposed project to determine whether it is exempted development or not.

There are specific restrictions on the design of such installations, which vary depending on whether the

building is industrial, light industrial/business premises, or an agricultural holding. See the tables below. There are other restrictions on exempted development. It is recommended that a further planning review be conducted once details of specific proposals are known.

### Table 1: Industrial Building CHP Exempted Development Regulations

| Industrial Buildings | |
|---|---|
| **Description of Development** | **Design Regulations** |
| **The construction, erection or placing within the curtilage of an industrial building of a structure for the purposes of housing a (fully enclosed) CHP system** | The gross floor area of the structure shall not exceed 500 $m^2$. |
| | No such structure shall exceed 10 m in height, or 50 m in length. |
| | No such structure shall be within:<br>(a) 10 m of any public road<br>(b) 200 m of the nearest habitable house or residential building or school, hospital, church or building used for public assembly (other than the house or building of the person providing the structure), save with the consent in writing of the owner, and, as appropriate, the occupier or person in charge thereof. |
| | No such structure within 100 m of any public road shall exceed 8 metres in height. |
| | No such structure shall have more than 2 flues, neither of which shall exceed 20 m in height from ground level. |
| | The diameter of any flue shall not exceed 1 m. |
| | Noise levels must not exceed 43db(A) during normal operation, as measured at the nearest party boundary. |
| | Not more than one such structure shall be erected. |
| | The structure shall be used for the purposes of housing a CHP unit only. |

### Table 2: Light Industrial Building / Business Premises CHP Exempted Development Regulations

| Light Industrial / Business Premises Buildings | |
|---|---|
| **Description of Development** | **Design Regulations** |
| **The construction, erection, or placing within the curtilage of a business premises, or a light industrial building, of a structure for the purposes of housing a (fully enclosed) CHP system** | The gross floor area of the structure shall not exceed 300 $m^2$. |
| | No such structure shall exceed 8 m in height, or 40 m in length. |

| Light Industrial / Business Premises Buildings | |
|---|---|
| | No such structure shall be within:<br>(a) 10 m of any public road<br>(b) 200 m of the nearest habitable house or residential building or school, hospital, church or building used for public assembly (other than the house or building of the person providing the structure), save with the consent in writing of the owner, and, as appropriate, the occupier or person in charge thereof. |
| | No such structure within 100 m of any public road shall exceed 8 metres in height. |
| | No such structure shall have more than 2 flues, neither of which shall exceed 16 m in height from ground level. |
| | The diameter of any flue shall not exceed 1 m. |
| | Noise levels must not exceed 43db(A) during normal operation, as measured at the nearest party boundary. |
| | Not more than one such structure shall be erected within the curtilage of such a premises or building. |
| | The structure shall be used for the purposes of housing a CHP unit only. |

### Table 3: Agricultural Holding CHP Exempted Development Regulations

| Agricultural Holding | |
|---|---|
| **Description of Development** | **Design Regulations** |
| **The construction, erection or placing within an agricultural holding of a structure for the purposes of housing a (fully enclosed) CHP system** | The gross floor area of the structure shall not exceed 300 $m^2$. |
| | No such structure shall exceed 8 metres in height, or 40 m in length. |
| | No such structure shall be within:<br>(a) 10 m of any public road<br>(b) 200 m of the nearest habitable house or residential building or school, hospital, church or building used for public assembly (other than the house or building of the person providing the structure), save with the consent in writing of the owner, and, as appropriate, the occupier or person in charge thereof. |
| | No such structure shall have more than 2 flues, neither of which shall exceed 16 m in height from ground level. |
| | The diameter of any flue shall not exceed 1 m. |
| | Noise levels must not exceed 43db(A) during normal operation, as measured at the nearest party boundary. |
| | Not more than one such structure shall be erected within the agricultural holding. |

| Agricultural Holding | |
|---|---|
| | The structure shall be used for the purposes of housing a CHP unit only. |
| | The gross floor area of the structure shall not exceed 300 $m^2$. |

### *2.13.3 Other CHP Installations: Non-Exempted Development*

Many CHP projects of a small-to-medium scale are covered under the exempted development classification. However, larger projects and smaller installations outside of industrial, business and agriculture settings will require consent from the relevant Local Authority. Large installations (300MW or more) may be classified as Strategic Infrastructure Development (SID), and an application for consent would in such cases be made directly to An Bord Pleanála.

### *2.13.4 The Planning Process*

If your project is not exempted development, then you will need to apply for Planning Permission from the relevant Local Authority or An Bord Pleanála. The process of applying for planning permission is outlined briefly below. Further information in relation to the planning process for CHP 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 CHP development in Ireland.

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

#### *2.13.4.1 Pre-Application Consultation meetings Assessment (Stage 1)*

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, such as the requirement for environmental assessment or supporting documentation. 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 (if applicable), or other environmental assessment that may be required
- Any other issue where clarity or guidance is required
- The required content of the planning pack
- The appropriate scale for various drawings

#### *2.13.4.2 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 drawings, 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

#### *2.13.4.3 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.

#### *2.13.4.4 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.

#### *2.13.4.5 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. Planning Appeals may also be made.

#### *2.13.4.6 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.

#### *2.13.4.7 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. 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 consent 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/

## 2.14 Grid Connection

To connect your project to the national electricity grid you will require a connection agreement with either EirGrid or the ESB Networks. This is based on the capacity of the CHP project. There are various types of categories of agreements depending on your project type and scale.

Further information on grid connections can be found at the below links and sections:

- EirGrid Connection Process
- EirGrid Grid Connection Application
- ESB Networks Connection Process
- ESB Networks Generator Connections

### *2.14.1 Grid Connection Engineering and Commissioning Requirements*

In order to ensure that your project is designed, constructed and commissioned in accordance with the relevant network operator's requirements it is recommended that consultation begins in the feasibility and design phase. This will ensure any requirements can be brought forward into the design and all necessary elements, such as additional substations that may be required are included in the design submitted for planning.

Preparation for connection and commissioning commences early in the project Lifecyle and concurrently with other activities, therefore this will need to be factored into your Project Plan and scheduling. Data will need to be requested from the network operator and studies carried out to support your application at least 18 months in advance of energisation.

### *2.14.2 Micro-Generation Grid Connection Offer*

Micro-generation refers to any source of electrical generation with a capacity of up to 6 kVA for single-phase connections or up to 11 kVA for three-phase connections.

Micro-Generation installations are defined as follows:

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

To apply to install and connect a micro-generator, you must complete Form NC6 Microgeneration Notification. Submission to ESB Networks can be made by post (address on form) or email: networkservicesbureau@esb.ie. Further information can be found on ESB Networks: Connect a Micro-Generator.

### *2.14.3 Mini-Generation Grid Connection Offer*

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

- Greater than 25 A up to and including 72 A at low voltage [230 V], when the DSO network connection is single-phase; and

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

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

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

To apply to install and connect a mini-generator, you must complete Form NC7 Minigeneration Notification. Submission to ESB Networks can be made by post (address on form) or email: dsominigeneration@esb.ie Further information can be found on ESB Networks: Connecting Mini Generation.

**Importantly, for mini generation, you must follow the steps as outlined in the ESB document:**

- Conditions Governing Connection and Operation of Mini-generation

### *2.14.4 Small-Scale Grid Connection Offer*

Small Scale Generation is designed to operate in parallel with the electricity network and is defined as a source of connected electrical energy, and all associated electrical equipment where the Installed Generator Capacity is less than or equal to the Maximum Import Capacity, in the range as follows:

- Inverter-connected Installed Capacity greater than 72amps (≈50kVA) Three Phase and up to 200kVA, or,
- Synchronous Installed Capacity greater than 6kVA and up to 200kVA

To apply to install a Small Scale generator, you must complete either Form NC8 Small Scale Generation Application for inverter connected generation, or Form NC5 Embedded Generation Facilities for synchronous connected generation and submit to ESB Networks by post (address on form) or email: dsosmallscalegeneration@esb.ie.

Further information can be found on ESB Networks: Connecting Small Scale Generation.

**Importantly, for small-scale generation, you must follow the steps as outlined in the ESB document:**

- Conditions Governing Connection and Operation of Small-Scale Generation (50 kW – 200 kW)

### *2.14.5 ECP Cat A Grid Connection Offer*

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

ECP Category A is for generation, storage and other system services technology projects (MEC[4] >0.5 MW). Applications for this grid connection offer will occur in batches, with application windows occurring annually.

An application fee applies for projects with MEC>500 kW (0.5 MW), which is €2,000. Successful applicants will be prioritised by the largest renewable energy generation (first 25), then by planning permission grant date. Each batch application may set its own generation priorities.

A New Generator Connection Application (NC5) should be used where an applicant has identified their specific generator manufacturer detail and would like their technical study processed using the specified data provided by the applicant. NC5A is a shortened version of this form and may be used where the specific

[4] The Maximum Export Capacity (MEC) is the maximum capacity that you can export to the Electricity Distribution System. MIC and MEC are measured in kilo Volt Amperes (kVA). 1kVA is roughly equivalent to 1 kW in most circumstances.

generator manufacturer detail is unknown at the time of application. Therefore, the technical study is completed using assumed data, and the applicant is required to provide their specific data a year in advance of energisation. Fully completed application forms can be sent via email with all relevant documentation to DSOGenerators@esb.ie.

### *2.14.6 ECP Cat B Grid Connection Offer*

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

- Small projects i.e., MEC greater than 6kW/11kW and less than or equal to 500kW
- DS3[5] system services trial projects - up to 500kW
- Auto producers[6]

Applicants who have an existing application which has been received complete (along with the appropriate application fee) by the Systems Operators will be processed throughout the calendar year. These applicants will be prioritised based on when the existing application was received in its entirety. Where any relevant details pertaining to their project have changed, the existing Applicants must submit a new application form under ECP-2.1 for the same site location (grid coordinates) and technology type. The applicants may apply to reduce their MEC.

A New Generator Connection Application (NC5) should be used where an applicant has identified their specific generator manufacturer detail and would like their technical study processed using the specified data provided by the applicant.

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

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

### *2.14.7 ECP Cat C Grid Connection Offer*

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

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

Category C (Community-led) applicants must be 100% community owned and can apply on an ongoing basis throughout the calendar year. Once the application fee deposit has been paid and the applications have been accepted, the Distribution System Operator (DSO) (ESB Networks) will conduct a detailed study and confirm the connection method and connection cost. This will be issued as a *"connection assessment"*.

Community-led renewable energy projects will also not need planning permission prior to applying for a grid

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5 Delivering a Secure, Sustainable (electricity) System. The DS3 programme aims to ensure the secure and safe operation of the electricity system with increasing amounts of variable non-synchronous generation.. To achieve this aim, the TSO needs to obtain specific DS3 system services from generators and market participants.

6 A person who has entered into a Connection Agreement with the DSO or TSO and generates and consumes electricity in a Single Premises, or on whose behalf another person generates electricity in the Single Premises, essentially for the first person's own consumption in that Single Premises.

connection. Planning permission will, however, be required before a grid connection offer is issued.

A New Generator Connection Application (NC5) should be used where an applicant has identified their specific generator manufacturer detail and would like their technical study processed using the specified data provided by the applicant.

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

Community-led projects must include a Declaration Form with their application.

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

### *2.14.8 EirGrid Grid Connection Offer*

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

When submitting a new application to EirGrid as Transmission System Operator (TSO), the application must be accompanied by all supporting documentation as requested, including two signed copies of the EirGrid standard confidentiality agreement and the first instalment of €7,000 (inclusive of VAT) of the application fee. The total application fee is dependent on the size of the plant (taking into account the MEC[7] and MIC[8] values) and whether shallow connection works are involved in dealing with the capacity required.

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

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

Under the Electricity Regulation Act 1999 (Section 14 (1A)) Order 2022, it is necessary to apply to the Commission for Regulation of Utilities (CRU) prior to commencing works to construct or reconstruct and or to generate electricity from a generation station not exceeding 10 MW.

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

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

### *2.14.10 Authorisation to Construct*

Permission to construct a generator must also (in most cases) be granted by the Commission for the Regulation of Utilities (CRU).

For generators with an installed capacity of ≤1 MW, no authorisation is required, and construction is

*[7] The Maximum Export Capacity (MEC) is the maximum capacity that you can export to the Electricity Distribution System. MIC and MEC are measured in kilo Volt Amperes (kVA). 1kVA is roughly equivalent to 1 kW in most circumstances.*

*[8] The Maximum Import Capacity (MIC) is the upper limit on the total electrical demand you can place on the network system.*

authorised under S.I. No. 459 (2022)[9].

For generators with an installed capacity between 1 MW and 10 MW, a Notification of Intention to Construct or Reconstruct, and/or to Generate Electricity, from a Generation Station not exceeding 10 MW is required.

For generators with a greater installed capacity, an Authorisation to Construct or Reconstruct a Generation Station is required. There are separate application forms for capacity <40 MW and >40 MW.

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

Importantly, there are dual application forms for <40 MW and >40 MW applications where an Authorisation to Construct and a Licence to Generate can be applied for together.

**Recommended Reading in relation to Authorisation to Construct is:**

- Guidance Notes: Applying for an Authorisation to Construct or Reconstruct a Generating Station

### *2.14.11 Licence to Generate*

For generators with an installed capacity of ≤1 MW, no authorisation is required, and construction is authorised under S.I. No. 460 (2022).[10]

For generators with an installed capacity between 1 MW and 10 MW, a Notification of Intention to Construct or Reconstruct, and/or to Generate Electricity, from a Generation Station not exceeding 10 MW is required. This is the same form as the Authorisation to Construct.

For generators with a greater installed capacity, a Licence to Generate Application Form is required. There are separate application forms for capacity <40 MW and >40 MW.

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

Importantly, there are dual application forms for <40 MW and >40 MW applications where an Authorisation to Construct and a Licence to Generate can be applied for together.

### *2.14.12 Licence to Supply*

A Licence to Supply is a mandatory licence for anyone wishing to supply electricity to final customers (a final customer is defined as a customer purchasing electricity for their own use[11], it is applied for through the CRU (Section 14(1)(b), (c) or (d) of the Electricity Regulation Act 1999, as amended).

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

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

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[9] *S.I. No. 459/2022 – Electricity Regulation Act 1999 (Section 16 (3A)) Order 2022*
[10] *S.I. No. 460/2022 – Electricity Regulation Act 1999 (Section 14 (1A)) Order 2022*
[11] *Article 2(3) of the Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market in electricity (recast)*

### 2.14.13 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) 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 from other agreements, such as the Road Opening Licence.

The Section 48 wayleave consent is applied for through the CRU, see 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 photocopy of the route map is also required to be submitted along with the application.

Applications should be submitted at least two 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, and a contact will be made if the CRU requires clarification 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

### 2.14.14 Wayleave Consent: Section 49 to Lay Electric Cables

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

The Section 48 wayleave consent is applied for through the Commission for Regulation of Utilities (CRU), see section 49 application form. At present, there is no application fee.

Should the electric lines be required to go through private land, a yearly agreement has to be reached between the asset owner and the landowner for the duration of the project. 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 two 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, and a contact will be made if the CRU requires clarification or additional information.

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

### 2.14.15 Transmission Use of Systems (TUoS) Agreement

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

### 2.14.16 Distribution Use of System (DUoS) Agreement

To obtain access to a distribution system and transport electricity to and/or from the generation plant through the distribution system an application must be made to ESB networks (Section 14(1)(b), (c), (d) or (h) of Electricity Regulation Act 1999, and Section 34 of Electricity Regulation Act 1999). Following on from the connection application, an initial payment is required. A DUoS charge is a fee that ESB Networks charges your Electricity Supplier for use of the Electricity Distribution System. Details of Charges for Connection to the

Distribution System, approved by CER, are available on the ESB Networks Website.

For further Information on the process for connection of demand customers to the distribution system please refer to: https://www.esbnetworks.ie/docs/default-source/publications/guide-to-the-process-for-connection-of-demand-customers-to-the-distribution-system.pdf?sfvrsn=9b4433f0_4

## 2.15 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.

### *2.15.1 Appointed Construction Contractors*

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

1. Turnkey contracting, which sees a single company handling all CHP equipment, electrical and civil engineering works, or

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

Typically, where CHP projects follow the turnkey route, the equipment provider will lead, and sub-contract the electrical and civil engineering works to companies that would be deemed appropriate for the installation of their equipment. Maintenance contracts are also usually agreed at this point, where required.

Maintenance contracts are also typically agreed upon at this point, as necessary.

### *2.15.2 Planning 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. This may include providing specific design details not available at the planning stage, or the submission of additional ecological survey reports, or a CEMP. Failure to discharge planning conditions as specified by the conditions of a planning permission may result in enforcement action.

### *2.15.3 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.

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

Additional documentation may be required to be submitted with the completed Commencement Notice; and

this should be completed on-line on the National Building Control Management System (BCMS). An online system (i.e. a BCMS) for lodging commencement notices and 7-Day Notices and complying with the various new requirements is available at www.localgov.ie.

The fees relating to a 7-Day Notice are set out in **Table 4**Error! Reference source not found.**.**

**Table 4: Breakdown of the current rates and 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 |

### *2.15.4 Licences, Permits and Certificates*

The following licences may be required prior to construction. The requirements for these licences will depend on project specific circumstances and will not be applicable to all projects.

#### *2.15.4.1 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 for through the MRL website. You must register with the Road Management Office; http://www.rmo.ie/non-registered-users.html online MRL System to apply for a Road Opening Licence.

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 three weeks prior to works commencing** to the relevant Local Authority. A Signage licence is also required to authorise the use of advertisement signs/structures on public roads, including 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

#### *2.15.4.2 Certificate of Registration (waste management)*

If there is a requirement to process waste during a construction project, there may be a requirement for a Certificate of Registration (COR). A COR is generally required for small-scale waste activities. A COR is granted by the relevant Local Authority in the area where the works will be carried out. The waste activities that require a Certificate of Registration are listed in Part II of the Third Schedule of the Waste Management (Facility Permit and Registration) Regulations 2007, (S.I. No. 821 of 2007) as amended. To aid in rapid determination, if the project or development requires a Certificate of Registration, please refer to the following Decision Tree.

Applicants should contact the relevant Local Authority wherever they wish to apply for a Certificate of Registration.

#### *2.15.4.3 Fire Safety Certificate*

A Fire Safety Certificate is required where the applicant proposes a new building, a new building extension, material alterations to an existing building or a change of use of an existing building. The application is made through the Building Control Authority (BCA) in the local City or County Council. If the building or works 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.

#### *2.15.4.4 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 Disability Access 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.

#### *2.15.4.5 Section 50 Licence for the Construction, Replacement or Alteration of Bridges and Culverts*

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

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

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

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

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

#### *2.15.4.6 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 apply to the relevant Local Planning Authority for this licence to place, on, under, over or along a public road numerous items or equipment, including the following which may be relevant to an CHP 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 an 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.

#### *2.15.4.7 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.

#### *2.15.4.8 Ecological Consents, Notifiable Actions/Consents/Derogations Licences*

If you are intending to develop on or in an area where wildlife could be impacted, consent may be required. Such consent may be in the form of notifiable actions or licences. Further permission may then be required in exceptional cases (e.g., 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.

#### *2.15.4.9 Derogation Licence*

A derogation licence may be required when removing vegetation in preparation for tree felling/afforestation. Derogation licences are licences to disturb or interfere with protected plant and animal species. A number of

plant and animal species are legally protected in Ireland. Some of these species are included in a system of Strict Protection pursuant to the requirements of Articles 12, 13 and 16 of the Habitats Directive (92/43/EEC) and are sometimes referred to as Annex IV species. The list of Annex IV species which occur in Ireland and its waters is set out in **Table 5** below. The European Commission Guidance document[12] 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 5: 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 | |

#### *2.15.4.9.1 Derogation Licence to Disturb Bats or their Breeding or Resting Places*

At present, there are nine confirmed resident bat species in Ireland. All bats are listed on Annex IV of the EU Habitats Directive. Under the Irish law that implements this directive, both the bats themselves and their roosts are protected; as such, it is an offence to disturb or interfere with them without an appropriate licence. If any bat species is suspected to inhabit structure (e.g., trees, bat boxes, buildings, stone bridges etc.) in any area proposed for development, a derogation licence to disturb bats, their breeding or resting places may be required by the granting authority[13].

Even when planning permission is granted, the wildlife legislation applies. **Works which would capture or kill them, damage or destroy their roosts or disturb them at important parts of their life cycle cannot take place without obtaining a *second derogation licence***. This licence is issued when planning permission is given under Regulation 54 of the Regulations, and strict criteria must be met before such a licence can be approved. 'Bat Mitigation Guidelines for Ireland'[14] should also be referred to when carrying out works which

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

[13] *National Parks and Wildlife Service (NPWS), under EC (Birds and Natural Habitats) Regulations 2011-2021.*

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

may disturb them.

#### *2.15.4.9.2 Derogation Licence to Disturb Otters or their Breeding or Resting Places*

Otters are listed on Annex IV of the EU Habitats Directive. Under the Irish law that implements this directive, both the otters themselves and their holts are protected, as such it is an offence to disturb or interfere with them without an appropriate licence. If an otter species is suspected to inhabit structure (e.g., banks or culverts, etc.) in any area proposed for development, a derogation licence to disturb otters, their breeding or resting places may be required by the granting authority[15].

Even when planning permission is granted, the wildlife legislation applies. **Works which would capture or kill them, damage or destroy their roosts or disturb them at important parts of their life cycle cannot take place without obtaining a *second derogation licence***. This licence is issued when planning permission is given under Regulation 54 of the Regulations, and strict criteria must be met before such a licence can be approved. 'Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes'[16] should also be referred to when carrying out works which may disturb them.

### *2.15.4.10 Capture/Kill Protected Wild Animals for Education or Scientific Purposes Licence*

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

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

### *2.15.4.11 Licence To Photograph or Film a Protected Wild Animal or Bird*

This licence may be required for ecological surveys. 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 un-flown 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)).

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[15] NPWS, under EC (Birds and Natural Habitats) Regulations 2011-2021.

[16] Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes. NRA, 2008.

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 in **Table 6** below.

**Table 6: 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 | | | | | |

#### *2.15.4.12 Licence for the Removal of Invasive Alien Species*

This licence may be required if invasive alien species are required to be removed or disturbed as part of a project. Under the EC Birds and Natural Habitats Regulations 2001 SI 477 of 2011, it is an offence to release or allow to disperse or escape, to breed, propagate, import, transport, sell or advertise species listed on Schedule 3 of the regulations without a Licence. The two regulations that deal specifically with this scheduled list of species are:

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

The following activities are expressly prohibited:

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

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

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

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.

Refer to the NPWS outline invasive species management plan for further information.

#### *2.15.4.13 Licence To Interfere with or Destroy the Breeding Places of Any Wild Animals*

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

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

The list of Annex IV species which occur in Ireland and its waters is set out in **Table 5**Error! Reference source n ot found.**.** The European Commission Guidance document[17] 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.

If any Annex IV species is suspected/found to occur in an area to be developed, a derogation licence may be required. A derogation licence to disturb Annex IV species or their breeding or resting places may be required by the granting authority, National Parks and Wildlife Service (NPWS), under European Commission (Birds and Natural Habitats) Regulations 2011-2021. For example, otters are listed on Annex IV of the EU Habitats Directive. The Irish law that implements this directive gives strict protection to individual otters and their breeding and resting places.

Even when planning permission is given, the wildlife legislation applies. Works which would capture or kill them, damage, or destroy their breeding or resting places, 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.

See https://www.npws.ie/licensesandconsents/disturbance/application-for-derogation-licence for further information.

#### *2.15.4.14 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,

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[17] *European Commission Guidance document. Available online at: https://environment.ec.europa.eu/topics/nature-and-biodiversity/habitats-directive en*

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 the 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.

#### *2.15.4.15 White-Clawed Crayfish Licence*

For streams, rivers and lakes where white-clawed crayfish are known to be present, if there is potential for the area to be impacted by a proposed development or project, a '*White-Clawed Crayfish Licence*' will be required to survey and or remove this species to an appropriate location.

A '*White-Clawed Crayfish Licence*' is granted by the wildlife licence unit through the National Parks and Wildlife Service (NPWS), under Section 23 and Section 24, Wildlife Act 1976 (as amended). The permit allows the survey, capture, temporary confinement and translocation of white-clawed crayfish.

See the survey licence conditions document for White-Clawed Crayfish for a further information.

#### *2.15.4.16 Tree Licensing*

##### *2.15.4.16.1 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 2.15.4.16.2** 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

#### *2.15.4.16.2 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

#### *2.15.4.17 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

#### *2.15.4.18 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 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 European Union (Water Policy) (Abstractions Registration) Regulations 2018 (S.I. No. 261 of 2018).

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 $m^3$ 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/).

#### *2.15.4.19 Ministerial Consent for works at/near a National Monument*

Where works may occur at or near a national monument, consent must be granted prior by the Minister for Housing, Local Government and Heritage. 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.

Consents of this nature must be requested through the National Monuments Service at: nationalmonuments@housing.gov.ie.

Further guidance and forms are available at NMS: Ministerial Consent – National Monuments

#### *2.15.4.20 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.

The use of metal detection devices is not permitted without consent on archaeological sites or to search for archaeological objects. The National Monuments Service grants detection devices consents and a request for such consents must be submitted to: nationalmonuments@housing.gov.ie. Further guidance is available at NMS: Detection Device Consent.

#### *2.15.4.21 Excavation Licence (Archaeological)*

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

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

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

#### *2.15.4.22 Industrial Emissions Licence (IE Licence)*

The Industrial Emissions Directive is administered by the Environmental Protection Agency (EPA), and lays down rules on integrated prevention and control of pollution arising from industrial activities (see **Table 7** for list of typically licenced industries). An industrial emissions licence is required for new activities, which is defined in the First schedule of the EPA Act 1992 as combustion of fuels in installations with a total rated thermal input of 50 MW or more. A licence must be obtained prior to commencement. Guidance on the

application process is available from the EPA (https://www.epa.ie).

**Table 7: Types of Industries that might require an Industrials Emissions Licence**

| Minerals and other materials | |
|---|---|
| Energy | Surface coatings |
| Metals | Intensive Agriculture (poultry and pigs) |
| Minerals Fibres, and Glass | Food and Drink |
| Chemicals | Wood, paper textiles and leather |
| Waste | Fossil fuels |
| Other Activities (includes testing of engines, manufacture of printed circuit boards, production of lime, the manufacture of ceramic products, the capture of CO2 streams and treatment of waste-water) | Cement, Lime and Magnesium Oxide |

Access to the EPA online application form is via the Environmental Data Exchange Network (EDEN) online portal (https://www.edenireland.ie/). The licence is required to refer to the complete environmental performance of the plant, including emissions to air, water and land, generation of waste, use of raw materials, energy efficiency, noise, prevention of accidents and restoration of the site upon closure. If unsure as to which type of authorisation is required, or to validate licence requirements, ***an applicant may request the EPA to determine appropriate licencing requirements***.

An application for an Article 11 determination (waste disposal and recovery) must be made online using the EPA's website (EDEN) and will take 15 working days from submission to determination. However, the licencing process through the EPA takes 8 weeks from application to determination, followed by 28 days allowed for objections, before a final decision can be made, which may then be subject to Judicial Review within 8 weeks of the decision.

Any person conducting an activity that is below an industrial emissions licence threshold must ensure that they do not exceed that threshold without first obtaining an Industrial Emissions licence and also must ensure that the activity is correctly authorised. It is an offence to carry on a licensable activity without a proper licence from the EPA, and validation of licence requirements with the EPA is strongly advised.

EPA Licencing of generating facilities is currently carried out only for thermal plants. For all queries in relation to IE licencing and to arrange a pre-application meeting contact the EPA at licensing@epa.ie.

#### *2.15.4.23 Integrated Pollution Control Licence (IPC Licence)*

An Integrated Pollution Control (IPC) licence is a single integrated licence that covers all emissions from a facility and its environmental management (see the applicable industries listed in **Table 8** below). IPC licence requirements come into effect as a result of the Environmental Protection Agency Act 1992, as amended, to meet the European Union Industrial Emissions Directive 2010/75/EU.

**Table 8: Types of Industries that might require an IPC Licence**

| Types of Industries that might require an IPC Licence | |
|---|---|
| Metals | Fossil fuels |
| Minerals Fibres and Glass | Cement |
| Chemicals | Waste (class 11.1) |
| Food and Drink | Surface coatings |
| Textiles and leather | Other Activities (includes testing of engines, manufacture of printed circuit boards, production of lime, the manufacture of ceramics). |

Before a licence is granted, you must satisfy the Environmental Protection Agency (EPA) that emissions from the activity will not cause a significant adverse environmental impact. If you are conducting IPC activities, you can ask the EPA to make a declaration as to whether an IPC licence is required via the EDEN online portal (https://www.edenireland.ie/). If disposing of waste, the certification and licencing of waste companies should be validated.

The requirement for a licence can be determined using the EDEN portal within 15 working days. However, the licencing process through the EPA takes eight weeks from application to determination and an EIA (Environmental Impact Assessment) may be required, followed by 28 days allowed for objections before a final decision can be made, which may then be subject to Judicial Review within eight weeks of the decision.

Some activities only require an EPA licence when they exceed specified thresholds. If you are carrying out an activity that is below a threshold, you must ensure that you do not exceed that threshold without having an IPC licence. Currently IPC licencing is limited to thermal plants. For all queries in relation to IPC licencing and to arrange a pre-application meeting contact the EPA at licensing@epa.ie.

#### *2.15.4.24 Medium Combustion Plant Registration*

Regulations require registration of medium combustion plant except where it is already included on a site holding an Industrial Emissions Licence (IEL) or an Integrated Pollution Control (IPC) licence.

The Environmental Protection Authority (EPA) issues Medium Combustion Plant Registration licences for installations which are any device in which fuels are burned to make use of the heat generated. This includes boilers, turbines, and engines. These Regulations apply to combustion plants with a rated thermal input equal to or greater than 1 MW and less than 50 MW, irrespective of the fuel that they use. The registration ensures compliance with the European Union (Medium Combustion Plants) Regulations 2017. Registration is controlled by the EPA via the EDEN portal (https://www.edenireland.ie/). For queries, contact the EPA at mcpregistration@epa.ie.

#### *2.15.4.25 Green House Gas (GHG) Emission Permit*

The Environmental Protection Agency (EPA) is responsible for administering EU ETS (Emissions Trading Scheme) in Ireland for both stationary units and aircraft operators[18]. The Green House Gas (GHG) emission permit authorises the holder to undertake named activities (for further detail refer to the: Commission Implementing Regulation) which result in the emission of carbon dioxide and other greenhouse gases. Installations from which greenhouse gasses are emitted, need to be monitored and controlled to ensure permitted emissions are not exceeded. It is an offence to carry on an activity listed in Annex 1 of the Directive without a GHG permit.

Information on activities can be found in the EU Guidance note on interpretation of Annex I of the EU ETS Directive (excl. aviation activities); this is helpful for determining if your installation is included in the EU ETS and if an emissions permit is required.

There is mandatory participation in the emission permit for sectors and companies in the energy industry including:

- **Electricity and heat generation:** Combustion installations with a rated thermal input exceeding 20 MW Including power plants generating electricity and heat from fossil fuel such as: natural gas, coal and oil as well as other high-emission technologies such as solid biomass fuel installations.

For more information on applicable sectors and greenhouse gases covered see Annex I and Annex II respectively of the EU ETS Directive.

[18] The legal basis for implementing the EU ETS in Ireland for stationary installations is set out in the European Communities (Greenhouse Gas Emissions Trading) Regulations 2012 (SI 490 of 2012).

Helpful guidance on activities that may require GHG permits can be obtained from the EPA website.

If you believe you fall into the descriptions under Annex I of the EU ETS Directive contact the EPA by email (ghgpermit@epa.ie) and they will advise on how to proceed. Useful information for ETS operators can be found under EU ETS Monitoring and Reporting guidelines.

Further information on GHG emissions trading can be found on the EPA website at:

- Emission trading statutory installations; and
- EU emission trading systems

#### *2.15.4.26 Gas Pipeline Consents*

Permission for the construction of a gas transmission pipeline is granted by the Commission for Regulation of Utilities (CRU), under Section 39A of the Gas Act 1976, as amended. Permission is required for the construction of gas transmission pipelines to connect authorised plants with the national gas grid. Once consent has been obtained to construct the pipeline, further consents will be required from the CRU to operate the pipeline. Please note that this consent is separate from planning consents from either the Local Authority or ABP.

Queries relating to Section 39A Consents can be submitted via email to 39Aconsent@cru.ie.

In accordance with the EU Environmental Impact Assessment Directive and the Habitats Directive, the project will be assessed for potential significant environmental impacts. It will be necessary to get consent from the Commission for Regulations of Utilities (CRU)and notify the Gas Networks Ireland (GNI) to degas a pipeline. The CRU is the competent authority that issues a Section 39A (of the Gas Act 1976, as amended) approval for this activity.

In order to decommission a pipeline, you need to degas it. To do that you must decant the gas in that pipeline into a lower pressure section of the network. Ultimately, that surplus gas is then flared and purged with nitrogen. Should you then need to dig up that degasified gas pipeline, the impact on the local environment is similar to the impact of putting the pipe in situ in the first place. An alternative to this step in the degasifying process is to fill the degassed pipeline with grout and leave in situ, as this has the least impact on the environment.

Gas lines were once deemed to have a lifetime of 40 years, but now (due to the advancements in materials in use) the GNI analyses pipelines to assess pipes to see if it can continue beyond this timeframe.

Prior formal consent given by Gas Networks Ireland (GNI) is required If you are carrying out work in the vicinity of gas pipelines transmission network. This consent is required if works are being carried out within a wayleave i.e. land acquired by GNI (under the Gas Act 1976, as amended), a GNI transmission installation or within 3 m either side of a transmission pipeline or distribution strategic mains in a public roadway.

It is important to follow the process outlined in GNI's '*Code of Practice for Working in the Vicinity of the Transmission Network'*.

The code of Practice sets out the requirements and considerations for the following:

- Design;
- Construction;
- Maintenance of services and/or structures; and
- Other works in the vicinity of existing GNI gas transmission pipelines and associated installations located in both wayleaves and public roadways.

In conjunction with the consent from the GNI the following licences and notices should be applied for:

- **Design and Planning** – consider requirements and the impacts of the proposed works;

- **Notice to Commence** – minimum of 5 days' notice prior to commencement is required;
- **Request Marking out of Transmission Pipeline Route** – minimum three working days' notice required by GNI to mark out the transmission pipeline route;
- **Observe Restrictions** - Observe GNI restrictions on the allowed proximity of mechanical excavators and other power tools and the measures to protect the transmission pipeline and associated installations during any works (Sections 10, 11, 12 & 13 in the Code of Practice); and
- **Backfilling** – Contact GNI prior to any backfilling over, alongside or under the transmission pipeline and obtain GNI's agreement to proceed. GNI require two working days' notice prior to backfilling (Section 12 in the Code of Practice).

If work involves any of the following activities: trenchless techniques, piling, surface mineral extraction, land filling, demolition, blasting, pressure testing, seismic surveys, wind farms, comply with the requirements in Section 14 in the Code of Practice.

### 2.4.5 Pre-Construction Conditions

For the purposes of safe construction and operation of a CHP facility, additional conditions need to be strictly adhered to. In the case of the Seveso Directive, this is not a licence so much as an international standard that must be adhered to if your activity involves the storage, use or potential release of dangerous substances.

### *2.15.5 Seveso III Directive*

The Seveso III Directive aims to control major accidents and or hazards involving dangerous substances, especially chemicals. They are a set of preventive measures and notifications in order to reduce the risk of hazardous activities and put a limitation on the consequences for human health and the environment, with a view to ensuring a high level of protection throughout the EU in a consistent and effective manner.

This Directive shall not apply to any of the following:

(a) Military establishments, installations or storage facilities;
(b) Hazards created by ionising radiation originating from substances;
(c) The transport of dangerous substances and directly related intermediate temporary storage by road, rail, internal waterways, sea or air, outside the establishments covered by this Directive, including loading and unloading and transport to and from another means of transport at docks, wharves or marshalling yards;
(d) The transport of dangerous substances in pipelines, including pumping stations, outside establishments covered by this Directive;
(e) The exploitation, namely the exploration, extraction and processing, of minerals in mines and quarries, including by means of boreholes;
(f) The offshore exploration and exploitation of minerals, including hydrocarbons;
(g) The storage of gas at underground offshore sites, including both dedicated storage sites and sites where exploration and exploitation of minerals, including hydrocarbons are also carried out; and
(h) Waste land-fill sites, including underground waste storage.

Notwithstanding points (e) and (h), onshore underground gas storage in natural strata, aquifers, salt cavities and disused mines and chemical and thermal processing operations and storage related to those operations which involve dangerous substances, as well as operational tailings disposal facilities, including tailing ponds or dams, containing dangerous substances shall be included within the scope of this Directive.

In the event of a major accident with the potential to pose a significant threat to human health the operator is required to notify the Health and Safety Authority (HAS) immediately using the approved Notifiable Incident Form and email this to comah@hsa.ie.

Please refer to: Seveso III Directive – Seveso III On the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC (Text with EEA relevance), Annex I for a list of Dangerous Substances considered under the Seveso Directive.

## 2.16 Construction Phase

### *2.16.1 Outline of Construction*

CHP installations can vary widely from small-scale systems that can be changed out and integrated easily into the existing infrastructure and not subject to planning consent, to larger, more complex installations involving the construction of new buildings, laying new pipelines and/or cables and the construction of new substations.

Once construction is ready to commence, if required, site clearance is the first stage, preparing the site for construction. Access roads may be put in place, allowing construction vehicles to access the site.

In parallel, two aspects of the project will usually start construction – the CHP facility to support the project and the substation(s) that may be required. These can be viewed as separate projects by their nature, but of course, they form part of the same project. The substation(s) will need to be ready for connection when the generator is ready to be connected to the grid.

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 CHP project, various permits may be required during the construction phase. Maintaining compliance with the permits granted to the project is crucial.

### *2.16.2 Planning Permission Conditions*

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

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

### *2.16.3 Commissioning*

Once construction is complete, commissioning of the CHP system takes place. 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.

The energisation and commissioning process will differ depending on the size and scale of the project. Some CHP installations may be commissioned independently by appropriate professionals, while installations supplying power to the grid may need to undergo commissioning and testing to satisfy the network operator requirements in line with any requirements under the respective connection agreement.

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

# 3 Operating & Maintenance Stage

## 3.1 Recurring Licences

Some licences and consents may not have a duration that covers the entire lifespan of a CHP 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 CHP site to keep up to date/abreast of the relevant necessary licences.

### *3.1.1 Wayleave Consent: Section 48 to Lay Electric Cables*

During the operation and maintenance of a CHP installation, it may be necessary to reapply for a Section 48 wayleave consent.

Please refer to **Section 2.14.13** for further information.

### *3.1.2 Wayleave Consent: Section 49 to Lay Electric Cables*

During the operation and maintenance of a CHP installation, it may be necessary to reapply for a Section 49 wayleave consent.

Please refer to **Section 2.14.14** for further information.

### *3.1.3 Waste Disposal Licence/Permits*

Disposal of waste from BESS facilities will be required to be with registered waste companies that are approved to deal with the waste type. Lithium batteries are classified as hazardous waste, and any replacement of units will require the removed batteries to be dealt with by appropriately approved waste management companies.

For further information regarding specialised waste disposal, please refer to **Section 2.15.4.17**.

### *3.1.4 Seveso Directive Compliance*

During the operations and maintenance of a CHP installation, it is important to ensure compliance with the Seveso III Directive which aims to control major accidents and or hazards involving dangerous substances, especially chemicals.

For further information relating to the Seveso Directive, please refer to **Section 2.15.5**.

### *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 2.15.4.4** for further information about DAC.

### *3.1.6 Licence for the Removal of Invasive Alien Species*

Under the EC birds and Natural Habitats Regulations 2001 SI 477 of 2011, it is an offence to release or allow to disperse or escape, to breed, propagate, import, transport, sell or advertise species listed on Schedule 3 of the regulations without a Licence.

Please refer to **Section 2.15.4.12** for further information about a licence for the Removal of Invasive Alien Species.

### *3.1.7 Integrated Pollution Control (IPC) Licence*

A revised IPC licence may be required during the operation and maintenance of a CHP installation to ensure that emissions from the activity will not cause a significant adverse environmental impact.

Please refer to **Section 2.15.4.23** for further information about an IPC licence.

### *3.1.8 Industrial Emissions Licence (IE Licence)*

A revised IE licence may be required during the operation and maintenance of a CHP installation to prevent and control of pollution arising from industrial activities

Please refer to **Section 2.15.4.22** for further information about an IPC licence.

### *3.1.9 Gas Pipeline Consents*

A revised gas pipeline consent may be required during the operation and maintenance of a CHP installation as further consents will be required from the CRU to operate the pipeline.

Please refer to **Section 2.15.4.26** for further information about gas pipelines consents.

# 4 End Phase

## 4.1 Decommissioning

Decommissioning refers to the cessation of energy and heat production and the dismantling and removal of associated equipment and infrastructure. Some CHP installations may be decommissioned or taken out of service with minimal works, larger projects may require significant more works to decommissioning and return the site to a suitable condition.

### *4.1.1 Planning Considerations*

When it comes time for decommissioning of a CHP 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 CHP installation, please check all relevant planning permission documents from previous applications.

### *4.1.2 Previously Exempted Development*

CHP installations that did not require planning permission for construction, having been classed as exempted development likely do not require planning permission for decommissioning. 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 planning permission, from either the Local Authority or An Bord Pleanála, will deal with decommissioning by condition. This means that within the conditions attached to the planning permission, it will directly set out how to carry out the decommissioning phase (who and when to notify of the process) and restoration of the site to its original condition. This is typically ordered after a set period of operation, and thus, the decommissioning of the installation does not require further consent, as it has been provided for under the original application. If, however, you wish to conduct works not specified within the condition, planning consent will be required for those works. A sample of what a condition might look like in relation to decommissioning is shown below:

> *"Within 6 months of the cessation of energy generation, or a period of 30 years and 6 months following completion of construction, whichever is the sooner, all equipment, access roads and infrastructure associated with the CHP project 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 CHP project 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 2.15.**

#### *4.1.4.1 Notice to Close and Application to Terminate Connection Agreement*

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

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

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

## 4.2 Lifespan Extension

CHP technology, as with any other infrastructure, has a lifespan which has been determined to be the maximum allowable period of operation for the equipment. Generally, manufacturers of CHP equipment will specify an operational lifespan for the equipment. This means the period after which the manufacturer recommends it be decommissioned or replaced. Unless specified by a statutory body, it is up to the owner/operator to determine the lifespan of the installation ultimately, however, it is recommended to have due regard to the manufacturer's instructions. For the lifetime of the site, the equipment should be maintained and operated safely and in accordance with the manufacturer's guidance and best practice.

### *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. 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 applicant 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 means of a condition. Typically, a condition attached to the grant of permission will set out the lifespan of the permitted development, and any extension to this will be by means of another, separate planning application. 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 whether your works are exempt from planning permission or not.

### *4.2.2 Licences*

An extension in the lifespan of a project may necessitate the extension of existing or the procurement of new licences (due to timescales/permits/conditions involved) for various licences. Please refer back to **Section 3** for more information in relation to potential licences that might be required.

## 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 CHP, re-powering would likely see the upgrade of existing equipment, allowing for more efficient energy production from fuels. This may also necessitate the upgrading of associated ancillary equipment, such as transformers or inverters.

### *4.3.1 Planning*

From a planning perspective, it is best to consider repowering as being akin to a new project and so it is 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 or projects which did not previously require planning permission, 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 Certificates that will not be required for renewal (e.g., Disability Access Certificate) it is likely that the remaining licences will require renewal or reapplication. It is recommended that you consult with the various granting authorities regarding re-powering of your project and seek advice as to whether renewal/reapplication is required.

# 5 Other Useful Resources

Combined Heat and Power Chapter 7: Strategic priorities of sustainable energy development (2023): https://www.sciencedirect.com/science/article/pii/B9780128210864000040?via%3Dihub

Combined Heat and Power Installations: https://www.gasnetworks.ie/business/gas-benefits/combined-heat-and-power/

Combined Heat and Power Natural Gas Carbon Tax relief: https://www.revenue.ie/en/companies-and-charities/excise-and-licences/energy-taxes/he-chp/index.aspx

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