



An Coimisiún
um Rialáil Fóntas
**Commission for
Regulation of Utilities**

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Commission for Regulation of Utilities

Updates to CRU Certification Process for High Efficiency Combined Heat and Power (HE CHP)

CRU Consultation Paper

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Executive Summary

The Commission for Regulation of Utilities (CRU) is the designated body for certifying High Efficiency Combined Heat and Power (HE CHP) applications. The CRU has a standard and long-established process for certifying CHP generators which meet high efficiency criteria. The CRU's HE CHP policy incentivises the use of energy-efficient CHP systems across Ireland, aiming to reduce carbon emissions by promoting the co-generation of heat and power.

Obtaining HE CHP certification from the CRU offers several benefits to operators. However, the CRU's records show that less than one-third of CHP operators take advantage of these opportunities. This means that circa 200 CHP units operating in Ireland do not seek to achieve high efficiency status nor the associated financial benefits. Most applicants, such as hotels and leisure centres, use the HE CHP certificate to claim substantial carbon tax relief from Revenue¹, turning the plant's electrical output into an extra revenue stream. Additionally, some plants have used the certification to qualify for REFIT² support payments, while in limited circumstances, some sites can still avail of priority dispatch to the electricity grid. The majority of hotels receive a rebate of between €7,000 and €15,000 annually, although these figures may vary. Leisure centres typically receive between €1,000 and €5,000.³ As the CRU is aware, there may be approximately 200 CHP units in Ireland that do not seek certification for high efficiency. Therefore, the CRU is using this consultation as an opportunity to promote the scheme and its potential financial benefits, to ultimately encourage high efficiency standards in cogeneration projects across Ireland.

As background, the CRU⁴ was appointed under relevant legislation⁵ from the early 2000s to certify CHP plants for high efficiency. Certification⁶ demonstrates that a system operates with optimal efficiency, producing both electricity and useful heat with significantly reduced fuel consumption compared to separate production methods. Certified plants are subject to ongoing periodic reporting and an appropriate auditing regime to ensure the robustness of the certification process.

In 2012, the CRU issued a policy decision⁷ on HE CHP certification. Subsequently, the CRU published a number of clarification notes⁸ to provide additional guidance on aspects of the policy. The CRU is now proposing some minor updates to streamline the HE CHP application process. While the main content of the 2012 policy decision will remain unchanged, the CRU aims to clarify aspects of the policy which were not covered in the 2012 decision, particularly instances where the 2012 guidance may be ambiguous. Separately, the CRU will be

¹ Please see Revenue's website for more information: [High Efficiency Combined Heat and Power cogeneration \(HE CHP\)](#).

² More information on the 'Renewable Energy Feed-in Tariff (REFIT) Scheme' is available [here](#).

³ This figure is subject to a variety of factors, including the number of hours a CHP unit is run per day and the size of the CHP unit.

⁴ When the CRU was initially tasked with certifying CHP plants, it operated under its former title, the Commission for Energy Regulation.

⁵ The CRU's authority to certify HE CHP plants stems from Article 14 of EU Directive 2012/27/EU on EED, which encourages the adoption of HE CHP to meet energy efficiency goals.

⁶ Certification for HE CHP can be issued as either a full certification or a partial certification, depending on the specific criteria met by the CHP plant.

⁷ Certification Process for High Efficiency CHP Decision Paper: [CER/12/125](#).

⁸ Clarification notes: [CER/12/184](#), [CER/16/153](#), [CRU/17/302](#), [CRU/17/303](#) and [CRU20142](#).

implementing some process improvements on how it handles CHP applications, including a proposal to update the application forms and process. The updated application forms will be developed and published in 2025.

The CRU is seeking feedback from stakeholders on the proposals outlined in this paper concerning:

1. Meter Calibration Requirements

To accurately assess CHP plants for high efficiency and Primary Energy Savings (PES), heat and electricity output must be monitored accurately. It is essential to follow recommended meter calibration standards to ensure measurements are accurate – this has a direct impact on the financial gains linked to the scheme. Currently, all operators are required to calibrate their meters to ensure energy output is accurately measured.

The CRU proposes that, in addition to existing requirements, all CHP sites must maintain a recalibration schedule for their meters and submit this alongside their application for certification. This schedule would show the last calibration date and the next due date, as well as the meter manufacturer's recommended recalibration intervals. Sites that use a small, conventionally fuelled, internal combustion engine (<1MWe) must update the calibration schedule annually and adhere to the recommended manufacturer calibration standards. Sites that receive renewable energy supports (e.g., REFIT) must maintain the recalibration schedule and provide evidence that meters are being calibrated consistently and in line with the recommendations set out by the manufacturer.

2. Clarity on Treatment of Losses from Pipework

To determine the efficiency of a CHP system, accurate heat demand calculations are essential. Pipework must be insulated to appropriate standards to prevent heat loss. Without appropriate insulation, heat demand may be overstated, and undue benefits may accrue to an operator.

The CRU proposes that all pipework must be appropriately insulated to European Standards (EN). If insulation is not possible, or indeed not maintained to satisfactory standards, operators should identify this fact and submit a justified calculation of heat loss. The nature of the heat loss will depend on whether the useful heat metering is installed at the point of generation or at the point of use.

3. Leniency Period for Economic Justification Compliance

A central premise of the certification process is that the commercial activity which the CHP plant is supporting must be an economically justifiable enterprise. There must be a justifiable economic basis for the heat to be used. Otherwise, it would undermine the State's financial supports to such CHP plants. The CRU acknowledges that market conditions can fluctuate, especially in the early stages of a project.

The CRU proposes to introduce a 'leniency' or safeguard period to allow time for market conditions to be re-established without the operator facing undue penalties. The CRU proposes a leniency period of one year, provided that the CHP plant has received full certification for each of the previous three years. This flexibility is granted to allow operators time to re-establish economic justification for the heat demand in instances where a previously qualifying operator

encounters short-term difficulty in proving justification. A CHP operator may only elect to avail of this leniency period once every 10 years.

4. Revising the HE CHP Submission Process

The necessary application forms are currently embedded in appendices at the end of the CRU's 2012 decision paper. They are not easy to locate on the CRU website and applicants have had issues in completing the forms correctly.

The CRU proposes to update the application process by introducing a clearer, simplified application form or Excel template to request all necessary operational data for a complete HE CHP assessment. This would include add-ons such as a meter calibration schedule, which would be updated annually by operators.

5. Simplification of Certification Process for Small, Conventionally Fuelled Internal Combustion Engines

The CRU will initially prioritise simplifying the certification process (Step 1). It is anticipated that the self-declaration process would then be scoped out and implemented (Step 2).

Step 1: Simplification of Requirements for Small, Conventionally Fuelled Internal Combustion Engines (<1MWe)

The majority of HE CHP sites in Ireland are conventionally fuelled combustion engines with less than 500 kW electrical output, typically serving hotels, leisure centres, and healthcare facilities where all power is used on-site. Currently, detailed assessments for these small sites can be administratively burdensome for both the CRU and operators. Small CHP sites could benefit from a simplified application and assessment process.

The CRU proposes to implement a simplified application and assessment process for small, conventionally fuelled internal combustion engine CHP plants in Ireland (<1MWe), similar to the UK approach for small-scale CHP plants that meet certain criteria. Specific qualifying criteria would be established. Plants meeting the criteria can then apply through a simplified application and assessment process. Otherwise, the standard process should be followed.

Step 2: Self-Declaration of Small, Conventionally Fuelled Internal Combustion Engines

This consultation proposes to develop a self-declaration process for small, conventionally fuelled internal combustion engine CHP plants in Ireland (<1MWe) as described above. If there is positive feedback on this proposal, the CRU may develop a process that would enable this subset of applicants to self-declare, thus availing of a more streamlined certification process. This, it is envisaged, would shorten waiting times for assessment for these applicants.

6. Consistent Operating Periods and Deadlines for Submission of HE CHP Data

Under the current policy, operators can submit data flexibly for any 12-month reporting period. Mostly, applications are based on the calendar year (January-December), but the CRU does receive several for varying 12-month periods, often for example April-March or October-

September. The CRU wishes to standardise the assessment periods for applicants, in so far as possible.

The CRU proposes to replace the current rolling application process with a fixed annual assessment period which will run from January to December for applicants where a conventionally fuelled internal combustion engine is in use. The CRU also proposes that all renewal applications for this type of site need to be submitted to the CRU by 31 March of the following year. For first-time applicants, who may be submitting data for more than one period, the 31 March deadline will not apply.

For applicants that apply for renewable energy supports such as REFIT, there will be no change, i.e. they must align their applications' reporting periods with the CRU's Public Service Obligation year (October – September). The CRU proposes that renewal applications for this type of site need to be submitted by 31 December, i.e. maintaining the three-month window allowed to these applicants. For first-time applicants, who may be submitting data for more than one period, the 31 December deadline will not apply.

7. Removal of Planned Plant Certificates

The 2012 policy decision allows planned plants (i.e. those not yet operational) to be awarded HE CHP certificates. In at least the past eight years, no site has requested a planned plant certificate. The CRU proposes to amend the HE CHP policy to remove planned plant certification. Instead, the CRU proposes to only issue HE CHP certificates based on actual operational data. This streamlines the certification process and aligns with current regulatory and support scheme requirements as they have evolved.

8. Publication of Certificate Holders

The CRU proposes to publish a list of all HE CHP certificate holders on its website and update it annually.

9. Any Other Feedback

The CRU is committed to making the HE CHP process clear, efficient, and user-friendly. We invite operators and stakeholders to share their questions, feedback, and suggestions for improvement to enhance the certification experience.

Next Steps

The CRU will consider all feedback to this consultation, engage with industry and implement changes if appropriate. The plan for implementing changes and developing new application forms will be outlined in the decision paper, to be published later this year.

Public/Customer Impact Statement

Obtaining HE CHP certification from the CRU offers numerous benefits to CHP operators. It provides access to financial incentives through renewable support schemes and, in limited instances, priority dispatch in the electricity market, supporting a more efficient and resilient energy system overall. Most applicants, such as hotels and leisure centres, use the HE CHP certificate to claim substantial carbon tax relief from Revenue⁹, turning the plant's electrical output into an extra revenue stream. Additionally, some plants have used the certification to qualify for REFIT¹⁰ support payments, while in limited circumstances, some sites can still avail of priority dispatch to the electricity grid. The majority of hotels received a rebate of between €7,000 and €15,000 annually, although these figures may vary. Leisure centres typically receive between €1,000 and €5,000. These range of figures are subject to a variety of factors, including the number of hours a CHP unit is run per day and the size of the CHP unit.

Since 2012, the CRU has certified CHP plants that meet the prescribed high efficiency criteria. Following the CRU's 2012 policy decision, initial uptake from industry was slow. Gradually, more and more CHP operators from a broad range of commercial enterprises sought certification, and now the CRU handles approximately 115 applications per annum. In its 2023 Energy in Ireland Report, SEAI noted that there were 318 CHP units in Ireland.¹¹ However, the CRU's records show that only about one-third of these actually apply and unlock those benefits. This means that circa 200 CHP units operating in Ireland do not seek to achieve high efficiency status nor the associated financial benefits. Therefore, the CRU is using this consultation as an opportunity to promote the scheme and highlight its potential financial benefits, to ultimately encourage high efficiency standards in cogeneration projects across Ireland.

With the scheme now in operation for over a decade, the CRU is proposing some revisions and clarifications which will significantly benefit CHP operators by simplifying the certification process, making it easier for them to take full advantage of available financial incentives. Certain aspects of the current process are inefficient. In particular, the application forms require modernisation to better align with the needs of stakeholders and to streamline the application process. The CRU is of the view that the proposed amendments will make the scheme more accessible for CHP operators.

Given that these substantial benefits for operators are supported by public funding, it is critical that the CRU carries out its assessment for certification in a thorough, transparent, and robust manner. The integrity of the certification process ensures that only plants meeting high efficiency standards can access these advantages, helping to maintain fairness, reliability, and trust in the system.

As regards the scheme's broader impact, the HE CHP certification process supports Ireland's decarbonisation targets by increasing energy efficiency, reducing greenhouse gas emissions, and enhancing energy security through building a resilient energy system. It contributes to

⁹ Please see Revenue's website for more information: [High Efficiency Combined Heat and Power cogeneration \(HE CHP\)](#).

¹⁰ More information on the 'Renewable Energy Feed-in Tariff (REFIT) Scheme' is available [here](#).

¹¹ Ireland has set an ambitious renewable energy target of achieving 80 per cent of its electricity generation from renewable sources by 2023. 2023 Energy in Ireland report is available [here](#).

Ireland's progress against national and EU energy targets, and towards a healthier and net zero future for communities.

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1 Introduction

The promotion of High Efficiency Combined Heat and Power (HE CHP) technology plays an important role in transitioning to a more sustainable and efficient energy system for Ireland. By generating electricity and useful heat from a single energy source, therefore reducing energy waste and improving fuel efficiency, HE CHP systems contribute to Ireland's goals of enhancing energy security, lowering carbon emissions, and achieving renewable energy targets.¹²

Since 2012, the Commission for Regulation of Utilities (CRU) has certified CHP plants which meet the prescribed efficiency criteria, thus enabling the plants to unlock financial benefits and, in some limited instances, avail of priority dispatch¹³ to the electricity grid. The policy has worked well in the years since, with the number of applications from CHP operators steadily rising each year. There were 318 CHP installations¹⁴ in Ireland in 2022 according to data from the SEAI, 277 of which were powered by natural gas.

With more than a decade of experience in certifying CHP plants, the CRU is now reviewing the policy and the way it handles applications. While the main content of the 2012 policy decision will remain unchanged, the CRU wishes to consult on some proposed revisions contained later in this paper. This consultation intention is to clarify aspects of the policy which the CRU has encountered in recent years which were not covered in the 2012 decision, particularly in instances where the 2012 guidance may be ambiguous. Separately, the CRU will be implementing some process improvements on how we handle CHP applications, including a proposal to modernise the application forms. The updated application forms will be developed and published in 2025.

Separately, the CRU has published two documents alongside this Consultation Paper. The first is the HE CHP Certification Positioning Report, prepared by the CRU's technical advisers, Ricardo Energy and Environment (CRU202502). The second is an Information Paper (CRU202503) which provides further guidance to operators on the CRU's auditing regime. The remainder of this section contains background information, legal context and guidance on the consultation.

1.1 Background

The CRU is the designated body for certifying HE CHP in Ireland, as outlined in Statutory Instruments 298, 299 and 499 of 2009. The key reference documents on the CRU's approach to certification are the 2012 Certification Process for High Efficiency CHP Decision Paper

¹² Ireland has set an ambitious renewable energy target of achieving 80 per cent of its electricity generation from renewable sources by 2030. Please see [SEAI's website](#) for more information.

¹³ In Ireland, CHP plants, especially those classified as high efficiency or renewable-based, have in the past been given priority access to electricity networks. As per the [SEM-22-009 Decision Paper on Dispatch, Redispatch and Compensation Pursuant to Regulation \(EU\) 2019/943](#), generators commissioned after July 2019 will not be given the priority dispatch status. Therefore, only HE CHP certified sites that availed of priority dispatch before this period can avail of this benefit currently.

¹⁴ The 2023 Energy in Ireland report is available [here](#).

CER/12/125¹⁵ and subsequent clarification notes.¹⁶ The CRU's process has been consistent and unchanged since the publication of CER/12/125.¹⁷ This process involves the review and assessment of applications from existing and new CHP plants. Plants that were previously certified may then submit annual renewal applications. For new applicants, the CRU can assess for multiple prior years, if requested by the operator. The CRU has an appropriate auditing regime to ensure the robustness of the certification process.

There is an established methodology for the evaluation of CHP as HE CHP based on an economically justifiable demand for heat – i.e. useful heat. Whether or not the heat produced by the unit can be defined as useful heat is a key consideration in the certification process. Therefore, applicants are required to provide details of heat demands and to provide evidence of their economic justification.

1.2 How Does Ireland's HE CHP Policy Align with European Policy?

Ireland's HE CHP policy is largely in line with European CHP policy, as it aligns with the broader objectives set out in the Energy Efficiency Directive (EED) 2012/27/EU and other European frameworks promoting energy efficiency and low-carbon technologies. The key themes across many countries regarding CHP policies are:

- **Financial Incentives and Support Schemes:** Most countries implement various financial mechanisms to promote CHP, such as grants, tax incentives, investment subsidies, feed-in tariffs, and white certificates. These schemes reduce the cost of installation and operation, making CHP more attractive to investors. There are some differences in the way that renewable fuel CHP is incentivised across Europe.

For example, in the United Kingdom, power generated by biogas CHP was incentivised through the Renewable Obligation Scheme and the Feed in Tariff, while useful heat recovered from biogas CHP was incentivised by the Non-Domestic Renewable Heat Incentive. These schemes created more favourable economic conditions for CHP. This is shown by the difference in the number of biogas CHP schemes in Northern Ireland

¹⁵ Certification Process for High Efficiency CHP Decision Paper - [CER/12/125](#)

¹⁶ Assessment of Useful Heat for High Efficiency CHP Clarification Note - [CER/12/184](#);

Repealed Harmonised Efficiency Reference Values for Separate Production of Electricity and Heat Information Note - [CER/16/153](#);

The Assessment of Sorption Chillers in the Certification Process for High Efficiency CHP Clarification Note - [CRU/17/302](#);

HE CHP Assessments where there are Two or More Units on a Single Site Clarification Note - [CRU/17/303](#);

High Efficiency CHP Clarification Note on Anaerobic Digestion Useful Heat Clarification Note - [CRU20142](#).

¹⁷ As a brief recap on the detail of the policy, the HE CHP certification process is designed to assess whether heat and electricity generated by a CHP plant meet the high efficiency criteria set out in legislation. HE CHP is defined by PES. If the plant's overall efficiency meets or exceeds 80 per cent for "combined cycle gas turbines with heat recovery" and "steam condensing extraction turbines-based plants" or 75 per cent for other technologies, then all the electricity from the plant is included in the PES calculation. Where this defined level is not met, only the proportion of electricity produced by the CHP process, calculated using the 'power to heat' ratio, is considered. Applications are evaluated on request, with certification granted based on available performance data.

compared to Ireland (70¹⁸ and 21¹⁹ units respectively). Note, however, that all these schemes have now closed to new entrants.

- **Priority Access and Grid Integration:** In Europe, HE CHP plants have traditionally received priority access to electricity networks and preferential treatment in dispatching into the grid. However, EU Regulation 2019/943 redefined these privileges. Under Article 12 of the regulation, new HE CHP plants, commissioned after July 4, 2019, are generally excluded from priority dispatch. Existing CHP plants commissioned before this date may retain priority dispatch.
- **Legislative and Regulatory Frameworks:** Countries align their CHP policies with the EU's energy efficiency and climate targets by creating supportive legislation. These frameworks define efficiency standards, encourage sectoral reforms, and mandate cost-benefit analyses for CHP deployment.
- **Promotion of Renewable Energy:** CHP policies across countries are increasingly linked to renewable energy goals. Many CHP systems are encouraged to use renewable fuels such as biomass, and CHP plants are often included in broader renewable energy incentive programs, reflecting the shift toward low-carbon energy systems.
- **District Heating and Cooling (DHC) Integration:** CHP plays a significant role in district heating and cooling systems, particularly in countries with colder climates. CHP is promoted for its efficiency in delivering both electricity and heat, with specific support for its integration into DHC networks to reduce overall energy consumption and carbon emissions.
- **Efficiency and Sustainability:** HE CHP is emphasised, with policies often requiring systems to meet specific efficiency criteria, e.g. Primary Energy Saving (PES) thresholds. This ensures CHP is not only an energy generator but also a tool for maximising resource efficiency and minimising waste.
- **Decentralised Energy Production:** CHP is viewed as a key tool for decentralising energy systems, particularly in reducing transmission losses and enhancing local energy security. By promoting small-scale and local CHP plants, policies aim to decentralise energy production.

The only area on this list where Ireland does not align itself with wider European policy is on District Heat Networks. This is because the industry in Ireland is in its infancy. However, Ireland has established district heating targets and is actively working to develop district heating networks through strategic initiatives and policy development.

¹⁸ The UK Wide AD - April 2023 report is available [here](#). Please note, these are figures from 2023.

¹⁹ The Combined Heat And Power In Ireland report is available [here](#). Please note, these are figures from 2020.

1.3 Legal and Policy Backdrop

The legal context for HE CHP certification is set out in [Schedule 1 Section 7 of the Electricity Regulation Act 1999 \(as amended\) \(the “ERA” or “1999 Act”\)](#) and Regulation 35 of the European Union (Energy Efficiency) Regulations 2014 (S.I. No. 426/2014) (the “2014 Regulations”), which transposes the Energy Efficiency Directive (2012/27/EU) into Irish law.

Several statutory instruments (S.I.s) and legislation relevant to the HE CHP certification process have been enacted since the Electricity Regulation Act 1999, and can be accessed at the following links:

- [S.I. No. 499 of 2009](#)
- [S.I. No. 299 of 2009](#)
- [S.I. No. 298 of 2009](#)
- [Decision 2008/952/EC](#)
- [Energy \(Miscellaneous Provisions\) Act, 2006](#)
- [Energy Efficiency Directive 2018/2002 with 2012/27/EU](#)
- [2023/4376: Efficiency Reference Values in Cogeneration](#)
- [2014/32/EU Measuring Instruments Directive](#)

The CRU is the designated authority responsible for the HE CHP policy framework in Ireland. To deliver on its legislative functions, the CRU published a decision paper entitled [Certification Process for High Efficiency CHP \(CER/12/125\)](#) in 2012.

Since the publication of the 2012 decision, the CRU published further clarification notes on aspects of the policy, as follows:

- Clarification Note - [Assessment of Useful Heat for High Efficiency CHP - \(CER/12/184\)](#)
- Information Note - [Repealed Harmonised Efficiency Reference Values for Separate Production of Electricity and Heat - \(CER/16/153\)](#)
- Clarification Note – [The Assessment of Sorption Chillers in the Certification Process for High Efficiency CHP \(CRU/17/302\)](#)
- Clarification Note – [HE CHP Assessments where there are Two or More Units on a Single Site - \(CRU/17/303\)](#)
- Clarification Note - [High Efficiency CHP on Anaerobic Digestion Useful Heat - \(CRU20142\)](#)

Following this consultation, the CRU intends to incorporate all clarification notes into one comprehensive CRU guidance paper.

1.4 Purpose of this Paper

The HE CHP certification scheme has been in operation for over a decade and has remained largely unchanged despite the significant year-on-year increase in applications from CHP operators. As uptake has increased, the CRU has identified aspects of the policy which would benefit from additional guidance. This paper proposes amendments to the existing HE CHP policy to add guidance to aspects not explicitly addressed by the 2012 decision paper.

Separately, the CRU recognises that the application process could be refreshed, for example, so that operators do not need to extract appendices from the 2012 decision when making an application. The CRU has put forth some proposals on how the process could be refreshed.

The CRU will implement some process improvements on how it handles CHP applications, such as modernising the application forms. The CRU will publish updated application forms in 2025 and welcomes views on the structure of the updated forms during this consultation process.

Having reviewed the consultation feedback, the CRU will issue a decision on revisions to the process, and a timeline for implementation later this year.

1.5 Responding to this Consultation

The CRU seeks input from stakeholders on proposed amendments to the HE CHP certification process. The CRU is committed to ensuring that the certification framework remains robust and transparent while being adaptable to future changes and enabling CHP operators to maximise the benefits of high efficiency plants.

The feedback received during this consultation will inform the final revisions to the certification process, ensuring it meets industry needs, supports energy efficiency goals, and contributes to a sustainable energy future for Ireland.

Responses to this consultation should be submitted through the CRU's consultation portal. Please note the CRU intends to publish all submissions received. Unless marked confidential, all responses may be published on the CRU's website. Respondents may request that their response is kept confidential. The CRU shall respect this request, subject to any obligations to disclose information. Respondents who wish to have their responses remain confidential should clearly mark the document to that effect and include the reason for confidentiality.

Responses from identifiable individuals will be anonymised prior to publication on the CRU website unless the respondent explicitly requests that their personal details be published.

The CRU privacy notice outlines how the privacy rights of individuals are protected. More information on CRU's privacy notice can be found here: <https://www.cru.ie/privacy-notice>

2 Overview of HE CHP Policy in Operation

The CRU began assessing CHP units in 2012, following the publication of its policy decision (CER/12/125). In the early years, there was limited uptake from operators. However, the volume of HE CHP applications to the CRU has increased steadily year-on-year and in recent years, the CRU has processed approximately 115 applications per annum.

SEAI, in its 2024 Energy in Ireland report,²⁰ stated that the installed capacity of CHP in Ireland at the end of 2023 was 324MWe (as shown in Table 1). In its 2023 Energy in Ireland Report, SEAI noted that there were 318 CHP units in Ireland.²¹ The CRU's records show that less than one-third of these apply for high efficiency certification. That leaves circa 200 CHP units operating in Ireland which do not seek to achieve high efficiency status, nor the financial benefits associated. Therefore, while there has been growing interest in this area, it is still relatively underused by industry.

Since 1991, the number of CHP plants in Ireland has grown (see Figure 1) and in 2023, 5.5 per cent of Ireland's total gross electricity generation came from CHP (see Figure 2). With the potential for these numbers to continue to grow, it is important that the HE CHP policy framework continues to incentivise the use of energy-efficient CHP systems across Ireland.

Table 4.5: Operational CHP capacity by fuel (share)

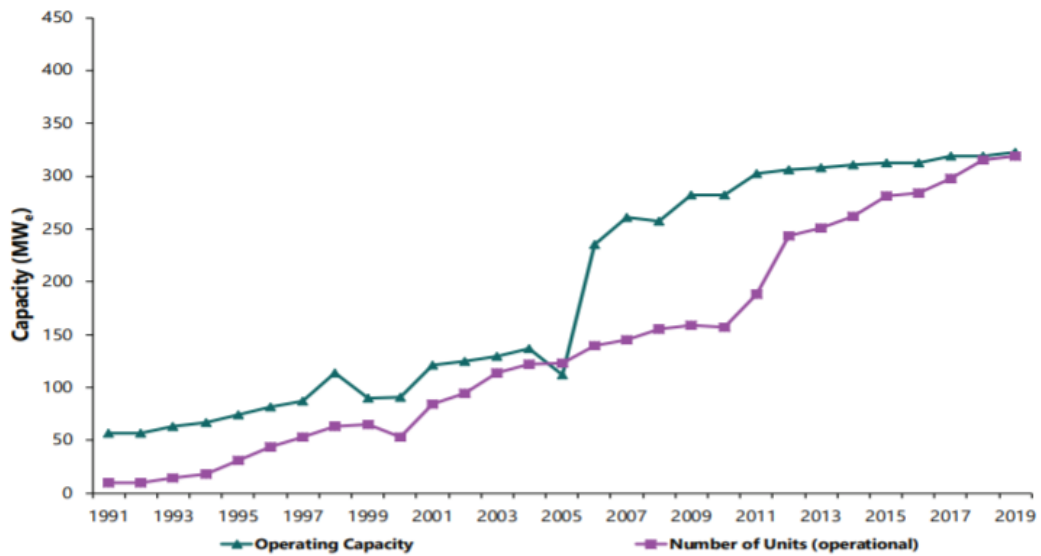
Capacity [MWe]	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Natural Gas	282.4 (91.6%)	285.4 (91.8%)	287.7 (92.1%)	285.5 (91.5%)	292.1 (91.7%)	298.3 (93.5%)	300.3 (93.2%)	301.2 (93.1%)	303.7 (93.2%)	305.5 (93.2%)	301.8 (93.2%)
Solid Fuels	5.2 (1.7%)	5.2 (1.7%)	5.2 (1.7%)	5.2 (1.7%)	5.2 (1.6%)	5.2 (1.6%)	2.6 (0.8%)	2.6 (0.8%)	2.6 (0.8%)	2.6 (0.8%)	2.6 (0.8%)
Biomass	5.4 (1.7%)	5.4 (1.7%)	5.4 (1.7%)	5.4 (1.7%)	5.4 (1.7%)	5.4 (1.7%)	6.6 (2.0%)	6.6 (2.0%)	6.6 (2.0%)	6.6 (2.0%)	6.6 (2.0%)
Oil Fuels	8.9 (2.9%)	8.8 (2.8%)	7.9 (2.5%)	7.5 (2.4%)	7.6 (2.4%)	1.0 (0.3%)	1.0 (0.3%)	1.1 (0.3%)	1.1 (0.3%)	1.1 (0.3%)	0.9 (0.3%)
Biogas	6.3 (2.0%)	6.3 (2.0%)	6.3 (2.0%)	8.4 (2.7%)	8.4 (2.6%)	9.3 (2.9%)	11.9 (3.7%)	11.9 (3.7%)	11.9 (3.6%)	11.9 (3.6%)	11.9 (3.7%)
Total	308.1 (100%)	311.0 (100%)	312.5 (100%)	312.1 (100%)	318.7 (100%)	319.2 (100%)	322.3 (100%)	323.4 (100%)	325.8 (100%)	327.7 (100%)	323.9 (100%)

Table 1: Operational electrical capacity (MWe) over the last ten years, broken down by fuel.²²

²⁰ 2024 Energy in Ireland report is available [here](#).

²¹ 2023 Energy in Ireland report is available [here](#).

²² 2024 Energy in Ireland report [pg. 52](#).



Source: SEAI

Figure 1: Number of CHP Units and Installed Capacity 1991 – 2019.²³

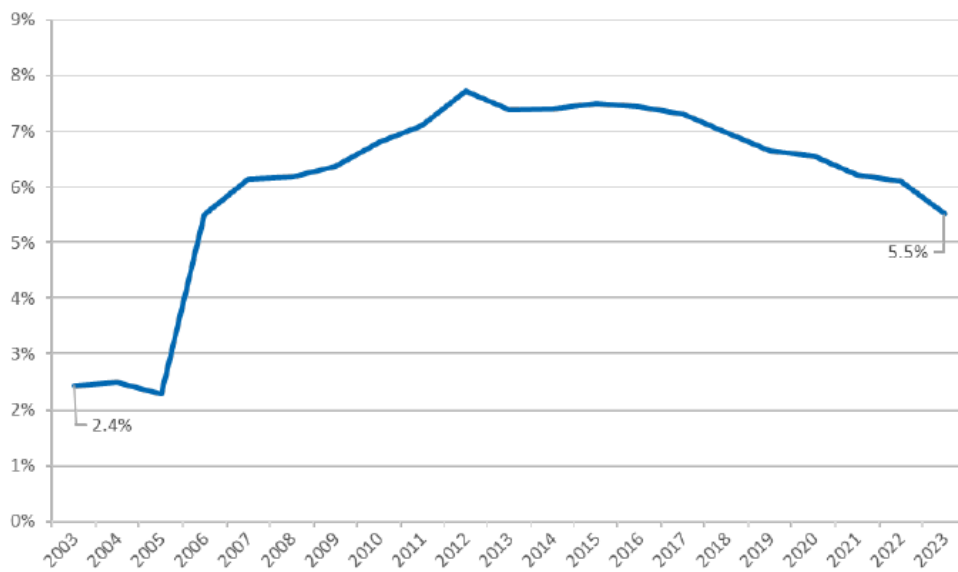


Figure 2: CHP Electricity as a percentage of gross electricity generated.²⁴

²³ SEAI’s 2020 Combined Heat and Power in Ireland report is available [here](#).

²⁴ 2024 Energy in Ireland report is available [here](#).

2.1 CHP in Ireland

In Ireland, several energy generation systems are benefiting from government support mechanisms unlocked by HE CHP certification:

- **Biogas CHP:** There are 11 biogas-based CHP systems across eight Anaerobic Digestion (AD) sites, which apply for high efficiency certification and, if successful, receive top-up payments. These payments cover the difference between the REFIT (Renewable Energy Feed-in Tariff) and the export payments from their relevant offtakers.
- **Biomass ORC:** One biomass-based organic rankine cycle (ORC) system also applies for high efficiency certification, receiving a top-up payment similar to the biogas CHPs, to cover the difference between the REFIT tariff and export payments from its offtaker.
- **Natural Gas CHPs:** A total of 99 natural gas CHPs claim relief from the Natural Gas Carbon Tax. Of these, approximately 80 provide space heating and hot water to facilities such as hotels, leisure centres, and hospitals. The remaining systems are used for industrial heating processes.
- **Liquified Petroleum Gas (LPG):** A further three CHPs firing liquified petroleum gas are claiming relief from the Mineral Oil Tax. These also provide space heating and hot water to service sector facilities.

2.2 CHP Installations Participating in HE CHP Certification

Since July 2022, 114 discrete CHP installations are currently or previously have been, participants in the HE CHP certification scheme. This equates to close to 269MWe of installed electrical capacity and 444MWth of installed heat capacity. It is important to note that these numbers differ somewhat from those in the SEAI reports.²⁵

Of these installations, some 89 per cent (102) are internal combustion engine units.²⁶ Nearly 10 per cent (11 sites) are gas turbine schemes, and the remaining site is an ORC turbine unit. This is represented in Figure 2 below. The data shows that most schemes are fuelled by natural gas internal combustion engines.

²⁵ SEAI's 2020 Combined Heat and Power in Ireland is available [here](#).

²⁶ Combustion of natural gas or biogas is translated to rotational energy, producing electricity by driving a generator.

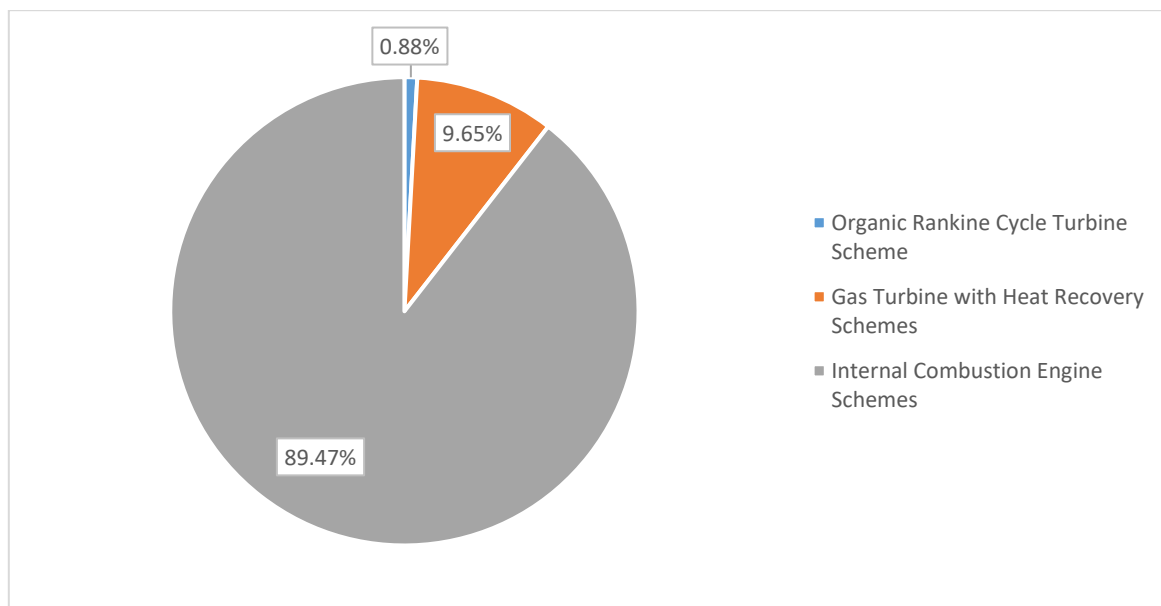


Figure 3: Numbers of Prime Mover Type

2.3 Primary Fuel Types

The majority of CHP units applying for high efficiency in Ireland are fuelled by natural gas, commonly used in hotels and leisure centres. Approximately 10 per cent are fuelled by biogas from AD sites. Figure 3 presents the four different fuel types - natural gas, biogas, LPG, and solid biomass and shows that nearly 90 per cent of sites (99) are firing natural gas as the primary fuel.

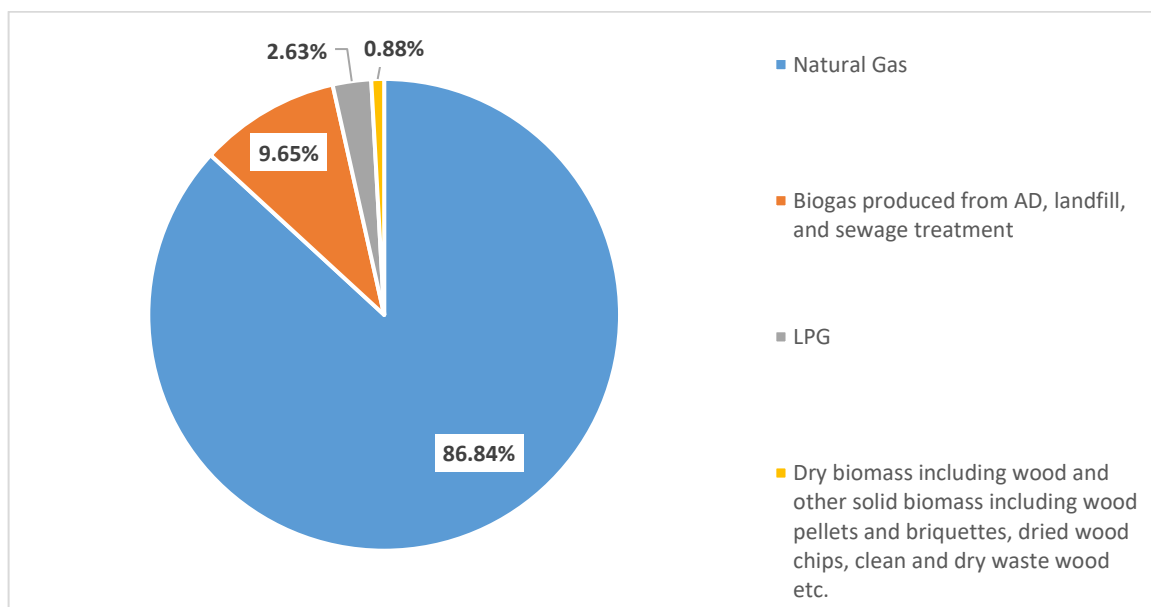


Figure 4: Primary Fuel Types

3 Proposed Revisions to the HE CHP Certification Process

As discussed in Section 1.1, the original HE CHP policy decision was published in 2012. In the decade since this area has evolved, and the number of applications has increased. The CRU has identified some areas where the existing guidance could benefit from additional clarity and highlighted the need to revise certain aspects of the CRU's approach to certification, including updating the application forms for CHP operators.

The goal is to improve efficiency, simplify the application process, and reduce potential areas of confusion while ensuring continued compliance with the requirements of all relevant EU legislation. This section outlines the proposed policy changes and invites stakeholders to share their views on these proposals.

The CRU has grouped the proposed amendments into three categories:

- A. Areas where additional clarification is required
- B. Submission simplification
- C. Scheme adjustment

A. Areas Where Additional Clarification is Required

3.1 Meter Calibration Requirements

To accurately assess CHP plants for high efficiency and PES, heat and electricity output must be monitored accurately. It is crucial to adhere to the recommended meter calibration standards to guarantee accurate measurements of heat and electricity. Regular calibration ensures reliable data and provides confidence in performance evaluations. The most reliable approach for HE CHP operators is to follow meter calibration requirements in line with the manufacturer's recommendations.

Meters must align with regulatory requirements and be calibrated regularly by certified professionals to ensure they meet the necessary accuracy for industrial and commercial applications. Meters should be calibrated at intervals in accordance with national or EU standards – typically every two to five years, depending on their type and usage.²⁷ The calibration process involves checking meter performance against a reference standard and adjusting as needed to maintain accuracy, within specified limits. Well-calibrated meters provide reliable data for evaluating performance, which is essential for determining HE CHP certification eligibility.

The accuracy of operator data is crucial for the scheme's effectiveness and for ensuring value for public funds. However, while the need for calibrated metering is already noted in

²⁷ [Measuring Instruments Directive 2014/32/EU](#)

CER/12/125, the ongoing requirements for recalibration are not clearly outlined. Despite its detailed specifications based on the Measuring Instruments Directive (MID), it does not advise on explicit recalibration requirements.

In practice, the CRU frequently receives applications from CHP operators without an accompanying calibration schedule. In such instances, unless the site is audited, the CRU cannot be certain that the meter data is reported accurately. Historically, the CRU has certified these sites while including a condition that meter calibration must be carried out before the next application. To safeguard the integrity of the scheme, we propose to strengthen our monitoring of recorded meter data.

CRU Proposal

The CRU wishes to raise the profile of meter accuracy as a core aspect of the assessment process. To do this, the CRU proposes that, in addition to existing requirements, all CHP sites must maintain a recalibration schedule for their meters and submit this alongside their application for certification. This schedule would show the last calibration date and the next due date, as well as the meter manufacturer’s recommended calibration intervals.

Sites that use a small, conventionally fuelled, internal combustion engine (<1MWe) must update the calibration schedule annually and adhere to the recommended manufacturer calibration standards. Sites that receive renewable energy supports (e.g., REFIT) must maintain the recalibration schedule and provide evidence that meters are being calibrated consistently and in line with the recommendations set out by the manufacturer.

The schedule would be developed from relevant, meter-specific standards and manufacturer information. The example in Figure 5 gives an idea of how this could look. Please note that this example does not define the required recalibration periods. The operator should provide, with an application, a table outlining the meters that they have installed, the date of last calibration and the next date of calibration. This should be updated every year and form part of the application.

Met er Tag	Descripti on	Meter ed Servi ce	Serial Number	Year of installati on	Meteri ng principl e	Measur ed Fluid Type	Meter Type	Require d calibrati on frequen cy	Year of Calibrati on	Years since last calibrati on	Next Schedul ed Date for Calibrati on
FM1	Natural Gas	Fuel	1234567 8	2020	Turbine	Gas	P&T compensa ted	4	2020	4	2025
EM1	Generat ed power	Power	1234543 21	2020	CT	n/a	n/a	15	2020	4	2035
HM 1	LTHW	Heat	5432120 20	2020	Ultraso nic	Water	n/a	15	2020	10	2030
HM 2	Steam	Heat	2615948	2022	Orifice	Saturat ed steam	P compensa ted	5	2022	2	2027

Figure 5: Example Calibration Schedule

CRU Rationale

HE CHP operators are required to calibrate meters to ensure accurate measurement of energy inputs and outputs. Failing to perform this calibration can lead to reliance on incorrect data, jeopardising operators' ability to demonstrate compliance with certification requirements. As a result, inaccurate data may cause disputes or delays in receiving entitlements such as tax relief or incentives. Moreover, improper calibration can conceal inefficiencies in the operation of the HE CHP unit, potentially leading to higher operating costs or suboptimal performance over time.

Uncalibrated meters pose a significant risk to the integrity of the certification process for the CRU. Certification relies on accurate and reliable data to confirm that HE CHP units meet established standards and provide the intended environmental and energy efficiency benefits. When meter calibration is overlooked, it introduces uncertainty into the evaluation process, which can increase administrative burdens and cause delays in certifications. Furthermore, inaccurate data could undermine the credibility of the HE CHP scheme, putting public funds at risk.

Creating and maintaining this schedule would ensure that operators not only acknowledge the need for recalibration but also commit to recalibrating the meters according to the manufacturer's recommended intervals, or the requirements of relevant standards, thereby introducing accountability and reducing the risks of delays or oversight.

A calibration schedule requirement would be straightforward to implement, as it would summarise each meter and its recommended recalibration period and denote when recalibration is due. This practice would improve meter management, promote measurement accuracy, maintain compliance with performance and regulatory standards and support accountability in the use of public funds. Low-risk sites (sites with a small, conventionally fuelled internal combustion engine <1MWe) have no further requirements, i.e. providing the information to the CRU will suffice. All other sites must provide evidence that meters are calibrated consistently and in line with the recommendations set out by the manufacturer.

It is also important to note that in many circumstances, the calibration requirements for metering are potentially very light. For example, a small-scale scheme may have only three meters: a gas meter, a power meter, and a heat meter. The power and heat meters, depending on meter specifics, typically have best practice calibration periods greater than 10 years, leaving only the gas meter to require more frequent attention. If the proposed simplification mechanisms as described in Section 3.5 are introduced, then small-scale schemes meeting the definition may well not require gas metering.

If this proposal is adopted, the CRU will develop a standard spreadsheet that all operators must complete alongside their submission. This would be published on the CRU website alongside the updated decision in 2025.

CRU Consultation Question

1. Do you agree with the CRU's proposal that operators must maintain and submit a recalibration schedule along with their application for HE CHP? Please provide your rationale.
2. Do you have any suggestions for improving the proposed meter calibration schedule requirements to better ensure accuracy and accountability?

3.2 Clarity on the Treatment of Losses from Pipework

Losses from pipework used to transport steam or hot water to different parts of a plant can significantly impact overall efficiency. These losses occur when heat escapes from poorly or uninsulated pipes, resulting in a reduction of usable heat available to the end user.

To address these losses, it is essential to use effective insulation, perform regular maintenance, and monitor the system to ensure that the generated heat is fully utilised. By minimising these pipework losses, HE CHP systems can improve their performance, reduce fuel consumption, and contribute to Ireland's energy efficiency goals.

Unlike in other jurisdictions, the CRU's policy has no guidance on how to take account of heat loss through exposed or poorly insulated pipework. Currently, some operators experience significant heat loss due to extensive uninsulated pipework. This is particularly relevant to plants supplying heat to small heat networks. These networks may have one of two approaches to metering the heat:

- Metering at the point of generation – here, excessive losses downstream of the metering would artificially increase the claimed useful heat output, with potential fiscal risk, and no incentive to properly insulate pipework.
- Metering at the point of use – where losses upstream of the point of metering, legitimately incurred in the supply of useful heat, are not accounted for in the total useful heat output. This would result in underclaiming useful heat and could cause sites to fall short of achieving the HE CHP criteria.

CRU Proposal

The CRU proposes in the first instance that all pipework must be insulated to EN standards. Where insulation is not present, or the insulation present is not maintained to EN standards, operators must submit a justified calculation of heat loss, the nature of which will depend on whether the useful heat metering is installed at the point of generation or at the point of use:

1. Metering at the point of generation: Here, the actual heat loss for the pipework system should be calculated from reference U-values and thicknesses, and this is then deducted from the metered total heat supplied, to give the total useful heat.

2. Metering at the point of use: In this case, the best practice heat loss should be calculated (i.e. assuming that the lengths of pipework are properly insulated to EN standards) and this value added to the heat metered at the point of use.

The CRU will develop specific guidance on calculating heat loss from pipework to ensure a consistent approach is taken by operators for the justification of the calculation. The CRU will undertake a review of the calculation submitted by the operator to ensure it is accurate before progressing with the assessment. For the avoidance of doubt, heat loss calculations are only required where insulation is not present or not maintained to EN standards.

The CRU is seeking comment on this and will provide more information in its decision paper if it is decided to implement this proposal.

CRU Rationale

A useful approach to improving energy efficiency, reducing costs, and minimising environmental impact on CHP systems and other industrial processes is to reduce the heat loss that arises from uninsulated pipework. This issue is already accounted for in similar policies in other jurisdictions, and implementation in Ireland would bring the policy in line with best practice.

Pipework, especially that which transports hot fluids like steam or hot water, experiences heat loss to the surrounding environment when not insulated. This results in wasted energy, which increases the overall energy consumption of the system and raises operational costs. By insulating pipes, heat loss is significantly reduced, enhancing the overall efficiency of the system. In many cases, the energy savings achieved through insulation can outweigh the costs of installation, providing both immediate and long-term financial benefits to operators. Heat loss reduction also reduces carbon emissions, supporting Ireland's commitment to achieving its carbon reduction targets as set out in Ireland's Climate Action Plan.

The requirement for operators to provide a justifiable calculation of heat loss from uninsulated pipes highlights the importance of transparency and accountability in energy efficiency measures. By doing so, the CRU ensures that operators can demonstrate the potential energy waste caused by uninsulated pipes and take appropriate actions to mitigate it.

CRU Consultation Question

3. Do you agree with the CRU's proposal to require that operators must submit a heat loss calculation where pipework insulation is not present or not maintained? Please provide your rationale.

3.3 Leniency Period for Economic Justification Compliance

A central premise of the certification process is that the commercial activity, which the CHP plant is supporting, must be an economically justifiable enterprise. There must be a justifiable economic basis for the heat to be used. Otherwise, it would undermine the State's financial supports to such CHP plants.

The CRU acknowledges that market conditions can fluctuate, especially in the early stages of a project. Operators who establish a market and complete a techno-economic feasibility study may later face market challenges, risking loss of HE CHP certification and the associated benefits. In addition, the loss of key heat customers or changes in demand patterns can cause a site to fall into partially- or non-qualifying scenarios, potentially losing an important revenue stream and undermining long-term project viability.

CRU Proposal

The CRU proposes to introduce a leniency period to allow operators time to re-establish market conditions without facing undue penalties. This could, similar to the UK CHPQA Investor Safeguard Provision,²⁸ enable operators to revert to the design economic justification for a defined period of equivalent submission years when a significant heat or market consumer is lost. For example, where a HE CHP site relies on a heat consumer to produce a product for which the market is not yet fully mature. The CRU is of the view that firm time bounds should be placed on any such period, to prevent gaming. In addition, the ability to invoke this would only be available to an operator once every 10 years.

The CRU proposes a single leniency period of one year in which to allow for economic justification for the heat demand to be re-proven. This one-year leniency period would be invoked by the operator for an application which is under review for HE CHP certification. To avail of the leniency, the CHP plant must have received full HE CHP certification in each of the three previous years.

CRU Rationale

In the UK, the Investor Safeguard Provision was introduced to protect the bankability of certain CHP schemes where connection to a heat load depends on other commercial entities. Allowing operators in Ireland to adopt this provision under similar circumstances would provide flexibility and reduce financial risk for plants, supporting the continued viability of HE CHP projects that were originally banked against certain assumptions or operating criteria.

In some cases, market conditions can fluctuate, especially in the early stages of a project. For example, if an operator has already established a market and completed a techno-economic feasibility study but later encounters market challenges, a leniency period could be considered beneficial. This leniency period would allow the operator time to re-establish market conditions

²⁸ CHPQA Guidance Note 44, GN 44.9, available [here](#).

and avoid undue penalties from the loss of HE CHP certification due to unforeseen market disruptions.

Such flexibility would provide operators an opportunity to adapt their business models or operational strategies without facing penalties for temporary setbacks, aligning with Ireland's broader energy efficiency and sustainability objectives. This proposal aims to ensure that CHP technologies are deployed effectively, encouraging long-term investments, while also providing operators with the opportunity to navigate market volatility and remain compliant with regulatory requirements.

CRU Consultation Questions

4. Do you agree with the CRU's proposal regarding the leniency period for economic justification compliance? Please provide your rationale.
5. Do you agree with the CRU's proposal to set the leniency period at one year, for a period in which the lack of economic justification becomes apparent (provided that the CHP plant has received full certification in the three years prior)? Please provide your rationale.
6. Do you agree with the proposed limit on invoking the leniency period only once every 10 years? Should a different time limit be chosen? If so, please indicate how long, with your rationale.

B. Submission Simplification

3.4 Revising the HE CHP Submission Process

The current submission form has been in use since 2012 and is embedded within the CER/12/125 decision document. As a result, it is often quite difficult for CHP operators to locate the form on the CRU website. The forms are used for both new applications and renewals, which can make it cumbersome and somewhat inefficient. This results in operators sometimes not providing all the necessary information. The form also requests the same data across different technologies, despite varying requirements for space heating & hot water (SH&HW), industrial, and AD installations. Furthermore, the current HE CHP data submission process requires operators to email information to the CRU, which can sometimes result in incomplete or missing data.

CRU Proposal

The CRU proposes to develop a new submission form that requests all essential operational data required for a complete HE CHP assessment. The form would consist of a front page where relevant information is collected that will remain unchanged, followed by a new page for each reporting year. This form could include add-ons specific to each technology type and would also incorporate a meter calibration schedule (see section 3.1) that operators would need to

update annually. In due course, the CRU may consider developing an online data submission portal, if necessary.

CRU Rationale

The 2012 CRU decision on HE CHP, particularly in Appendices B and C, outlined the necessary application forms for certification. These appendices detail the steps and information that operators must provide to demonstrate compliance with the regulations. However, operators have had issues with the process over the years. Currently, operators or agents working on their behalf are required to print the appendices, manually fill out the information, and then scan the completed documents to submit via post or email (the most common method). This method is cumbersome and prone to human error, which can lead to inefficiencies and potential mistakes in applications. Additionally, the existing application forms are lengthy and do not request all the information required for an assessment. For example, the CRU requires the total fossil fuel usage on site and floor area for SH&HW facilities to verify fossil fuel use against benchmarks. For industrial processes, the CRU requires the quantity of product produced to evaluate the scheme against benchmarks. This is not requested in the current application form.

Furthermore, the CRU is of the view that the process for applying is outdated, especially considering the modern digital technologies that could facilitate a more streamlined and error-free submission process. Updating the forms to allow for digital submissions would improve accuracy, save time, and reduce the administrative burden on operators. A new application form could be developed to request all necessary operational data for a complete HE CHP assessment and include add-ons such as a meter calibration schedule requiring annual updates.

Overall, the CRU is of the view that a revised form would streamline the submission process, ensuring that operators submit all relevant information from the initial submission. It would allow for technology-specific data requests, making it easier to tailor the review process for different types of installations and including a meter calibration schedule would support ongoing accuracy in operational data, ultimately improving assessment quality and efficiency.

CRU Consultation Questions

7. Do you agree with the CRU's proposal to update the method by which operators will apply for certification? Please provide your rationale.
8. Do you agree with the CRU's proposal to remove redundant information from the application forms? Please provide your rationale.
9. Do you have any other suggestions for the CRU on how the application process can be improved?

3.5 Simplification of Requirements for Small, Fossil Fuel Submissions

The CRU is exploring options to simplify the certification process for small-scale, conventionally (fossil) fuelled internal combustion engine HE CHP plants, aiming to reduce the burden of detailed applications and assessments typically required for large-scale or more complex applications. The CRU proposes to take a staggered approach to process simplification, first simplifying the forms and, if approved, ultimately moving to a self-declaration process.

3.5.1 Step 1: Simplification of Requirements for Small, Conventionally Fuelled Internal Combustion Engine Submissions

The majority of HE CHP sites in Ireland are small internal combustion engines with less than 500 kW electrical output, typically serving hotels, leisure centres, and healthcare facilities where all power is used on-site. Currently, detailed assessments for these small sites can be administratively burdensome and costly for both the CRU and operators.

In the UK, similar small CHP plants undergo a simplified submission and assessment process, reviewing key operational data without detailed breakdowns. Under CER/12/125, Biogas CHP plants in Ireland already may use engine efficiency and electrical output to estimate fuel input. A similar approach could be applied to small natural gas plants, replacing fuel metering with fuel input calculations. This would streamline the process for the CRU and operators, reducing costs and administrative burdens for low-risk sites.

CRU Proposal

The CRU proposes to implement a simplified application and assessment process for small, natural gas CHP plants in Ireland. Specific, qualifying, criteria would be established. Plants meeting all aspects of the criteria could then apply through the simplified application and assessment process. Otherwise, the standard process should be followed. It is suggested that the criteria should be:

- small, single internal combustion engine and
- conventionally (fossil) fuelled, and
- less than 1 MWe electrical output

The key changes could be:

- Instead of requiring specific fuel metering, fuel input could be estimated based on engine efficiency and electrical output, as is already done for biogas CHP plants. This should be justified based on the site-specific engine data sheet.
- Single, annualised values for fuel input and power and heat outputs to make up the submission rather than monthly data.

CRU Rationale

The CRU favours a simplified HE CHP process for a small, single internal combustion engine, conventionally (fossil) fuelled plant with less than 1 MWe output. This streamlined approach would reduce the costs and administrative demands on both the CRU and operators, particularly for low-risk, small-scale sites. It focuses only on key operational data, such as fuel input, electricity, and heat output, rather than requiring detailed technical studies. It would make the assessment process more efficient without compromising accuracy, providing a more practical solution for small HE CHP installations.

The simplified HE CHP assessment process has been successful in the UK, facilitating the widespread adoption of small-scale CHP systems by reducing administrative barriers and encouraging energy efficiency among smaller operators.

CRU Consultation Question

10. Do you agree with the CRU's proposal to adopt a simplified HE CHP process for sites that use a single internal combustion engine, conventionally fuelled, less than 1 MWe? Please provide your rationale.
11. Do you agree with the criteria proposed by the CRU for availing of a simplified HE CHP process? Please provide your rationale.

3.5.2 Step 2: Self-Declaration for Small, Conventionally Fuelled Internal Combustion Engine Submissions

As mentioned in section 3.5.1, most HE CHP sites in Ireland consist of small internal combustion engines under 500 kW in electrical output. These sites typically serve hotels, leisure centres, and healthcare facilities where power is used entirely on-site. Currently, detailed assessments for these small sites can be administratively burdensome and costly for both the CRU and operators.

The CRU recognises that HE CHP applications entailing demand for space heating or water heating (including indoor swimming pools) for domestic, public and commercial buildings usually carry a lower risk profile than applications from renewable energy support scheme beneficiaries. Where there is a clear need for space and/or water heating for either residential, public or commercial buildings, which would normally be met in the absence of CHP at prevailing climatic and market conditions, the CRU considers that there is a prima facie case for treating such heat as useful heat.

In order to streamline the application and certification process for such plants, the CRU is considering a self-declaration process. While the CRU still reserves the right to audit each site, the self-declaration process will allow a swift turnaround time for applications that meet the same criteria as section 3.5.1.

CRU Proposal

The CRU proposes to develop a self-declaration process for a small, single internal combustion engine, conventionally (fossil) fuelled plant with less than 1 MWe output. The CRU would retain the right to audit these facilities to address potential risks.

It is suggested that the criteria should be:

- small, single internal combustion engine and
- conventionally (fossil) fuelled, and
- less than 1 MWe electrical output

CRU Rationale

Self-declaration, further to the simplification as discussed in Section 3.5.1, could simplify the certification process for lower-risk sites, ensuring that the administrative burden a small, internal combustion engine, conventionally fuelled plants, plants are kept to a minimum. It could speed up the certification process for applicants and enable the CRU to focus its resources on more complex assessments where the potential gains are higher for operators. The CRU would appropriately scale up its audit programme to ensure oversight and mitigate the risk of irregularities if this proposal is adopted. This would balance the need for efficiency with the need for accurate data validation.

CRU Consultation Questions

12. Do you agree with the CRU's proposal to develop a self-declaration process for sites that use a single internal combustion engine, conventionally fuelled, less than 1 MWe?
13. What do you consider to be the appropriate parameters for defining low-risk sites that would qualify for self-declaration? Please provide your rationale.
14. Do you foresee any risks or challenges associated with introducing a self-declaration process for HE CHP? If so, please outline the potential risks and provide any recommendations you may have to mitigate them.

Scheme Adjustment

3.6 Consistent Operating Periods and Deadlines for the Submission of HE CHP Data

Currently, operators can submit data for any reporting period, with about three out of every five operators aligning their reporting to the calendar year, i.e., January to December. This rolling

application process allows operators flexibility in seeking certification as soon as their CHP systems are operational or meet the necessary criteria.

The CRU 2012 decision states that submissions must be made within two calendar months of the anniversary of the date of issue of the last certificate. This has not been rigorously applied and has resulted in a number of sites making multiple-year submissions, resulting in uneven annual assessment costs for the CRU.

In contrast, CHPQA in the UK mandates a fixed calendar year reporting period with set deadlines for data submission and assessment. This is a more structured system, with operators having to submit their data annually within specific deadlines, typically by the end of March for the previous calendar year's performance.

CRU Proposal

The CRU proposes to replace the current practice of rolling application for HE CHP certification with a fixed annual assessment period. For sites with a conventionally fuelled, internal combustion engine, this will run from January to December, i.e. only calendar year submissions will be accepted. Applicants that apply for renewable energy supports such as REFIT must align their applications' reporting periods with the CRU's Public Service Obligation (PSO) year, i.e. September to October. If this proposal is implemented, the CRU may require operators that are impacted to submit operating data for a shortened period on a once-off basis to align their data with the calendar year.

Proposed Rules:

- **Assessment Period:** The CRU proposes that the assessment period for sites with a conventionally fuelled internal combustion engine will run from **01 January to 31 December**. For plants that receive PSO payments, the assessment period will run from **01 October to 30 September**, aligning with the PSO year. Operators must align their operating data submissions to these periods.
- **Data Submission Cut-Off:**
 - 31 March (of the following year) for renewal applications from sites with a conventionally fuelled internal combustion engine which do not export electricity to the grid. The CRU will accept applications from new applicants after this date, as these sites can claim rebates for multiple prior years.
 - 31 December for REFIT plants or any site which applies for payments through the PSO.

CRU Rationale

There is currently no defined application window. A fixed reporting period would streamline the process and simplify planning and resourcing for the CRU. It could also expedite certificate

issuance and provide operators with greater confidence in the timing and consistency of assessments.

Additionally, adopting a fixed reporting year with deadlines is in line with how similar schemes operate in other jurisdictions. In the UK, scheme submissions to CHPQA must be made in the period January to June, based on performance data from the previous calendar year. It should be noted that the fixed submission periods in the CHPQA Programme are set by the way in which certified schemes interact with the various policy measures (whether tax exemptions or incentive schemes).

This process offers a more structured timeline which ensures consistency and allows for standardised assessment, supporting resource planning on the part of the regulator.

The CRU is of the view that adopting a January to December calendar year for sites with a conventionally fuelled, internal combustion engine is more suitable for operators, as many organisations operate their financial and operational reporting on a calendar-year basis, making it easier to integrate HE CHP applications into existing reporting processes. Additionally, setting the data submission cut-off date as 31 March allows operators time to finalise and submit operational data for the previous year. An October to September calendar year for REFIT plants and other sites that receive PSO payments allows for these plants to continue to align their calendar year with the PSO year.

The CRU proposes to exempt new applicants from the 31 March deadline, as their applications may include multiple years of data, which could require significant effort to complete by the deadline.

CRU Consultation Questions

- 15.** Do you agree with the CRU's proposal to introduce a fixed January to December assessment period for HE CHP applicants with a conventionally fuelled combustion engine, with a data submission cut-off date of 31 March (of the following year)? Please provide your rationale.
- 16.** Do you agree with the CRU's proposal to introduce a fixed October to September assessment period for REFIT applicants and other sites who receive PSO payments, with a data submission cut-off date of 31 December (of the following year)? Please provide your rationale.

3.7 Removal of Planned Plant Certificates

The CRU currently allows the certification of planned CHP plants under CRU/12/125. This relies on many assumptions in order to assess plants that are not yet operational. This can lead to discrepancies between initial assessments and actual plant performance.

CRU Proposal

The CRU proposes to amend the HE CHP policy to remove the right to achieve certification for planned plants. Instead, the CRU proposes to only issue HE CHP certificates based on actual operational data.

CRU Rationale

The CRU's proposal to remove planned plant certificates is influenced by a couple of factors. Firstly, planned plant certificates for HE CHP systems in Ireland were originally introduced to accommodate the requirements of the REFIT 3 support scheme, which closed on 31 December 2015. Additionally, since the closure of REFIT 3, no CHP plant has requested or been issued a planned plant certificate, reflecting a lack of demand over the past eight years.

Furthermore, the terms and conditions of the subsequent RESS 4 scheme specify that for projects involving Biomass HE CHP, Biogas HE CHP, and Waste-to-Energy HE CHP, only certificates based on operational data — verified after three months of operation — are acceptable. As planned plant certificates no longer align with current regulatory or support scheme requirements, their removal from the HE CHP certification process is both practical and justified.

Additionally, in the past, significant resources have been spent assessing planned plants that were never constructed, while as indicated above, changes in REFIT 3 terms and conditions (i.e. the September 2019 operational deadline) have made planned plant certificates redundant for REFIT 3 applications.

Finally, no other EU Member State issues certificates for planned plants.

CRU Consultation Question

17. Do you agree with the CRU's proposal that a plant must be operational in order to apply for HE CHP, i.e. to remove certification for planned plants? Please provide your rationale.

3.8 Publication of Certificate Holders

The CRU sees merit in publishing the names of the operators who have fulfilled the established criteria for high efficiency CHP.

CRU Proposal:

The CRU proposes publishing a list of all HE CHP certificate holders on its website for public information purposes. The list would include:

- Name of the plant
- Size of CHP (in MWe)

- Reporting period for which the latest CHP certificate is issued

The CRU would update this list annually.

CRU Rationale:

Publishing a list of all HE CHP certificate holders on the CRU website enhances transparency and accountability in the energy sector. Providing accessible, regularly updated information about certified plants fosters trust among stakeholders, including the public, policymakers, and industry participants. Under legislation, the CRU is obligated to send a copy of all HE CHP certificates to the transmission system operator so that they may (in limited instances) give priority dispatch to HE CHP insofar as the operation of the transmission system permits.²⁹ Publishing this information would facilitate easy access for Eirgrid and all other interested stakeholders.

This proposal supports the CRU's commitment to openness and transparency, in line with the CRU's Strategic Plan.

Further, the publication of this list helps support the achievement of national energy and climate goals. By making information about energy efficiency and CHP systems publicly available, the CRU provides a basis for evaluating the performance of HE CHP plants and encourages accountability in the sector. Additionally, it can incentivise operators to maintain high standards of performance and compliance with certification requirements.

CRU Consultation Question

- 18.** Do you agree with the CRU's proposal to publish a list of all HE CHP certificate holders on its website for public information purposes? Please provide your rationale.

3.9 Request for Feedback

The CRU is committed to ensuring the HE CHP process is as clear, efficient, and user-friendly as possible. The CRU is aware that there may be other areas of the HE CHP process that require clarification. As part of this consultation, we invite operators and stakeholders to share any observations regarding the current HE CHP process.

We welcome any feedback on any challenges the existing policy presents or any suggestions for improvements to it.

²⁹ This gives effect to Article 8(1) of the Directive as Article 8(1) refers to priority dispatch provisions elsewhere in EU law [Directive 2004/8/EC](#).

The CRU intends to implement any changes in our decision paper later in 2025 and welcomes any feedback on how to implement the policy updates proposed herein.

CRU Consultation Questions

- 19.** Do you have any questions regarding the current HE CHP certification process?
- 20.** Are there any specific changes or improvements you would suggest, which may make the process more efficient and user-friendly, beyond what is proposed by the CRU?
- 21.** Please outline any considerations the CRU should account for when implementing policy updates later this year.

3.10 Summary List of Consultation Questions

Section Number and Title	Consultation Questions
3.1 Meter Calibration Requirements	Q1. Do you agree with the CRU’s proposal that operators must maintain and submit a recalibration schedule along with their application for HE CHP? Please provide your rationale.
	Q2. Do you have any suggestions for improving the proposed meter calibration schedule requirements to better ensure accuracy and accountability?
3.2 Clarity on the Treatment of Losses from Pipework	Q3. Do you agree with the CRU’s proposal to require that operators must submit a heat loss calculation where pipework insulation is not present or not maintained? Please provide your rationale.
3.3 Leniency Period for Economic Justification Compliance	Q4. Do you agree with the CRU’s proposal regarding the leniency period for economic justification compliance? Please provide your rationale.
	Q5. Do you agree with the CRU’s proposal to set the leniency period at one year, for a period in which the lack of economic justification becomes apparent (provided that the CHP plant has received full certification in the three years prior)? Please provide your rationale.
	Q6. Do you agree with the proposed limit on invoking the leniency period only once every 10 years? Should a different time limit be chosen? If so, please indicate how long, with your rationale.
3.4 Revising the HE CHP Submission Process	Q7. Do you agree with the CRU’s proposal to update the method by which operators will apply for certification? Please provide your rationale.
	Q8. Do you agree with the CRU’s proposal to remove redundant information from the application forms? Please provide your rationale.

	<p>Q9. Do you have any other suggestions for the CRU on how the application process can be improved?</p>
<p>3.5 Simplification of Requirements for Small, Fossil Fuel Submissions</p>	<p>Step 1: Simplification of Requirements for Small, Conventionally Fuelled Internal Combustion Engine Submissions</p> <p>Q10. Do you agree with the CRU’s proposal to adopt a simplified HE CHP process for sites that use a single internal combustion engine, conventionally fuelled, less than 1 MWe? Please provide your rationale.</p> <p>Q11. Do you agree with the criteria proposed by the CRU for availing of a simplified HE CHP process? Please provide your rationale.</p>
	<p>Step 2: Self-Declaration for Small, Conventionally Fuelled Internal Combustion Engine Submissions</p> <p>Q12. Do you agree with the CRU’s proposal to develop a self-declaration process for sites that use a single internal combustion engine, conventionally fuelled, less than 1 MWe?</p> <p>Q13. What do you consider to be the appropriate parameters for defining low-risk sites that would qualify for self-declaration? Please provide your rationale.</p> <p>Q14. Do you foresee any risks or challenges associated with introducing a self-declaration process for HE CHP? If so, please outline the potential risks and provide any recommendations you may have to mitigate them.</p>
<p>3.6 Consistent Operating Periods and Deadlines for Submission of HE CHP Data</p>	<p>Q15. Do you agree with the CRU’s proposal to introduce a fixed January to December assessment period for HE CHP applicants with a conventionally fuelled, internal combustion engine, with a data submission cut-off date of 31 March (of the following year)? Please provide your rationale.</p>
	<p>Q16. Do you agree with the CRU’s proposal to introduce a fixed October to September assessment period for REFIT applicants and others who receive</p>

	<p>PSO payments, with a data submission cut-off date of 31 December (of the following year)? Please provide your rationale.</p>
<p>3.7 Removal of Planned Plant Certificates</p>	<p>Q17. Do you agree with the CRU's proposal that a plant must be operational in order to apply for HE CHP, i.e. to remove certification for planned plants? Please provide your rationale.</p>
<p>3.8 Publication of Certificate Holders</p>	<p>Q18. Do you agree with the CRU's proposal to publish a list of all HE CHP certificate holders on its website for public information purposes? Please provide your rationale.</p>
<p>3.9 Request for Feedback</p>	<p>Q19. Do you have any questions regarding the current HE CHP certification process?</p>
	<p>Q20. Are there any specific changes or improvements you would suggest, which may make the process more efficient and user-friendly, beyond what is proposed by the CRU?</p>
	<p>Q21. Please outline any considerations the CRU should account for when implementing policy updates later this year.</p>

4 Next Steps

Following consideration of comments received to this consultation paper, the CRU will issue a decision on the updated HE CHP policy. This decision will include a section summarising the responses received, along with the corresponding response from the CRU. To assist HE CHP operators, the CRU will also issue a document that will summarise the 2012 decision, all clarification notes, and any changes resulting from this consultation paper.

A decision paper will be published in the coming months. Where there are areas which require additional consideration as discussed in this paper, the CRU may consult further.

Appendix 1 - Benefits to Operators

This section outlines the current policy regarding HE CHP certification and highlights the advantages it offers to operators.

HE CHP certification in Ireland offers significant benefits to operators while also supporting sustainability goals and encouraging energy efficiency. It provides access to financial incentives and in limited instances, priority dispatch in the electricity market, contributing to a more efficient and resilient energy system. This section outlines the various benefits available to certified HE CHP operators.

Relief from Natural Gas Carbon Tax (NGCT)

The Natural Gas Carbon Tax (NGCT) in Ireland, introduced in 2010, applies to natural gas supplied to consumers, excluding fuel used in motor vehicles, which is instead taxed under Mineral Oil Tax. The tax rate is based on the CO₂ emissions produced during the combustion of natural gas, regardless of its form (e.g., LNG, CNG). Since May 2024, an NGCT rate of €10.13 per MWh has applied, reflecting a higher carbon charge of €56 per tonne of CO₂. Fuel used in HE CHP plants are eligible for full relief from NGCT where fully qualifying, otherwise eligibility is on the HE CHP fuel element.

Solid Fuel Carbon Tax (SFCT)

The Solid Fuel Carbon Tax (SFCT) applies to coal, peat, and other solid fuels supplied in the State from 1 May 2013, with tax rates based on CO₂ emissions from combustion. Suppliers are liable for the tax when the fuel is first supplied, and individuals who bring solid fuel into the State for personal use are exempt unless they resell it. In that case, the operator must pay SFCT and register with Revenue. Fuel used in HE CHP cogeneration plants is eligible for full relief from SFCT where fully qualifying, otherwise, eligibility is on the HE CHP fuel element.

Mineral Oil Tax (MOT)

The carbon charge on Mineral Oil Tax, introduced in 2010, is a tax on fossil fuels based on CO₂ emissions from fuel combustion. It applies to mineral oils such as petrol and auto-diesel, non-auto mineral oils like marked gas oil (MGO), kerosene, fuel oil, and liquefied petroleum gas (LPG), as well as aviation gasoline and heavy oil used for recreational flying and boating. Fuel used in HE CHP cogeneration plants is eligible for full relief from MOT where fully qualifying, otherwise, eligibility is on the HE CHP fuel element.

Priority Dispatch

In the past, HE CHP plants have been guaranteed priority dispatch in Ireland's electricity grid as part of the country's commitment to promoting renewable and efficient energy sources. However, as per a decision made by the Single Electricity Market Committee in 2019,³⁰ generators commissioned after July 2019 are no longer given the priority dispatch status.

³⁰ The SEM-22-009 Decision Paper on Dispatch, Redispatch and Compensation Pursuant to Regulation (EU) 2019/943 is available [here](#).

Therefore, only HE CHP certified sites that availed of priority dispatch before this period can avail of this benefit currently.

Impact on REFIT

The Renewable Energy Feed-in Tariff (REFIT) in Ireland was a key government policy aimed at promoting the generation of electricity from renewable sources. Launched to support wind, small-scale hydro, and anaerobic digestion projects, REFIT guaranteed long-term, fixed-price contracts for electricity producers, offering financial security and encouraging investment in renewable energy infrastructure. The REFIT scheme in Ireland closed to new applications on December 31, 2015. Projects that were approved before this date continue to receive grandfathered support for up to 15 years.

The REFIT tariff in 2024 for large AD CHP (above >500 kWe) is 163 €/MWh and 188 €/MWh³¹ for small AD CHP (<500 kWe). An AD operator will claim a top-up payment equal to the difference between the REFIT tariff and the export payment it receives from its offtaker. However, for an operator to claim the top-up to reach the price fixed by REFIT, it must provide a valid HE CHP certificate.³²

When REFIT ends in Ireland, several biogas CHP plants may reassess their operations due to the loss of guaranteed payments. Without REFIT, operators will face exposure to fluctuating electricity market prices, which could make biogas power generation less economically viable given the high costs associated with biogas CHP. Currently, there is approximately 6 MW of biogas CHP electrical capacity in Ireland.

Impact on RESS

The Renewable Electricity Support Scheme (RESS) is designed to promote a range of renewable energy technologies, including biomass, biogas, and waste-to-energy projects.

The scheme operates through a competitive auction process, where developers bid for the amount of financial support they need per megawatt-hour (MWh) to make their projects economically viable. The auctions are held periodically, with the first round, RESS 1, taking place in 2019, followed by subsequent rounds RESS 2 and RESS 3. As of September 2024, preliminary results for RESS 4 have been released. The winning bids are awarded a guaranteed price for electricity generated over a set period (typically 15 years).

RESS is specifically designed to support the development of new renewable energy plants. As a result, it is exclusively available to projects that have not previously received support under the REFIT scheme. This means that any plants that were previously part of the REFIT scheme will not qualify for RESS.

³¹ Reference Prices for REFIT Schemes 2024 are available [here](#).

³² REFIT 3 is available [here](#).

Appendix 2 - Current Policy Recap

In 2012, the CRU published a decision paper outlining the HE CHP certification process, followed by a series of clarification notes. The following subsections provide the benefits of being HE CHP certified, a high-level overview of each publication and a summary of the current process.

A. Certification Process for HE CHP: Decision Paper - CER/12/125³³

The document, published in 2012, sets out the requirements for certifying high efficiency CHP systems, focusing on Primary Energy Savings (PES) and the use of economically justifiable useful heat. The certification process outlined is rigorous, requiring detailed operational data, metering, and audits to ensure compliance. By adhering to these standards, CHP plants can achieve HE CHP certification as per high efficiency criteria established by EU directives, contributing to Ireland's energy efficiency goals.

To be certified as high efficiency, CHP plants must achieve a PES threshold of 10 per cent or greater for plants with a capacity greater than 1 MWe, and any positive PES for smaller plants. CHP plants are evaluated based on their overall energy efficiency and their power to heat ratio. Certified plants must maintain compliance through annual reporting and are subject to audits to verify ongoing qualification.

The document provides detailed guidance on:

- Calculating key performance parameters such as overall efficiency, power to heat ratio and PES
- The certification process and application requirements
- Reporting and auditing requirements
- Useful heat in specific applications
- District heating requirements
- Metering and data requirements
- Worked examples

³³ Certification Process for High Efficiency CHP Decision Paper - [cer12125.pdf](#)

B. Assessment of Useful Heat for HE CHP: Clarification Note - CER/12/184³⁴

This clarification note was issued later in 2012. It sets out in greater detail the requirements to demonstrate useful heat, particularly with respect to space heating and hot water applications.

The document provides guidance on the certification process for HE CHP systems, specifically for cases involving space and water heating in residential, public, and commercial buildings.

It added clarity on the following:

1. Useful heat is defined as heat produced through cogeneration that satisfies an economically justifiable demand for heating or cooling, which would otherwise be met by other energy generation methods under market conditions.
2. For space or water heating in buildings, applicants must provide details about the nature and use of the premises, occupancy rates, year of construction, and compliance with BER. For public buildings, energy efficiency improvement reports are also required.
3. For district heating projects, applicants must demonstrate that the cost of heat supplied by CHP is competitive with alternative sources at market conditions. Details on metering and billing systems are also necessary.
4. An emphasis is put on avoiding overuse. Heat supplied by CHP must only meet legitimate heating needs for comfort or health reasons. Excessive or unnecessary heat use does not meet the definition of useful heat.

C. Repealed Harmonised Efficiency Reference Values for Separate Production of Electricity and Heat: Information Note - CER/16/153³⁵

This information note directs applicants to updated harmonised efficiency reference values published in 2015 (now further superseded by the 2023 updates) and updated regulations for PES calculations, ensuring alignment with the latest EU standards. However, its contents have been superseded by the 2023 updated reference values within C (2023) 4376 final - ANNEXES 1 to 2³⁶ (which were incorporated into the HE CHP assessment process when released).

³⁴ Assessment of Useful Heat for HE CHP Clarification Note - [cer12184.pdf](#)

³⁵ [CER16153-HECHP-Information-Note-Primary-Energy-Savings.pdf](#)

³⁶ The CRU has not published a clarification note regarding the update made by the European Commission. The Directive 2012/27/EU mandates periodic revisions every four years to ensure that the reference values reflect advancements in technology, energy efficiency, and changes in fuel mixes. Key updates include revised efficiency benchmarks for separate heat and electricity production across various fuels and technologies, which are used in the PES calculations. These revisions account for improved efficiency in conventional power generation and heating systems, ensuring that the benchmarks remain relevant for assessing whether CHP systems qualify as high efficiency under the EED (2012/27/EU). Overall, these changes aim to enhance alignment with current energy practices and promote accurate PES calculations.

D. HE CHP Assessments Where There Are Two or More Units On A Single Site: Clarification Note - CRU/17/302³⁷

This clarification note provided guidelines for assessing HE CHP systems when multiple units are located on a single site.

The CRU's default position is to issue a single HE CHP certificate for all units on a site. However, separate certification can be granted if the units are in physically separate locations and have independent heating systems, such as on a campus with separate buildings. These cases will be evaluated individually and the CRU may conduct site visits to verify the separation. Applicants seeking separate certification for multiple units must demonstrate full separation of inputs and outputs.

The onus is on the applicant to justify separate certification and ensure that no unfair fiscal benefits are gained.

E. The Assessment of Sorption Chillers in the Certification Process for HE CHP: Clarification Note - CRU/17/303³⁸

The note clarifies how sorption chillers should be evaluated in the certification process for HE CHP systems.

The key clarification is that the heat input into a sorption chiller is not considered useful heat for the purposes of HE CHP certification. Instead, the cooling output (sometimes referred to as coolth) of the sorption chiller must be metered separately and added to other metered useful heat. This metering is necessary to ensure that cooling output is assessed accurately as part of the certification process.

Applicants using sorption chillers must meter both the cooling output and any non-cooling heat applications. If an application does not provide clear evidence that cooling is required for a building (residential, commercial, or public), applicants must demonstrate that using a sorption chiller is economically justifiable compared to other technologies.

F. HE CHP Clarification Note on Anaerobic Digestion Useful Heat - CRU/20/142³⁹

This note offers guidance on the assessment of useful heat for CHP plants in AD facilities. This was necessary to align with the EED 2012/27/EU, which promotes the cogeneration of heat and power, aiming to enhance energy efficiency and improve security of supply.

³⁷ [HE CHP assessments where there are two or more units on a single site.pdf](#)

³⁸ [Clarification note on the assessment of soption chillers.pdf](#)

³⁹ [CRU20142-High-Efficiency-CHP-Clarification-Note-on-Anaerobic-Digestion-Useful-Heat.pdf](#)

The CRU undertook a desktop study to assess heat use in AD processes across historical applications and literature, primarily focusing on Ireland and the UK. This study provided benchmarks and guidelines for acceptable heat use within AD facilities. The findings led to the establishment of recommended caps on heat use, allowing applicants to potentially avoid submitting a full economic assessment if their heat use falls within these limits.

Heat Caps: The document sets forth specific heat caps for AD plants seeking HE CHP certification:

- **Plants with Pasteurisation:** The heat use must not exceed 97 kWh per tonne of feedstock. This cap includes the heat needed to raise the feedstock temperature for pasteurisation, maintain the temperature, and a 10 per cent allowance for additional heat use.
- **Plants without Pasteurisation:** The heat use must not exceed 54 kWh per tonne of feedstock, factoring in the heat required to maintain the digester at 37°C.

If plants exceed these caps, they are required to provide a full economic assessment to justify the additional heat as economically justifiable demand. Plants using innovative technologies or methods that exceed the specified caps must also submit a full economic assessment.

All AD plants must install heat meters to track heat used in the process. Heat that exceeds the caps outlined in the document must be justified with economic data, while heat within the caps is assumed to meet the directive’s requirements. Applicants are also required to provide detailed information on their equipment, feedstock, and any additional water used in the AD process as part of their certification or annual reporting.

Appendix 3 – Current Process

The figure below shows the application and approval process for obtaining a HE CHP certificate. The expected processing time for an application is three to six months. The CRU handles applications on a first-come, first-served basis. Each submission is evaluated in the order it is received. However, it is important to note that the nature and complexity of each application can differ significantly. As a result, some applications may progress quicker than others, depending on the specific details of each application.

