CLIMATE CHANGE ADVISORY COUNCIL

Recast Energy Efficiency Directive

Fact Sheet

Disclaimer: *This series tracks the progress of EU Green Deal legislation, providing point-in-time updates on how each law is being adopted into national law and the implementation status of specific article-level measures. This publication was compiled by the Climate Secretariat who are solely responsible for the content and any views expressed therein. It does not represent the views of the Council.*

	Recast Energy Efficiency Directive (EU/2023/1791)
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Key Dates	➢ Entered into force on 10 October 2023 ➢ Deadline for transposition 11 October 2025

Introduction

The Commission revised the Energy Efficiency Directive (EED) (Directive (EU) 2023/1791) as part of the EU Green Deal Package. There are a significant number of new requirements being introduced under the Directive and a selection of these are included in this note along with details on their transposition status, key issues and the implementation plan for these requirements for Ireland. This assessment is not exhaustive but reflects some of the main areas addressed in Ireland's National Energy and Climate Plan and relevant to previous Annual Review recommendations.

A number of detailed guidance notes on various aspects of the Directive have also been published by the Commission and are available here.

Article 3 – Energy Efficiency First Principle

'In accordance with the energy efficiency first principle, Member States shall ensure that energy efficiency solutions, including demand-side resources and system flexibilities, are assessed in planning, policy and major investment decisions of a value of more than EUR 100,000,000 each or EUR 175,000,000 for transport infrastructure projects, relating to the following sectors:
(a) energy systems; and
(b) non-energy sectors, where those sectors have an impact on energy consumption and energy efficiency such as buildings, transport, water, information and communications technology (ICT), agriculture and financial sectors.'

This Article introduces conditions for the practical application of the energy efficiency first principle in planning, policy and major investment decisions and requires Member States to consider whether cost-efficient, technically, economically and environmentally sound alternative energy efficiency measures are available.

A number of implementation mechanisms are currently being considered including through the Public Spending Code, Infrastructure Guidelines and National Investment Framework for Transport in Ireland (NIFTI), through the planning process including building control processes and through CRU policy frameworks for energy infrastructure. Ireland's NECP notes that the objectives of NIFTI currently align with energy efficiency first principles in general, however updates may be required to the Department of Transport's Transport Appraisal Framework and to the Infrastructure Guidelines. Additional guidance on implementation has been requested from the European Commission.

Article 4 – Final Energy Consumption

'Member States shall collectively ensure a reduction of energy consumption of at least 11,7% in 2030 compared to the projections of the 2020 EU Reference Scenario so that the Union's final energy consumption amounts to no more than 763 Mtoe. Member States shall make efforts to collectively contribute to the indicative Union primary energy consumption target amounting to no more than 992,5 Mtoe in 2030.'

Under Article 4, the EU has committed to reducing its Final Energy Consumption (FEC) to 763 Mtoe, a 11.7% decrease compared to the projected EU 2020 reference scenario for baseline energy consumption. Article 4 also indicates that the EU's Primary Energy Consumption (PEC) by 2030 will be no more than 992.5 Mtoe. This is binding at an EU level but is indicative at a national level. The Commission will calculate whether all Member State contributions add up to the overall 11.7% target and, if not, issue corrections to the indicative national contributions.

The directive requires EU countries to set indicative national energy efficiency targets based on both primary and final energy consumption contributions to meet the Union's target. In February 2024, the Irish Government approved a Final Energy Consumption target of 10.451 Mtoe, and a Primary Energy Consumption target of 11.294 Mtoe in line with the EED formula[1].

The most optimistic scenario for energy use reductions that has been produced by the SEAI (the WAM projection) for Ireland's NECP submitted to the European Commission, projects Ireland's FEC in 2030 to be 12.46 Mtoe, which is 2.01 Mtoe higher than Ireland's target for 2030.

Renewables are not treated differently to fossil fuels for the purposes of the EED Targets. Ireland has noted that it will be seeking to revisit this as part of the 2027 review of the EED. The final NECP submitted to the European Commission states '*Ireland looks forward to the*

review of this issue under Article 35 of the Energy Efficiency Directive, which must be completed by 28th February 2027.'

Article 5 & Article 6 (Public Sector Energy Reduction of 1.9% per year & Renovation of 3% of floor space per year)
'Member States shall ensure that the total final energy consumption of all public bodies combined is reduced by at least 1,9 % each year, when compared to 2021.' *'Without prejudice to Article 7 of Directive 2010/31/EU, each Member State shall ensure that at least 3 % of the total floor area of heated and/or cooled buildings that are owned by public bodies is renovated each year to be transformed into at least nearly zero-energy buildings or zero-emission buildings in accordance with Article 9 of Directive 2010/31/EU.'*

Under Articles 5 and 6 public bodies must reduce their combined total final energy consumption by at least 1.9% each year compared with 2021 and renovate at least 3% of the total floor area of their heated and/or cooled buildings annually. There is some interaction with the revised Energy Performance of Buildings Directive (EPBD) requirements for the rate of renovation of non-residential buildings for example.

DECC is finalising the definition of what is included in the public sector, with further guidance expected from the Commission on this. SEAI is also currently gathering data on owned buildings versus leased buildings and the floor area of public bodies in order to quantify the required delivery of equivalent savings by 2030.

Article 6(6) makes provision for an alternative approach to meeting required energy savings in the buildings of public bodies. The alternative approach offers flexibility by allowing Member States to estimate and achieve yearly energy savings in public buildings that are at least equivalent to the savings that would have been achieved under the default renovation requirement. Member States would not be obliged to renovate public buildings to reach NZEB or ZEB immediately, but can achieve energy savings through implementing measures like demand reduction and improvements related or unrelated to the building envelope or technical systems. Renovation passports must be produced for 3% of public buildings' floor area annually to guide the journey to becoming NZEB compliant by 2040 rather than the default approach requiring renovation rate of 3% annually. Ireland signalled to the Commission in December 2023 that it may apply this alternative approach rather than the 3% renovation rate but is currently collecting data on the floor area of public bodies concerned.

Article 8 (Energy Savings Obligation)

'Member States shall achieve cumulative end-use energy savings at least equivalent to:….

…new savings each year from 1 January 2021 to 31 December 2030 of:

- **(i)** *0,8 % of annual final energy consumption from 1 January 2021 to 31 December 2023, averaged over the most recent three-year period preceding 1 January 2019;*
- **(ii)** *1,3 % of annual final energy consumption from 1 January 2024 to 31 December 2025, averaged over the most recent three-year period preceding 1 January 2019;*
- **(iii)** *(iii) 1,5 % of annual final energy consumption from 1 January 2026 to 31 December 2027, averaged over the most recent three-year period preceding 1 January 2019;*
- **(iv)** *1,9 % of annual final energy consumption from 1 January 2028 to 31 December 2030, averaged over the most recent three-year period preceding 1 January 2019.'*

'Member States shall achieve the amount of energy savings required under paragraph 1 of this Article either by establishing an energy efficiency obligation scheme as referred to in Article 9 or by adopting alternative policy measures as referred to in Article 10.'

The revised Directive significantly increases the annual energy savings obligation (Article 8) by 2028. This is one of the key instruments of the Directive to drive energy savings in end-use sectors, such as buildings, industry and transport. EU countries are required to achieve cumulative end-use energy savings from 2021 to 2030 of at least 0.8% of final energy consumption in 2021-2023, at least 1.3% in 2024-2025, 1.5% in 2026-2027 and 1.9% in 2028-2030.

Ireland's NECP notes that it intends to deliver the energy savings required through a combination of the energy efficiency obligation scheme (EEOS)[2] to achieve energy savings targets on certain energy companies ("obligated parties") and a range of alternative measures. Under the EEOS, energy suppliers and distributors are required to achieve annual energy efficiency targets which can be met for example by supporting homeowners, businesses and communities to carry out works to deliver energy savings[3]. Alternative measures currently counted for Ireland include SEAI programmes for energy savings in residential, public sector, industry, transport and commercial services where EEOS obligated parties are not involved in delivering the measures.

Under the previous Directive implemented via SI 522/2022, an EEOS target for the obligation period from 2021-2030 was set of 36,424GWh in cumulative end-use energy savings by

obligated parties. This entails 60% of the target under the previous Directive being delivered via EEOS with the rest via alternative measures.

No decision has been taken on the split between EEOS and alternative measures, however DECC intends to hold a public consultation in Q4 2024 on any increase/changes to the EEOS[4] and alternative measures with an aim to have amended legislation in place by mid-2025. Analysis of alternative measures counted in other EU Member States and their suitability in an Irish context is expected as an input to this consultation.

Article 11 – Energy Efficiency in Industry

'Member States shall ensure that enterprises with an average annual consumption higher than 85 TJ of energy over the previous three years, taking all energy carriers together, implement an energy management system. The energy management system shall be certified by an independent body, in accordance with the relevant European or international standards.'

'Member States shall ensure that enterprises with an average annual consumption higher than 10 TJ of energy over the previous three years, taking all energy carriers together, which do not implement an energy management system are subject to an energy audit.'

Article 11 includes requirements for enterprises to implement energy management systems and carry out energy audits. Article 11 also provides for Member States to require assessments of the feasibility to connect to district heating networks as part of energy audits carried out by enterprises.

SEAI currently operates an Energy Audit Scheme for larger enterprises which will help enterprises to comply with this requirement, along with a Large Industry Network which supports the adoption of energy management systems. For smaller enterprises, the Support Scheme for Energy Audits provides €2,000 towards the cost of an energy audit.

Article 12 – European Data Centre Database

'By 15 May 2024 and every year thereafter, Member States shall require owners and operators of data centres in their territory with a power demand of the installed information technology (IT) of at least 500kW, to make the information set out in Annex VII publicly available, except for information subject to Union and national law protecting trade and business secrets and confidentiality.'

The revised directive introduces an obligation for the monitoring and reporting of the energy performance of data centres. A European database will collect and publish data on the energy performance and water footprint of data centres with significant energy consumption which data centre operators will be required to report directly to.

Owners and operators of data centres with an installed IT power demand of at least 500kW will be required to make publicly available:

- Name of the data centre, owner and operators date of entry into operation and the municipality where the data centre is based.
- Floor area of data centre, installed power, annual incoming and outgoing data traffic, amount of data stored and processed.
- The performance of the data centre during the last full calendar year (energy consumption, power utilisation, temperature set points, waste heat utilisation, water usage and use of renewable energy).

The deadline for reporting under Article 12 was the 15th of May 2024 and every year thereafter, however the Directive has not yet been transposed in Ireland[5]. The Commission has also introduced a delegated Regulation[6] to supplement the EED to establish an EU scheme to rate the sustainability of data centres, which requires reporting of prescribed information and KPIs by datacentres by the 15th of September 2024 and is now directly effective in Ireland.

Article 25 – Heating and cooling assessment and plans

'As part of its integrated national energy and climate plan and its updates pursuant to Regulation (EU) 2018/1999, each Member State shall submit to the Commission a comprehensive heating and cooling assessment.'

'Member States shall ensure that regional and local authorities prepare local heating and cooling plans at least in municipalities having a total population higher than 45,000.'

To ensure a fully decarbonised district heating and cooling supply by 2050, the definition of efficient district heating and cooling has been revised and minimum requirements will be gradually changed to allow for a progressive integration of renewable energy and waste heat and cold in district heating systems.

A comprehensive heating and cooling assessment will also be required along with a cost-benefit analysis to facilitate the identification of the most resource efficient and cost-efficient solutions to meet heating and cooling needs. If potential for high-efficiency cogeneration/efficient district heating and cooling from waste heat is identified, Member States will be required to take adequate measures for such infrastructure to be developed. Regional and local authorities will also be required to prepare local heating and cooling plans in areas with a total population higher than 45,000.

Ireland has conducted key analysis for district heating systems through SEAI's 2022 National Heat Study and through the Dublin Energy Agency, Codema. The General Scheme of the Heat (Networks and Miscellaneous Provisions) Bill 2024 was approved on the 5th November 2024[7]. In light of this, the Department of the Environment, Climate and Communications is currently working on the business case for the Development of a National District Heating Infrastructure and Market to put forth as a spending programme. In respect to local authorities' heating and cooling plans, the LACAPs have elements of heat planning to-date but more support and guidance is needed[8]. The District Heating Steering Group recommended that the District Heating Centre of Excellence in SEAI should undertake economic analysis to include how to support or deliver heating and cooling plans for relevant local authority areas, as required under the Energy Efficiency Directive recast of 2023[9].

Article 27: Energy transformation, transmission & distribution

'National energy regulatory authorities shall apply the energy efficiency first principle, in accordance with Article 3 of this Directive, in carrying out the regulatory tasks provided for in Directives 2009/73/EC and (EU) 2019/944 regarding their decisions on the operation of the gas and electricity infrastructure, including their decisions on network tariffs. In addition to the energy efficiency first principle, national energy regulatory authorities may take into account cost efficiency, system efficiency and security of supply, and market integration, while safeguarding the Union's climate targets and sustainability, as set out in Article 18 of Regulation (EU) 2019/943 and in Article 13 of Regulation (EC) No 715/2009.'

'Member States shall ensure that gas and electricity transmission and distribution system operators apply the energy efficiency first principle, in accordance with Article 3 of this Directive, in their network planning, network development and investment decisions.'

Gas and electricity transmission and distribution system operators will be required to apply the energy efficiency first principle in network planning, network development and investment

decisions. They will be required to assess alternatives in a cost-benefit analysis, taking into account the wider benefits of energy efficiency solutions, demand-side flexibility and investment in assets which contribute to climate change mitigation.

They will also be required to monitor and quantify the overall volume of network losses and optimise networks and improve network efficiency. There is no published information to date on the status of implementation in Ireland.

Article 30 – Financing Energy Efficiency

'Member States shall adopt measures that promote energy efficiency lending products, such as green mortgages and green loans, secured and unsecured, and ensure that they are offered widely and in a non-discriminatory manner by financial institutions and, are visible and accessible to consumers. Member States shall adopt measures to facilitate the implementation of on-bill and on-tax financing schemes, taking into account the Commission guidance provided in accordance with paragraph 10. Member States shall ensure that banks and other financial institutions receive information on opportunities to participate in the financing of energy efficiency improvement measures, including through the creation of public-private partnerships. Member States shall encourage the setting up of loan guarantee facilities for energy efficiency investment.'

Article 30 sets an obligation for Member States to promote innovative financing schemes and leverage private investments, aiming to develop policy measures for incentivising private investments. For example, Member States are required to promote energy efficiency lending products – such as green mortgages and green loans under Article 30(3).

The Commission guidance note in implementation of Article 30 notes that it will develop a new European Energy Efficiency Financing Coalition (launched in April 2024[10]) that will involve Member States and financial institutions to mobilise private financing for energy efficiency at scale. Further information on the Coalition is available here.

Ireland has a number of green financial products available. Bank of Ireland, AIB, ESB, Haven and Permanent TSB provide green mortgages. However, to qualify for the discounted interest rate of a green mortgage the home being purchased or built needs to have a Building Energy Rate of at least a B3 or higher. Those with mortgages can switch to a green mortgage if proof of adapting their home to at least a B3 or higher can be obtained.

In terms of financing of energy efficiency improvement measures, Ireland led the way in Europe on a collaboration with the European Investment Bank for a Home Energy Upgrade Loan Scheme with loans from €5,000 up to a maximum of €75,000 per property for between

one and ten years which are now available through Bank of Ireland (3.0% Typical APR), AIB (3.55% Typical APR), PTSB (3.9% Typical APR). An Post Money also provided a Green Home Improvement Loan (4.9% Typical APR).

Banks and other financial institutions have significant potential to contribute to climate-related projects through participation in public-private partnerships, but more coordination is needed between the retail banking sector, Government and state bodies as identified in the Banking & Payments Federation of Ireland[11].