Official Journal
of the European Union

EN
C series

C/2023/1553 19.12.2023

COMMISSION RECOMMENDATION

of 12 December 2023

on transposing Article 30 on national energy efficiency funds, financing and technical support of the Directive (EU) 2023/1791 on energy efficiency ('EED recast')

(C/2023/1553)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 292 thereof,

Whereas:

(1) In its communication of 28 November 2018 on 'A Clean Planet for all – A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy', [1] the Commission stated that energy efficiency is a key area of action, without which the full decarbonisation of the Union's economy cannot be achieved.

(2) In December 2018, a new 2030 Union headline energy efficiency target of at least 32,5 %, compared to projected energy use in 2030, was included in the Clean Energy for All Europeans package, which aimed at putting energy efficiency first, achieving global leadership in renewable energies and providing a fair deal for consumers.

(3) Directive 2012/27/EU of the European Parliament and of the Council (the 'Energy Efficiency Directive' (EED)), [2] as amended by Directive (EU) 2018/2002, [3] obliged to achieve the headline target of at least 32,5 % energy savings at EU level by 2030.

(4) In its communication of 17 September 2020 on 'Stepping up Europe's 2030 climate ambition – Investing in a climate-neutral future for the benefit of our people' (the 'Climate Target Plan'), [4] the Commission proposed to raise the Union's climate ambition by increasing the greenhouse gas (GHG) emissions target to at least 55 % below 1990 levels by 2030. The proposal delivered on the commitment made in the communication of the Commission of 11 December 2019 on 'The European Green Deal' to put forward a comprehensive plan to increase the Union's target for 2030 towards 55 % in a responsible way.

(5) The impact assessment accompanying the Climate Target Plan demonstrated that, to achieve the increased climate ambition, energy efficiency improvements needed to be significantly raised from the level of 32,5 %.

(6) To achieve those objectives, in its communication of 19 October 2020 on 'Commission Work Programme 2021 – A Union of vitality in a world of fragility', [5] the Commission adopted a legislative package to reduce GHG emissions by at least 55 % by 2030 (the 'Fit for 55 package'), and to achieve a climate-neutral European Union by 2050. That package covers a range of policy areas including a proposal for a recast of the Energy Efficiency Directive.

[1] Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank 'A Clean Planet for all — a European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy' COM(2018) 773 final.

[2] Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (OJ L 315, 14.11.2012, p. 1).

[3] Directive (EU) 2018/2002 of the European Parliament and of the Council of 11 December 2018 amending Directive 2012/27/EU on energy efficiency (OJ L 328, 21.12.2018, p. 210).

[4] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 'Stepping up Europe's 2030 climate ambition Investing in a climate-neutral future for the benefit of our people' COM/2020/562 final.

[5] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 'Commission Work Programme 2021 - A Union of vitality in a world of fragility' COM(2020) 690 final.

(7) Directive (EU) 2023/1791 (the 'Energy Efficiency Directive recast' (EED recast)) [6] was thus adopted on 13 September 2023, which significantly raised the level of ambition for 2030 in terms of energy efficiency, including in relation to financing for energy efficiency.

(8) Mobilising investments in energy efficiency via dedicated policy and energy efficiency financing measures – able to scale up the volume of energy efficiency projects and leverage private financing for the EED Recast implementation – is key in order to support Member States to deliver on the 2030 energy efficiency targets and to achieve climate neutrality by 2050 in a cost-efficient way, while ensuring the competitiveness and sustainability of the EU economy.

(9) The European Council, in its conclusions of 21-22 October 2022 and of 15 December 2022, called on the Council and the European Commission to submit concrete proposals to, among others, increase efforts to save energy and reiterated the need to step up investments in energy efficiency.

(10) Article 30 of the EED recast recognises the need to deploy adequate financial and technical support for energy efficiency measures, to develop targeted policy measures enabling the mobilisation of private investments in energy efficiency and lays the basis for further work to incentivise investment in energy efficiency, placing an emphasis on the cooperation between the European Commission and Member States.

(11) In particular, pursuant to Article 30(1) and without prejudice to Articles 107 and 108 TFEU, Member States should facilitate the establishment of financing facilities, or the use of existing ones, for energy efficiency improvement measures to maximise the benefits of multiple streams of financing and the combination of grants, financial instruments and technical assistance. While Article 30(2) requires the Commission to assist Member States in establishing financing and project development assistance facility to mobilise investments in energy efficiency and support energy efficiency measures among people affected by energy poverty, vulnerable customers, people in low-income households and, where applicable, people living in social housing. To support Member States in transposing and implementing Article 30(1) and (2) EED, the guidance recalls the scope and objectives of the requirements and provides options and examples of policy measures to fulfil the obligations, such as for instance the need to streamline the regulatory framework to enable blending of multiple streams of EU and national financing, and the need to facilitate the establishment of technical assistance facilities at national or, where relevant, regional level.

(12) Article 30(3) requires Member States to promote energy efficiency lending products – such as green mortgages and green loans – and ensure that they are offered widely and in a non-discriminatory manner by financial institutions, and are visible and accessible to consumers, as well as to adopt measures to facilitate the implementation of on-bill and on-tax financing schemes, and to encourage the establishment of loan guarantee facilities for energy efficiency investments. To support Member States in transposing and implementing Article 30(3) EED, the guidance recalls the scope and objectives of the requirements and provides options and examples of policy measures to fulfil the obligations, such as for instance the development of the necessary regulatory framework to ensure non-discrimination of energy efficiency loans, dedicate support schemes and de-risking facilities to promote energy efficiency lending products, and the necessary steps to enable on-tax and on-bill financing schemes in the national frameworks. In this regard, actions by Member States should be consistent with the EU financial regulatory acquis and leverage the measures available to them and to market participants within the EU framework for sustainable finance, and without prejudices to further development in these areas.

(13) Article 30(4) and (5) requires Member States to promote the establishment of financial support schemes specifically targeting the refurbishment of individual and district heating and cooling systems, and to promote local expertise and technical assistance support to achieve decarbonisation of local district heating and cooling systems. To support Member States in transposing and implementing Article 30(4) and (5) EED, the guidance recalls the scope

[6] Directive (EU) 2023/1791 of the European Parliament and of the Council of 13 September 2023 on energy efficiency and amending Regulation (EU) 2023/955 (recast) (OJ L 231, 20.9.2023, p. 1–111).

and objectives of the requirements and provides options and examples of policy measures to fulfil the obligations, such as for instance the launch of dedicated financing schemes for district heating refurbishment in connection with the establishment of one-stop-shops for district heating and cooling operators.

(14) Article 30(7) requires the Commission to conduct a dialogue with both public and private financial institutions, as well as relevant specific sectors in order to map out needs and possible actions it can take with the view to mobilise private financing for energy efficiency measures and energy renovation, and to contribute to the achievement of the Union's energy efficiency targets and of the national energy efficiency contributions. In this regard, the Commission will launch a new European Energy Efficiency Financing Coalition that also involves Member States in a closer cooperation, thereby creating a framework for dialogue towards action, which can facilitate investments on energy efficiency.

(15) Pursuant to Article 30(11), Member States may establish a national energy efficiency fund with the objective to support Member States in meeting their national energy efficiency contributions and their energy savings obligations in line with Article 4 and Article 8 of Directive (EU) 2023/1791 on energy efficiency. According to Article 30(12), where a national energy efficiency fund is established, this should be employed to increase uptake of private investments in energy efficiency and to support energy efficiency measures among people affected by energy poverty, vulnerable customers, people in low-income households and, where applicable, people living in social housing. To support Member States in transposing and implementing Article 30(11) and (12) EED and in making use of the options available in Article 30(13) and (14) EED, the guidance recalls the scope and objectives of the provisions on national energy efficiency funds, suggest steps to undertake for its establishment, and the option to temporarily fulfil annual obligations under the EED by mean of a financial contribution to the national energy efficiency fund, as well as the methodology to calculate such a financial contribution.

(16) Article 30(17) strengthens the existing reporting requirements for Member States on energy efficiency financing, by requiring to report to the Commission by 15 March 2025 and every two years thereafter, as part of their integrated national energy and climate progress reports submitted pursuant to Article 17 and in accordance with Article 21 of Regulation (EU) 2018/1999, data on (a) the volume of public investments on energy efficiency and the average leverage factor achieved by public funding supporting energy efficiency measures; (b) the volume of energy efficiency lending products, distinguishing between different products; (c) where relevant, national financing programmes put in place to increase uptake of energy efficiency and best practices, and innovative financing schemes for energy efficiency. In addition, Article 30(18) clarify the existing disclosure obligations to be taken into consideration to fulfil the requirements referred in paragraph 17, point (b).

(17) Member States are to bring into force the laws, regulations and administrative provisions transposing Article 30 on energy efficiency financing by 11 October 2025.

(18) The full transposition and effective implementation of the EED recast is necessary if the EU is to achieve its 2030 energy efficiency and climate targets.

(19) Member States have some margin of discretion to transpose and implement the requirements regarding Article 30 on energy efficiency financing in a way that is best suited to their national circumstances.

HEREBY RECOMMENDS THAT MEMBER STATES:

1. Follow the guidelines provided in the Annex to this Recommendation when transposing the requirements introduced by Article 30 of Directive (EU) 2023/1791 on energy efficiency.

2. This Recommendation explains the amended requirements and illustrates how the objectives of the Directive can be achieved. The aim is to contribute to a uniform understanding of the EED recast across Member States as they prepare their transposition measures.

3. This Recommendation does not alter the legal effects of the EED recast and is without prejudice to the binding interpretation of the EED recast as provided by the Court of Justice. It focuses on the provisions relating to energy efficiency financing and concerns Article 30 to the EED Recast.

Done at Brussels, 12 December 2023.

For the Commission
Kadri SIMSON
Member of the Commission

ANNEX

1. INTRODUCTION

Article 30 of the of the Directive (EU) 2023/1791 on energy efficiency ('EED recast') aims to increase public and private investments in energy efficiency in different sectors in order to meet EU's 2030 energy efficiency targets. It contributes to this objective by providing an enabling framework to increase the cost-effectiveness of public budget support and the mobilisation of private investments in energy efficiency measures. EU funding and national public financing will not be enough to meet the investment needs, the majority of the financial support will need to be mobilised from the private sector. The limited amount of public funding available shall focus on addressing barriers to investments, supporting investments by the most vulnerable groups, providing financial instruments and public guarantees, with the objective of accelerating the roll out of energy efficiency measures and to leverage and mobilise private investments. The transposition and implementation of Article 30 EED recast on financing energy efficiency is expected to improve the enabling framework to mobilise investment in energy efficiency, and thus contribute to both the 2030 energy efficiency targets and REPowerEU energy savings objectives.

This Guidance aims to support Member States on transposing Article 30 of the Directive (EU) 2023/1791 on energy efficiency. The binding interpretation of EU legislation is the exclusive competence of the Court of Justice of the European Union. The views expressed in this guidance are without prejudice to the position that the Commission might take before the Court of Justice.

The obligations for Member States in Article 30 are detailed at the beginning of each section of this Annex and require Member States to implement a number of policy measures, or financing and support programmes, with the objective of enhancing energy efficiency investments across sectors, thus contributing to the achievement of the binding EU 2030 energy efficiency targets.

Section 2 of this Annex recalls the mandatory provisions in Article 30 EED recast to be transposed and implemented in the national legislative framework, providing explanations on the scope and objectives of the provisions, as well as further information on the choice of possible policy measures to fulfil the requirements.

Section 3 of this Annex addresses the optional provisions on the national energy efficiency funds, which gives Member States the option to establish such a fund to fulfil the objectives of the EED recast, and some of the EED recast obligations by mean of financial contributions. In case this option is chosen, some precise requirements apply.

Section 4 of this Annex addresses the strengthened reporting requirements on energy efficiency financing, which are directly applicable to Member States. This reporting will be integrated in the National Energy and Climate Progress Reports (NECPR) in accordance with Articles 17 and 21 of Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action.

2. MANDATORY PROVISIONS FOR TRANSPOSITION AND IMPLEMENTATION

The central requirement of Article 30 is for Member States to facilitate the establishment of financing facilities and/or scale-up the use of the existing ones to support energy efficiency measures, as well as to promote and remove existing barriers to the scale-up of private and innovative financing solutions for energy efficiency. This is key for mobilising appropriate investment volume in energy efficiency. The following section and its sub-sections address the main mandatory requirements for transposition stemming from Article 30.

2.1. Facilitating financing facilities and the combination of grants, financial instruments and technical assistance

Table 2-1.

Article 30, paragraphs 1 and 2

#	Paragraph from Article 30
1	Without prejudice to Articles 107 and 108 TFEU, Member States shall facilitate the establishment of financing facilities, or use of existing ones, for energy efficiency improvement measures to maximise the benefits of multiple streams of financing and the combination of grants, financial instruments and technical assistance.

2	The Commission shall, where appropriate, directly or via the European financial institutions, assist Member States in setting up financing facilities and project development assistance facilities at national, regional or local level with the aim of increasing investments in energy efficiency in different sectors, and protecting and empowering vulnerable customers, people affected by energy poverty and, where applicable, people living in social housing including by integrating an equality perspective so that no one is left behind.

2.1.1. *Scope and objectives of the requirement*

Article 30(1) requires Member States to facilitate the establishment of financing facilities and maximise blending between multiple streams of financing. As per Article 30(2) in addition to national level facilities, Member States should facilitate the establishment of financing facilities at regional or local level. With detailed knowledge of the building stock and local occupants, regional and local financing facilities are closer to citizens and local businesses. Therefore, they are in a position to actively engage with them, facilitating the deployment of financial support for energy efficiency upgrades ([1]). Member States will need to ensure that financing facilities offer a combination of different financing streams and project development assistance, and maximise the use of EU funds support to establish national and regional financing facilities. A mix of financial and technical support is often needed to overcome the many different barriers that prevent energy efficiency upgrades, including economic, financial, behavioural and informational barriers, including energy-financial literacy, around project development processes, financing options, contractor credibility, etc ([2]). In establishing financing and technical support facilities providing public financial support to energy efficiency improvement measures, Member States should consider the applicable State aids rules for energy efficiency ([3]).

While financial support might be available, its existence or access to it is often not known. One-stop-shops are effective at increasing awareness of technical and financing options as well as offering a combination of technical ([4]) and financial support for energy efficiency measures, both in the residential and commercial sectors ([5]). One-stop-shops may directly provide financing for a project and/or act as an intermediary, linking customers with public or private financers. The Hauts-de-France Pass Rénovation scheme offers an example of a scheme that blends financial instruments with technical support (see Box 1).

Box 1. Hauts-de-France Pass Rénovation
The Hauts-de-France Pass Rénovation is a comprehensive 'one-stop-shop' deployed by a regional authority to support the renovation of residential buildings in the region. Its objective is to reduce energy consumption in residential buildings, combat energy poverty and demonstrate that energy efficiency financing is low risk to encourage private banks to roll-out further products. The programme was piloted in 2013 in Picardie and has since been extended to the whole Hauts-de-France Region. The scheme takes several steps to increase the visibility, availability and accessibility of energy efficiency lending products. A publicity campaign was implemented to ensure public awareness of the scheme. Support is available for all owner-occupiers or renters of residential housing, regardless of age and type of housing. Various financing solutions are offered including a standalone loan offer, zero-interest 'eco-loans' (under the regulated national scheme) and facilitated

([1]) Economidou, M., Della Valle, N., Melica, G., Valentini, O. and Bertoldi, P., 2021, Financing energy renovations at local and regional levels, EUR 30815 EN, Publications Office of the European Union, Luxembourg, ISBN 978-92-76-41141-3, doi:10.2760/52526, JRC123755.

([2]) Bertoldi, P., Boza-Kiss, B., Della Valle, N. and Economidou, M., 2021, The role of one-stop shops in energy renovation - a comparative analysis of OSSs cases in Europe, Energy and Buildings, ISSN 0378-7788, 250, p. 111273, JRC124675.

([3]) As regard aid for energy efficiency investments, the relevant State aid provisions are articles 38, 38a (aid to building owners and tenants), 38b (aid to ESCOs), and 39 (aid granted via financial intermediaries) of the General Block Exemption Regulation on State Aid (GBER) and Section 4.1 (Aid for the reduction and removal of greenhouse gas emissions including through support for renewable energy and energy efficiency), 4.2 (Aid for the improvement of the energy and environmental performance of buildings) and 4.10 (Aid to district heating and cooling) of the Guidelines on State Aid for climate, environmental protection and energy (CEEAG).

([4]) Including technical support for planning, quality assurance, and post-occupancy monitoring of the works.

([5]) Boza-Kiss, B., Bertoldi, P., Della Valle, N. and Economidou, M., 2021, One-stop shops for residential building energy renovation in the EU, EUR 30762 EN, Publications Office of the European Union, Luxembourg, ISBN 978-92-76-40100-1, doi:10.2760/245015, JRC125380.

access to loans from third-party financial institutions. Loan tenors can be as long as 25 years are based on the lifespan of the specific renovations. Pre-financing of the work is provided, with reimbursements made only the end of the project. To ensure affordability, monthly payments take the forecast energy savings into account. Low-income beneficiaries that cannot afford to pay back the loan can also benefit from financial assistance provided by the state housing authority, ANAH. Households are also provided with technical support including a thermal audit of their dwelling, advice on renovation works and potential energy savings, support with recruitment of companies, site monitoring during renovations and subsequent monitoring of energy consumption.

2.1.2. *Choice of policy measures to fulfil the requirement*

Member States could fulfil the requirement of facilitating the establishment of financing facilities and the combination of grants, financial instruments and technical assistance through various actions:

— **Streamline the regulatory framework to enable blending of multiple streams of EU and national financing** and the combination of grants, financial instruments, and technical assistance from different facilities.

— **Ensure close coordination among the different sources of financing for energy efficiency considering the needs of the targeted final beneficiaries. For instance, the upcoming public budget support for energy efficiency measures in vulnerable households from the Social Climate Fund** (6) **could be provided as well through financial intermediaries, and Member States could already plan on how to include such measures in their Social Climate Plans that will be submitted by June 2025 and deploy an integrated supportive framework for energy efficiency investments.**

— **Establish dedicated expertise in national promotional banks or similar public institutions promoting capital investments into energy efficiency, in particular on blending financial instruments with public grants programmes.**

— **Facilitate the establishment of technical assistance facilities at the national or, where relevant, regional level.** Technical assistance facilities can actively engage with local administrations and local businesses to deploy financial support and favour blending of different finance streams for efficiency upgrades. For this purpose the European Commission and the European Investment Bank can support Member States with deploying technical assistance facilities at national and regional level, based on the ELENA model.

— **Set up one-stop-shops at the national, regional or local level** (7): These schemes proactively provide both technical and financial support to businesses for energy efficiency upgrades to their facilities, and/or to owner-occupiers or to tenants of residential housing who wish to improve the energy efficiency of their dwellings. They can help to establish trust by clearly defining responsibilities and corrective actions in case of issues with construction works and can also be instrumental in supporting hard-to-reach groups. One-stop-shops can also play a key role in bringing several households with similar retrofit needs together, thus acting as projects aggregators, creating economies of scale, reducing the administrative and quality-assurance burden for individual owner-occupiers, and enable standardisation and aggregation of projects for financial investors and debt re-financing purposes.

(6) Regulation (EU) 2023/955 of the European Parliament and of the Council of 10 May 2023 establishing a Social Climate Fund and amending Regulation (EU) 2021/1060 (OJ L 130, 16.5.2023, p. 1).

(7) The Guidance to Article 23 EED recast further details the provisions in relation to establishment of one-stop-shops to support energy efficiency objectives.

2.2. **Promoting energy efficiency lending products**

Table 2-2.

Article 30, paragraph 3 - first sentence

#	Paragraph from Article 30
3-first sentence	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.

2.2.1. *Scope and objectives of the requirement*

Energy efficiency lending products are loans that cover the upfront investment cost of energy efficiency measures. Energy efficiency lending encompasses a variety of debt financing instruments, from standard loans for energy efficiency measures to more innovative lending products such as energy efficiency mortgages, green consumer credits, and on-bill and on-tax financing. These products can be provided by several different types of lenders, including public institutions, banks, utilities, etc., and received by a wide range of borrowers, including homeowners, tenants, businesses, energy service companies (ESCOs) and public organisations.

Energy efficient lending products are typically delivered through two main channels:

— Credit lines, that are lending facilities offered by banks or other financial institutions for the specific purpose of financing energy efficiency measures. In nascent energy efficiency financing markets, credit lines for energy efficiency should ideally be backed by public and multi-lateral banks. As markets mature, local commercial banks can develop dedicated private energy efficient credit lines (e.g., green mortgages).

— Dedicated funds, that are instruments with a specific mandate to invest in energy efficiency measures, often with a focus on specific sectors (e.g., buildings or industry). Dedicated funds should offer debt, as well as equity, hybrid instruments and loan guarantees. These funds can contain entirely private capital, entirely public capital, or contributions from both private and public sectors. National energy efficiency funds that exist in many Member States are an example and will be discussed further in Section 3.

Member States should support financial institutions, in particular commercial banks and national organisations promoting capital investments, to scale-up financing for energy efficiency. In particular, credit institutions play a fundamental role in increasing the volume of energy efficiency lending. Several commercial banks in Europe are offering green consumer credit and green mortgages and have strategies and targets to green selected lending portfolios. The retail banking system can also leverage on a well-developed and widespread organisational structure to provide advisory and auxiliary services to support the requirements and opportunities associated with green loans, based on direct and robust relationships with building owners and enterprises.

To this end, Member States and market participants are recommended to make appropriate use of the tools, standards and labels of the EU sustainable finance framework and Capital Markets Union (CMU), taking in particular into account the EU Taxonomy role to help mobilise private finance towards environmentally sustainable activities and opportunities, including towards high-end energy efficiency investments.

To support the uptake of energy efficiency measures, green consumer credits tend to have maturities that are longer than general purpose consumer credit, lower and/or fixed interest rates, and often no security requirements ([8]). Green consumer loans can be used to support energy efficiency measures by acquiring efficient energy equipment, technologies or appliances, as well as for targeted building renovation measures. Similarly, green mortgages encourage borrowers to improve the energy efficiency of their buildings and/or acquire energy efficient dwellings by offering more favourable terms than standard mortgages. Box 2 provides the example of the Romanian Green Homes and Green Mortgages Programme.

([8]) Security, or collateral, is an asset that is pledged by the borrower to the lender in the case that he or she defaults on the repayment. Loans that are secured are often provided at a cheaper rate than loans without security, but with higher risk to the borrower.

Box 2. Romania Green Homes and Green Mortgages Program

The Romania Green Homes and Green Mortgages Programme was established in 2012 with funding from the European Commission ([9]). It comprises two elements: (1) Green Homes Certification by the Romanian Green Building Council (RoGBC); and (2) Green Mortgages provided by commercial banks to buyers of homes certified by the RoGBC. All banks offering mortgages in Romania can participate if they agree to accept RoGBC's criteria and independent certification system for green homes and offer reduced interest rates on RoGBC certified homes. The mortgages provided include no public subsidy. Banks offer lower interest rates as the certified green homes have both a lower mortgage default risk and higher asset valuation. The National Bank of Romania also allows green homebuyers to count the estimated energy savings as an additional source of income in loan applications, enabling borrowers to access larger loans for energy efficient renovation or construction.

Article 30(3) further states that Member States shall ensure that energy efficiency lending products are offered widely and in a non-discriminatory manner by financial institutions and be visible and accessible to consumers ([10]). To implement this requirement, the following measures should be taken into consideration:

— To ensure a wide offer, it would be beneficial to support the development of a thriving national market for energy efficiency lending products and ensure that potential customers are able to access and choose between a significant and differentiated array of dedicated financial products.

— To ensure a non-discriminatory offer compared to other financial products, Member States should ensure that financial institutions' retail businesses make use of their available offer of dedicated energy efficiency lending products (mortgages and consumer credits). Potential clients should be made aware of the existence of energy efficiency lending products and these type of products – expectedly with more favourable conditions – should always be offered to customers whenever they better suit their needs.

Member States are therefore expected to ensure that energy efficiency lending products are offered widely and in a non-discriminatory manner, and are visible and accessible to consumers. They could do so by introducing an obligation in national legislation requiring financial institutions to clearly assess the interests of existing or prospective customers in improving the energy efficiency of their assets (e.g. residential and commercial properties; appliances and equipment), and, based on such interest, pro-actively make available energy efficient lending products that meet clients' needs. The offer of energy efficiency lending products should in any case comply with the Consumer Credit Directive ([11]) and the Mortgage Credit Directive ([12]), as well as with the 2020 European Banking Authority Guidelines on loan origination and monitoring for in scope financial institutions ([13]).

To ensure that a wide offer of energy efficiency lending products is available in their national context, Member States are required to adopt measures that promote the development of this market by deploying some of the policy measures and regulatory revisions described in Section 2.2.2.

In addition, Member States will need to monitor the national market, to ensure that consumers benefit from the deployment of energy efficiency lending products by assessing that these are designed to reduce the cost and risks associated with investing in energy efficiency measures and that lower default risk of energy efficiency investments is taken into account by credit institutions when supported by robust evidence. Moreover, energy efficiency lending products should also be made available to low incomes households, affected by energy poverty and/or living in social housing, putting in place the adequate risk mitigation instruments and in line with financial stability regulations ([14]).

([9]) European Commission, Directorate-General for Energy, 2022, Report on the evolution of financing practices for energy efficiency in buildings, SME's and in industry: final report, Publications Office of the European Union
([10]) The implementation of Article 30 EED recast obligations should not undermine EU financial stability.
([11]) Directive (EU) 2023/2225 of the European Parliament and of the Council of 18 October 2023 on credit agreements for consumers and repealing Directive 2008/48/EC.
([12]) Directive 2014/17/EU of the European Parliament and of the Council of 4 February 2014 on credit agreements for consumers relating to residential immovable property and amending Directives 2008/48/EC and 2013/36/EU and Regulation (EU) No 1093/2010
([13]) European Banking Authority EBA/GL/2020/06 29 May 2020.
([14]) Prêt Avance Renovation, a French government scheme, provides an example of a mortgage loan targeted towards low-income households wishing to finance energy efficiency renovation work in their home.

Reflecting the principle of non-discrimination, both the energy savings (future negative expenses) and the valorisation of the underlying asset (when impacting the financial circumstance of the potential borrower) should be considered as criteria for the financial institution to take into account when proposing an energy efficiency loan. In this context, energy savings that are expected to result from the energy efficiency investment should be considered as one of the different indicators in the assessment of the consumer's creditworthiness. In fact, when assessing the borrower's ability to meet obligations under the credit agreement, institutions and creditors are expected to take into account relevant factors that could influence the present and future repayment capacity of the borrower, such as energy (cost) savings or housing wealth, while avoiding undue hardship and over-indebtedness ([15]).

2.2.2. *Choice of policy measures to fulfil the requirement*

Member States can fulfil the requirement of ensuring the existence of a wide and non-discriminatory offer of energy efficiency lending products through, for example, the following measures:

— **Develop the necessary regulatory framework**: National legislation should oblige financial institutions to assess the interest of their existing and prospective clients in improving the energy efficiency of their assets and/or in acquiring energy efficient equipment and offer them a dedicated energy efficiency lending product that best meets their interests. In addition, Member States should require financial institutions to offer energy efficiency lending products that meet the needs of different types of clients and market segments (residential, commercial, industrial, public etc.) so that prospective clients have access to a wide variety of options in the market.

— **Adopt regulations that ensure non-discrimination of energy efficiency loans**: Regulations should prevent financial institutions from discriminating against their energy efficiency lending products in favour of other lending products in their portfolio to ensure consumers can choose the most suitable product for them, notwithstanding applicable rules on risk related consideration. This can happen for various reasons, including:

— The complexity/administrative burden of the product in relation to others that makes it more difficult to explain and implement. Financial institutions should provide training to their staff in the retail business so that they can better explain the marginal benefits of energy efficiency lending products to clients. Member States could deploy trainings and support programmes to increase energy financial literacy of citizens and businesses.

— Selection of the best product to recommend based only on the interest rate, without considering other factors. It is important that the interest rate of an energy efficiency financial product is not higher than a regular financial product in the same institution for a comparable type of investment.

— Remuneration policies that give an unjustified higher incentive for sale of a regular financial product than a competitive energy efficiency one.

These requirements are examples of the application of the energy efficiency first principle by financial institutions.

Member States have various policy options to ensure that energy efficiency lending products are not discriminated against compared to other type of products by ensuring visibility and accessibility to consumers:

— **Carry out publicity campaigns**: Publicity campaigns can increase awareness of energy efficiency lending products and available public support schemes.

— **Ensure financial products available are designed to minimise costs and risk of the borrower**: Affordability can be improved through pre-financing of the work, longer loan maturities that consider the lifetime of the installations, monthly payments that are less than or equal to the forecast energy savings, and built-in measurement and verification of achieved energy savings. In order to minimise risks and costs for the **borrowers, as well as risks for financial institutions, the designing of such products could be accompanied by support from public de-risking facilities.**

([15]) As detailed in the 2020 European Banking Authority Guidelines on loan origination and monitoring, European Banking Authority EBA/GL/2020/06 29 May 2020

— **Provide regulatory and financial incentives to financial institutions, for instance via technical assistance to support the development of new energy efficiency lending products and their uptake, ensure that their staff in retails business is appropriately trained to explain the marginal benefits of energy efficiency lending products to clients, including ex-post measurement, verification and compliance of energy efficiency projects.**

— **Include specific provisions to address low-income households: Low-income households may not be able to afford loan payments at market rates, so further financial support should be provided, such as guarantees or subsidised public loans. These can be combined with other funding streams and technical assistance. They can also be part of the social security benefits or can be an alternative or complementary way of providing social energy tariffs in Member States where these are applied.**

— **Develop dedicate support schemes to promote energy efficiency lending products for the young and the ageing population**: Support should be made available to all owners or renters, regardless of age and repayment perspectives. Specific guarantees should be provided to allow youth and ageing population to access energy efficiency lending products.

In addition, Member States can fulfil the requirement of further promoting energy efficiency lending products and their national market, through the following support measures:

— **Establish facilities for public green loans or strengthen existing ones:** Public green loans are offered or indirectly sponsored by public institutions to households, businesses, and tenants, to cover the up-front cost of energy efficiency measures. Public loans are usually ‘soft loans’ in that they have favourable interest rates or pay-back periods compared to commercial loans. Public green loans can be provided by a national energy efficiency fund (see Section 3) and/or other public bodies.

— **Unlock private sector financing for energy efficiency improvements:** Member States can actively support private financial institutions to extend suitable lending products, e.g. through de-risking tools like loan guarantees (Section 2.5), project development support and awareness / information campaigns.

To verify the good functioning of the green loan market, Member States would find it beneficial to perform regular market assessments to verify if the above identified measures are implemented and evaluate the level of compliance of their financial market with the EED recast requirement to ensure a wide a non-discriminatory offer of energy efficiency financial products in the national context. Member States should perform ex-post policy evaluation on their existing policy and financing measures supporting the uptake of energy efficiency lending products. Based on the results of these assessments, Member States should further develop strategies, together with their national regulatory authorities, to improve compliance.

2.3. Facilitating on-bill and on-tax financing schemes

Table 2-3.

Article 30, paragraph 3 – second sentence

#	Paragraph from Article 30
3-second sentence	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.

2.3.1. *Scope and objectives of the requirement*

On-bill and on-tax financing differ from other energy efficiency lending schemes in that they use alternative repayment channels, i.e., energy bills, taxes and other charges related to the property. This can reduce transaction costs and offer convenient, familiar and trustworthy repayment options for end-users.

On-bill and on-tax financing are forms of home-based financing, meaning that they establish mechanisms to transfer debt repayment obligations from the former owner(s) to the subsequent owner(s) by tying debt to the property itself. Mechanisms can also be introduced to allow tenants to participate in loan repayments through an additional charge on the tax or energy bill of the dwelling, partially or totally compensated by the effect of a reduced energy consumption. While on-bill and on-tax financing schemes have similar benefits, their structures differ, as do the measures needed to facilitate their implementation.

On-bill financing is a method of financing energy efficiency renovations in buildings that uses the utility bill as the repayment vehicle. An advantage of on-bill financing schemes is that they can take advantage of utilities' existing payment systems to reduce transaction costs. These schemes leverage the utility's knowledge of their clients' energy consumption patterns and bill repayment history to identify effective energy efficiency measures while reducing a potential driver of loan default risk. Given the lower transaction costs and reduced risks, on-bill financing schemes can offer attractive terms such as low interest rates and long maturities and be broadly accessible, provided robust risk analysis and mitigation measures are put in place.

The structures of on-bill financing schemes vary significantly. In some schemes, financing for energy efficiency renovations is provided directly by the energy utility; in others, it is provided by a private third party, with the utility acting as a repayment intermediary. Where relevant, namely when on-bill financing schemes are implemented as a credit agreement and not as a service, on-bill financing schemes must comply with the Consumer Credit Directive and energy consumer protection legislation. In these cases, energy savings that are expected to result from the energy efficiency investment could be considered in the assessment of the consumer's creditworthiness, whenever it is possible to ascertain with sufficient evidence that the consumer credit will bring future incomes to the consumer. According to recently adopted rules on credit agreements for consumers, the consumer creditworthiness assessment, i.e. the assessment of the ability to repay a credit sustainably, should be based on information on the financial and economic circumstances of the consumer ([16]), such as evidence of income or other sources of repayment, including expected energy savings. Box 3 provides the example of on-bill financing scheme implemented via the Latvian Sunshine programme.

Box 3. Latvian Sunshine programme and Latvian Building Energy Efficiency Fund
The Sunshine programme was initiated as a Horizon 2020 project to support the deep refurbishment of Latvia's relatively inefficient building stock ([17]). Each project is delivered by an ESCO, ([18]) which implements large renovations of multi-family residential buildings, such as retrofits to the building envelope, insulation of heat distribution pipes, installation of control systems, etc. The projects hinge on an Energy Performance Contract, in which the ESCO guarantees that renovations will achieve a specified level of energy savings. The projects are financed up to 40 % with funds from the European Regional Development Fund and the remaining part is obtained through on-bill financing. End users continue to pay the same monthly bill as prior to the renovation. The bill is paid to the House Management Company, which uses the savings from the energy efficiency renovations to pay the ESCO. These on-bill financing arrangements are agreed for the first 20 years. As the renovations have an average operating life of 30 years, the end users will benefit from future energy savings. Dwellings in renovated buildings tend to see an immediate increase in value by 20 %-30 %.

On-tax financing schemes provide households or companies with a debt to cover the cost of residential or commercial building renovations, the purchase of energy efficient appliances or equipment, or other energy processes improvement, and use specific taxes and/or other charges related to the property as the repayment vehicle. If the building is rented, depending on the scheme, it may be the tenant who repays the loan through taxes and/or other charges, while also benefiting from the energy savings. As a form of home-based financing, on-tax financing schemes include mechanisms to

([16]) As established by Directive (EU) 2023/2225 of the European Parliament and of the Council of 18 October 2023 on credit agreements for consumers and repealing Directive 2008/48/EC.

([17]) RenOnBill, 2020, Overview of On-Bill Building Energy Renovation Schemes. This project received funding from the European Union's Horizon 2020 research and innovation programme.

([18]) ESCOs provide capital and technical support to households and firms to implement energy saving measures and, in return, assume a portion of the earnings from future energy savings.

enable the debt to be passed on by the previous property owner(s) to the next one(s), without necessarily having to liquidate it: if the building is sold, the 'loan' can be repaid, or taken on by the new owner(s), if they agree. The fact that on-tax financing establishes straightforward debt transfer mechanisms helps to overcome the disincentive for property owners to invest in energy efficiency measures with a long payback period if they think they will only own the property for a shorter period.

On-tax financing originated in the United States as Property Assessed Clean Energy (PACE), in which repayments are made through an addition to the property tax paid by the building owner. PACE loans are secured by a property tax lien, ([19]) so the repayment obligation is transferred with the property ownership. On-tax finance can be provided either by public sources such as municipal governments or by private funds. If privately financed, the role of the public sector is to act as a repayment intermediary by integrating loan payments into tax collection, and in case a credit agreement is directly established between the customer and a third party, these should comply with the Consumer Credit Directive ([20]) and Mortgage Credit Directive ([21]). The public sector may also participate in debt collection, or even act as mediator in case of non-performing loans, for example by implementing complementary risk coverage tools, hence reducing the risk to investors. Given the reduced risk to lenders because of public sector participation in the financing scheme, loans provided through on-tax financing schemes can often be provided with attractive terms such as lower interest rates, lower upfront cash payments and longer maturities.

2.3.2. *Choice of policy measures to fulfil the requirement*

To comply with EED recast requirements regarding the facilitation of on-bill and on-tax financing schemes, Member States could consider passing law or regulation to remove regulatory barriers and to enable the development of such schemes in the national context, as well as policy measures and supportive framework to maximise the uptake of on-bill and on-tax financing schemes where relevant to achieve the 2030 energy efficiency targets.

With regards to on-bill financing, the steps that Member States will have to take to fulfil the requirement will depend on their respective national circumstances. The following measures may be needed to support their implementation:

— **Establish utility's rights to provide financing for energy efficiency**: For utility-financed schemes, Member States may need to modify creditors laws to confirm that utilities have the legal right to provide credit for renovations. Additional reforms may be required to the maximum duration and size of utility-provided loans.

— **Ensure consumer protection**: Members States should require providers of on-bill financing to make borrowers aware of risks and benefits that the scheme entails by dedicated campaign and mandatory information requirements. Where such financing schemes are implemented as credit agreements, they must comply with the Consumer Credit **and Mortgage Credit Directives.**

— **Coordinate implementation by entrusted public authorities: On-bill financing requires cooperation across a wide range of stakeholders including energy utilities, financial institutions, energy renovation market players, and energy regulators, as well as homeowners and tenants. Governments may need to play a coordinating role by entrusting entities to study and plan the role-out of on-bill financing in cooperation with the relevant stakeholders.**

— **Provide de-risking: Member States may need to provide financial backing to pilot schemes (e.g., via loan guarantees), if they are perceived as risky by private lenders.**

— **Ensure sufficient cashflow to achieve scale: Once the scheme is established, Member States may need to ensure that the implementing entity (e.g., the utility or ESCO) has sufficient cash flow to scale up. For example, a national energy efficiency fund could purchase the receivables of the on-bill financing scheme.**

([19]) A lien is a form of security interest granted over an item or property to secure the payment of a debt.
([20]) Directive (EU) 2023/2225 of the European Parliament and of the Council of 18 October 2023 on credit agreements for consumers and repealing Directive 2008/48/EC.
([21]) Directive 2014/17/EU of the European Parliament and of the Council of 4 February 2014 on credit agreements for consumers relating to residential immovable property and amending Directives 2008/48/EC and 2013/36/EU and Regulation (EU) No 1093/2010

— **Clarify process and legal structure for on-bill finance in multi-family buildings**: On-bill financing schemes are often an attractive option for renovating multi-family buildings, however fragmentation in the decision-making process can often hinder efforts to reach consensus. Member States may need to reform horizontal property laws that govern decisions on renovations through on-bill financing in multi-family buildings and establish how liability is distributed among co-owners, for instance in case of rebound effects or increase in behavioural energy consumptions.

— **Enable transferable debts**: Further reforms may be required to ensure that on-bill financing schemes allow the costs of renovations to be shared between building owners and tenants and to allow for debts to be legally transferred in the case of changes in owner, tenant or energy provider.

Member States will need to implement a variety of measures to fulfil the requirement to facilitate implementation and create a national conducive regulatory and legal framework for on-tax financing. As with on-bill financing, the specific reforms will depend on national circumstances, but in general this will entail a combination of the following steps:

— **Reform regulations and systems around property taxes and liens to enable on-tax financing schemes**: Member States may need to reform property-related tax laws and systems to allow additional payments for energy efficiency renovations. Reforms may be required to laws surrounding property liens and the seniority of property taxes relative to mortgages.

— **Ensure effective enforcement procedures**: Member States may need to establish or strengthen enforcement procedures in the case of tax arrears. A public agency may also need to be established or mandated to intervene in the debt collection process in case of **non-performing loans.**

— **Facilitate the establishment of one-stop-shops: On-tax financing schemes may be more effective when delivered through one-stop shops that offer a package of services for energy efficiency renovations, including on-tax financing. One-stop-shops can also support vulnerable tenants to engage property owners to renovate.** ([22])

— **Increase consumer awareness, training and consumer protection**: Member States may also need to increase consumer awareness and financial literacy, in particular to focus on consumers around core competencies of energy financial literacy and the advantages and availability of on-tax financing schemes as well as the risks that they entail ([23]). Financing schemes implemented as credit agreements must comply with the Consumer Credit Directive and Mortgage Credit Directive and relevant consumer protection rules.

2.4. Ensuring financial institutions are aware of opportunities to participate in financing of energy efficiency improvements

Table 2-4.

Article 30, paragraph 3 – third sentence

#	Paragraph from Article 30
3-third sentence	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.

2.4.1. *Scope and objectives of the requirement*

The objective is for financial institutions to benefit from information flows on investment opportunities, energy efficiency technologies, and best practices in structuring finance around expected energy savings.

([22]) Bertoldi, P., Boza-Kiss, B., Della Valle, N. and Economidou, M., 2021, The role of one-stop shops in energy renovation - a comparative analysis of OSSs cases in Europe, Energy and Buildings, ISSN 0378-7788, 250, p. 111273, JRC124675

([23]) Della Valle, N. and Bertoldi, P., 2021, Mobilizing citizens to invest in energy efficiency, EUR 30675 EN, Publications Office of the European Union, Luxembourg, ISBN 978-92-76-36152-7, doi:10.2760/137315, JRC124667

Government-supported networks of public authorities, financial institutions and sustainable energy industry can disseminate information on financial instruments that have been successfully used to support energy efficiency investments, and that can be instrumental in developing new and adequate financing schemes and instruments in EU Member States. The Energy Efficiency Financial Institutions Group (EEFIG) and the associated Sustainable Energy Investment (SEI) Forums and follow-up national roundtables, do this in the EU and allow national stakeholders and experts to engage and work together on the implementation of EU policies for energy efficiency.

Central databases can also be instrumental in providing essential information to financial institutions for energy efficiency financing. The EEFIG's De-risking Energy Efficiency Platform (DEEP)allows financial institutions to transparently benchmark for energy efficiency investment performance; and Odysee-Mure, which monitors energy consumption and efficiency trends and evaluates energy efficiency policy measures.

PPPs offer the potential to mobilise private financing and leverage the expertise of private companies. PPPs can be loosely defined as a collaboration between a public authority and private company to deliver a public service or objective. One example, the Solas Sustainable Energy Fund, is a public-private fund backed by the European Investment Bank (EIB) and MEAG (the asset manager of Munich Re and ERGO) that provides debt financing for ESCOs that implement energy efficiency and behind-the-meter renewable energy projects ([24]).

Aggregation and securitisation of energy efficiency projects, for example in the form of green bonds, can also help raise awareness of financial institutions on the opportunities of financing energy efficiency improvements, including those implemented via PPPs. Bundling projects for portfolio financing via PPPs can present financial institutions with larger scale investment opportunities that have harmonised and familiar formal requirements for reporting, market labelling, etc. Issuances of securities on secondary markets can provide financial institutions with greater liquidity and help raise awareness of the investment opportunities. In this regard, the European Green Bond Standards provide a common framework for issuing green bonds for green securitisation.

2.4.2. *Choice of policy measures to fulfil the requirement*

Member States can employ various measures to fulfil this requirement:

— **Promote learning across financial institutions**: The close coordination and available overviews of existing energy efficiency financial support mechanisms in the EU represents a clear opportunity to encourage the replication of successful schemes and the rolling out of new financing initiatives in new sectors and geographies. Building on the SEI Forum and national roundtables, Member States could establish permanent networks for information sharing across public authorities, financial institutions and sustainable energy industry.

— **Establish information portals:** Member States could also support learning across financial institutions by establishing centralised information portals and making **reporting to central databases like DEEP mandatory for publicly funded projects.**

— **Create standardised processes to aggregate small-scale energy efficiency investments: To raise awareness of opportunities to invest in small-scale energy efficiency projects, Member States can work with the private sector to standardise investment assessment processes, contract terms and investment structures to support better aggregation of projects.**

— **Support aggregation and issuances of green bonds: Member States can also support the bundling and standardisation of energy efficiency projects to foster the issuances of green loans, green bonds or green securitisations, by providing for instance technical support and public guarantees to reduce or share risks for the project and/or borrower. In this regards, national governments can adopt the voluntary EU Green Bond Standard ([25]), which provide a common framework to standardise and regulate their green bond issuances, while demonstrating that funding legitimate energy efficiency projects and ensuring investors reduced risks of greenwashing.**

([24]) European Investment Bank, 2018, Solas Sustainable Energy Fund.
([25]) European Commission, 2020, European Green Bond Standard.

— **Implement transparent planning and procurement for PPPs: To raise awareness of financial institutions about opportunities to participate in PPPs, Member States can make plans for energy efficiency PPPs publicly available, procure projects via open tenders on public platforms, and ensure that public contracts for PPPs are bankable.**

— **Encourage financial institutions to proactively finance energy efficiency projects: Member States** could launch campaigns to encourage financial institutions to actively finance energy efficiency projects and sign Memorandums of Understanding with banking federations to establish industry wide objectives and targets.

2.5. Establishing loan guarantee facilities for energy efficiency

Table 2-5.

Article 30, paragraph 3 – fourth sentence

#	Paragraph from Article 30
3-fourth sentence	Member States shall encourage the setting up of loan guarantee facilities for energy efficiency investment.

2.5.1. *Scope and objectives of the requirement*

Financial institutions can be hesitant to offer financing for deployment of energy efficiency measures for a variety of reasons. Energy efficiency technologies may be unfamiliar to the financial institution, and hence perceived as higher risk. Small and micro enterprises and low-income homeowners may also be perceived as risky, and financial institutions may therefore be reluctant to extend loans to them at affordable rate and/or without security demands. Lastly, financial institutions may perceive higher risks associated with longer maturity products required for some energy efficiency measures.

Loan guarantees are commitments to pay out a certain sum of money to the lender in case of an unfavourable event (e.g., payment default). The objective of loan guarantees is to encourage financial institutions to extend loans for energy efficiency measures with appropriate terms. Loan guarantees can be structured to address different types of risks, including contractual risks, payment risks, performance risks and regulatory risks around tariff adjustments, changes in public support schemes, etc. Partial credit guarantees are promises to pay principal and/or interest up to a pre-determined amount. Partial credit guarantees can be provided on a first loss basis, in which the provider indemnifies lenders for a given amount or percentage of any losses; or on a *pari-passu* basis, in which the guarantee provider will be considered on an equal footing with other creditors. Payment guarantees are promises to cover pre-determined payment obligations in project contracts (such as, on-bill financing payments). Policy-based guarantees cover lenders against the risk of default by sovereign borrowers, such as municipal governments or state-owned utilities. Tenor extensions encourage financial institutions to extend finance with longer tenors through guarantees targeted to the back end of loans.

The guarantee reduces the risk-profile of the project and/or the borrower, allowing them to attract private loans with more favourable terms (e.g., higher values, lower interest rates, longer maturities, no security demands, etc.). By giving banks and investors the confidence to engage in energy efficiency projects, loan guarantees can help project developers secure financing of sufficient amount and tenor. Bulgaria's Energy Efficiency and Renewable Sources Fund provides an example (see Box 4).

Box 4. Bulgaria's Energy Efficiency and Renewable Sources Fund
The Energy Efficiency and Renewable Sources Fund (EERSF) was established in 2004 to promote the energy efficiency market in Bulgaria. EERSF manages financial resources received by Bulgaria from the Global Environment Facility through the International Bank for Reconstruction and Development and from other donors. It is structured as a self-sustaining commercial entity, and works as a revolving fund, reinvesting proceeds from loans and guarantees in new projects. EERSF offers both low-interest loans and loan guarantees to Bulgarian companies, municipalities and private individuals for energy efficiency projects. The loan guarantee facility provides both partial credit guarantees for individual projects, and portfolio guarantees for ESCOs and residential portfolios.

2.5.2. *Choice of policy measures to fulfil the requirement*

Member States have different policy options to fulfil the requirement to establish loan guarantee facilities to encourage loans for energy efficiency investment:

— **Establish loan guarantee facilities in existing or new institutions**: Loan guarantees for energy efficiency could be established within existing public financing institutions, such as public banks or existing national funds. Alternatively, loan guarantees could be a product offered by a new national energy efficiency fund (see Section 3). The institution will need to be sufficiently capitalised depending on the volume of investments in energy efficiency it aims to trigger.

— **Utilise the Member State compartment of the InvestEU programme:** In establishing the loan guarantee facilities, Member States have the option to voluntarily contribute to the InvestEU Fund and set up a 'Member State compartment'. The Member State contribution will serve as an EU guarantee that will back loans, guarantees or equity investments that align with national priorities for energy efficiency. The EU budget guarantees provided by the InvestEU Fund will benefit from the EU's high credit rating, which could leverage significant investments and be channelled **via existing and known lending products implemented across the EU.**

— **Utilise the EU shared management financial instruments under Cohesion policy framework 2021-2027: In establishing the loan guarantee facilities, Member States have the option to make use of the EU shared management financial instruments (in the form of loans, guarantees or equity) under Cohesion policy framework 2021-2027 for energy efficiency. This option would allow Member States to benefit from the legal possibilities to combine financial instruments and grant support under Cohesion policy framework 2021-2027, and therefore to effectively increase scale and leverage of energy efficiency investments.**

— **Utilise efficiently the available shared management funds to set up a scheme combining grants and financial instruments. In the MFF 2021-2027 programming period, guarantee financial instruments and grants may be combined when they are both co-funded from EU shared management funds, such as the European Regional Development Fund.** [26] **The combination of loan guarantees and grants can be effective in incentivising investment in new or riskier markets or business models.**

— **Define the scope of loan guarantees: Guarantees can offer credit enhancement for individual projects, such as refurbishment of district heating systems or renovation of multi-apartment buildings. Alternatively, guarantees can be offered on the loans for portfolios of projects, ESCOs, on-bill financing schemes or dedicated state-backed lending product for the renovation of worst performing buildings.**

— **Determine the type of loan guarantee products to be offered:** The type(s) of loan guarantees provided should be determined by the type of energy efficiency investments that the Member States aim to support, in line with its strategy to deliver on its 2030 energy efficiency targets and its updated National Energy and Climate Plans, and the specific risks faced by the type of energy efficiency investments.

The provision of loan guarantees can be instrumental in achieving other requirements set out in Article 30, including the development and provision of energy efficiency lending products, such as green consumer credits and mortgages and on-bill financing schemes.

2.6. Local expertise, technical assistance and financial support for refurbishment of individual and district heating and cooling

Table 2-6.

Article 30, paragraphs 4 and 5

#	Paragraph from Article 30
4	Without prejudice to Articles 107 and 108 TFEU, Member States shall promote the establishment of financial support schemes to increase the uptake of energy efficiency improvement measures for the substantial refurbishment of individual and district heating and cooling systems.

(26) European Investment Bank, 2021, Factsheet: Combination of financial instruments and grants under shared management funds in the 2021-2027 programming period.

5	Member States shall promote the establishment of local expertise and technical assistance, where appropriate through existing networks and facilities, to advise on best practices with regard to achieving the decarbonisation of local district heating and cooling, such as access to dedicated financial support.

2.6.1. *Scope and objectives of the requirement*

As per Article 30(4) and (5), Member States are required to promote the establishment of financial support schemes for refurbishing individual and district heating and cooling systems ([27]). Article 26 EED recast establishes the criteria for district heating and cooling system to qualify as efficient, and the timing of when these criteria will become more stringent up to 2050.

District heating and cooling systems are frequently financed, built and operated through PPPs. Governments can establish financing facilities that directly provide loans or grants for renewable district heating and cooling systems. Governments can also help unlock private financing for district heating and cooling systems through risk sharing facilities and strong oversight to overcome coordination challenges and establish bankable projects. Member States are also required to promote the establishment of local expertise and technical assistance, where appropriate, for achieving the decarbonisation of district heating and cooling. Measures to unlock finance are often planned separately from measures to address regulatory and technical challenges to energy efficiency refurbishments. However, the absence of finance for refurbishment of individual and district heating and cooling is often due to deficiencies in the enabling environment, rather than a lack of capital. Beyond regulatory barriers, renovation projects and programmes can face human resource constraints, including a lack of local expertise in energy audits and energy efficient technologies; feasibility studies; project planning and management; legal, financial and transactional issues; etc.

Public technical assistance can be critical to driving demand for energy efficiency, developing a pipeline of bankable projects and building a basis of local expertise for refurbishment of individual and district heating and cooling systems. Various EU facilities, including the European Local ENergy Assistance (ELENA) programme, the European City Facility and the Horizon 2020 Project Development Assistance have been instrumental in mobilising energy efficiency investments in public infrastructures and public and private buildings. In alignment with paragraph 2 of Article 30, Member States should work with the Commission to replicate these project development assistance models at the national, regional and local levels. One-stop-shops have also been effective options for deploying financing alongside technical assistance, to comprehensively address the barriers to energy efficiency upgrades, including for district heating and cooling systems.

2.6.2. *Choice of policy measures to fulfil the requirement*

Member States may opt to fulfil the requirements of establishing financial support schemes, local expertise and technical assistance for refurbishment of individual and district heating and cooling systems through a number of measures:

— **Launch dedicated financing schemes or strengthen existing ones**: Governments can establish, within existing funds and programmes, financing facilities that directly provide loans or grants for green district heating and cooling systems. As discussed in Section 2.5, loan guarantee facilities can also be used to unlock private finance. Financing schemes could be targeted at system operators and/or ESCOs that implement energy efficiency measures.

— **Provide technical assistance and project development assistance facilities**: These facilities can help build a pipeline of bankable projects and the local expertise required for refurbishment programmes for individual and district heating and cooling systems. Member States should work with the Commission to establish project development **assistance facilities at the national, regional and local levels.**

([27]) Article 30 states that this requirement does not prejudice Articles 107 and 108 of the Treaty on the Functioning of the European Union (TFEU) on State Aid. Section 4.10 on aid for district heating and cooling 2022 Guidelines on State Aid for Environmental Protection and Energy (CEEAG) specify the applicable State aid rules for public financial support to modernisation of district heating and cooling systems.

— **Establish one-stop-shops for the refurbishment of heating and cooling systems: One-st**op shops can be established within public agencies, utilities, retail banks, consumer organisations etc. to provide technical assistance alongside financing and to build a local skills basis for refurbishing individual and district heating and cooling systems.

3. NATIONAL ENERGY EFFICIENCY FUNDS

Table 3-1.

Article 30, paragraphs 11, 12, 13, 14, 15

#	Paragraph from Article 30
11	Member States may set up a national energy efficiency fund. The purpose of this fund shall be to implement energy efficiency measures to support Member States in meeting their national energy efficiency contributions and their indicative trajectories referred to in Article 4(2). The national energy efficiency fund may be established as a dedicated fund within an already existing national facility promoting capital investments. The national energy efficiency fund may be financed with revenues from the allowance auctions pursuant to the EU ETS on buildings and transport sectors.
12	Where Member States set up national energy efficiency funds, as referred to in paragraph 11 of this Article, they shall establish financing instruments, including public guarantees, to increase the uptake of private investments in energy efficiency and of the energy efficiency lending products and innovative schemes referred to in paragraph 3 of this Article. Pursuant to Article 8(3) and Article 24, the national energy efficiency fund shall support the implementation of measures as a priority among people affected by energy poverty, vulnerable customers, people in low-income households and, where applicable, people living in social housing. That support shall include financing for energy efficiency measures for SMEs in order to leverage and trigger private financing for SMEs.
13	Member States may allow public bodies to fulfil the obligations set out in Article 6(1) by means of annual contributions to the national energy efficiency fund equivalent to the amount of the investments required to achieve those obligations.
14	Member States may provide that obligated parties can fulfil their obligations set out in Article 8(1) and (4) by contributing every year to the national energy efficiency fund an amount equal to the investments required to achieve those obligations.
15	Member States may use their revenues from annual emission allocations under Decision No 406/2009/EC for the development of innovative financing for energy efficiency improvements.

3.1. Scope and objectives

As per Article 30 (11), Member States may set up a National Energy Efficiency Fund to support the implementation of energy efficiency measures and to deliver on their national contribution to the 2030 EU energy efficiency targets. Alternatively, Member States may opt to align existing national energy efficiency funds to the revised provisions of Article 30. Compared to the requirements in the Energy Efficiency Directive 2012 (as amended in 2018), the EED recast specifies that the National Energy Efficiency Fund should support Article 8(3) on implementing energy efficiency obligation schemes and Article 24 on empowering and protecting vulnerable customers and alleviate energy poverty. In addition, National energy efficiency funds should prioritise support for vulnerable customers, people affected by energy poverty and people living in social housing, and extend financing for energy efficiency measures in SMEs. Where applicable, public financial support from National energy efficiency funds should be designed in line with the rules on State aid for improving energy efficiency ([28]).

3.2. **Choice of policy measures**

Member States have various options in the establishment or realignment of National Energy Efficiency Funds:

— **Establish the institutional governance arrangements:** National Energy Efficiency Funds may be established as a dedicated fund within an already existing national facility promoting capital investments. The governance arrangements should set out that the purpose of the fund is to implement energy efficiency measures in support of national energy efficiency objectives and establish lines of accountability.

— **Determine how the fund will be capitalised:** A national energy efficiency fund may be capitalised through the public budget, EU financing programmes or through revenues generated from the auctions of emission allowances under the EU Emission Trading System. In particular, when establishing and determining the capitalisation of national energy efficiency funds, EU Member States should consider complementarities and synergies with existing budgetary resources available to support energy efficiency under the 2021-2027 Cohesion Policy programmes (ERDF and CF). Section 3.3 3.3details how national energy efficiency funds may be capitalised through contributions from parties in lieu of their obligations under Articles 6(1) and 8(1) and (**4) EED recast. Revolving funds may also generate revenue through their investments and ensure perpetuity.**

— **Define the fund's objectives, performance metrics and reporting requirements: Governments should establish objectives and performance metrics around total energy savings, the types of projects and technologies supported, and the amount of private finance leveraged. Objectives and performance metrics should also be included on support for SMEs, vulnerable customers, people affected by energy poverty and, where applicable, people living in social housing. Transparent systems of reporting should be established to enable ongoing monitoring and evaluation of the fund's performance against these objectives.**

— **Specify the financing instruments that the fund may deploy:** A national energy efficiency fund can deploy several of the financing instruments discussed earlier, including public loans, on-tax financing schemes and loan guarantees for private green consumer credits, green mortgages, on-bill financing schemes and green bonds.

3.3. **Fulfilling obligations set out in other articles through contributions to National Energy Efficiency Funds**

The following EED recast articles detail options for Member States to fulfil obligations through contributions to the National Energy Efficiency Fund:

— Article 4(2) requires each Member States to set an indicative national energy efficiency contribution that will collectively meet the Union's target of reducing energy consumption by at least 11.7 % in 2030 compared to the reference scenario. Article 4(6) states that when Member States make insufficient progress towards meeting their contributions, they must ensure that additional measures are implemented within one year. One potential measure is a voluntary contribution to the National Energy Efficiency Fund or another financing instrument dedicated to energy efficiency.

([28]) As regard aid for energy efficiency investments, the relevant State aid provisions are articles 38, 38a (aid to building owners and tenants), 38b (aid to ESCOs), and 39 (aid granted via financial intermediaries) of the General Block Exemption Regulation on State Aid (GBER) and Section 4.1 (Aid for the reduction and removal of greenhouse gas emissions including through support for renewable energy and energy efficiency), 4.2 (Aid for the improvement of the energy and environmental performance of buildings) and 4.10 (Aid to district heating and cooling) of the Guidelines on State Aid for climate, environmental protection and energy (CEEAG).

— Article 6(1) requires Member States to ensure that 3 % of the total floor area of heated and/or cooled buildings owned by public bodies is renovated each year to be transformed into at least nearly zero-energy buildings or zero-emissions buildings [29]. In this regard, Article 30(13) establish that Member States may allow public bodies to fulfil the obligations set out in Article 6(1) by means of annual contributions to the National Energy Efficiency Fund equivalent to the amount of the investments required to achieve those obligations.

— Article 8(1) requires Member States to achieve cumulative end-use savings at least equivalent to 1.3 % of annual final energy consumption for the period 2024-2025, 1.5 % of annual final energy consumption for the period 2026-2027, and 1.9 % of annual final energy consumption for the period 2028-2030. Article 8(4) requires Member States to provide in their national energy and climate progress reports information about the indicators applied to calculate the energy savings with respect to Article 8(1). In this regard, Article 30(14) establishes that Member States may provide that obligated parties can fulfil their obligations set out in Article 8(1) and (4) by contributing every year annually to the National Energy Efficiency Fund an amount equal to the investments required to achieve those obligations. For this purpose, and as per Article 8(2), Member States shall ensure that energy savings resulting from the measures financed by the National Energy Efficiency Fund to fulfil Article 8(1) obligations are calculated in accordance with Annex V of the EED.

— Article 9(1) allows Member States to fulfil their obligations under Article 8(1) by way of an energy efficiency obligation scheme (EEOS). In this case, Member States may decide that obligated parties under an EEOS fulfil their obligations, in whole or in part, through a contribution to the National Energy Efficiency Fund.

If Member States do not fulfil their obligations in a specific year, they have the option to make an annual contribution to the National Energy Efficiency Fund. Member States that choose this option will still need to meet the obligations set out in Articles 4(2), 6(1) and 8(1) and (4) at a later stage. The purpose is to allow Member States to compensate – via a temporary measure in the form of a financial contribution to the National Energy Efficiency Fund – the gap in their annual national obligations, while ensuring achievement of their national contribution to the 2030 energy efficiency targets and that the existing gap on Article 8 and Article 6 obligations is addressed in the subsequent years with the funding reserved for that purpose in the National Energy Efficiency Fund. .

In all cases, the annual financial contributions must be equal to the investment required to achieve the respective obligations and reach the indicative trajectory. If they choose one of these options, Member States shall determine the type of energy efficiency measures to be financed by the National Energy Efficiency Fund to fulfil obligations set out in Article 4(6), Article 6(1), Article 8(1) and (4), and 9(1) and calculate the amount of energy savings they will generate. To calculate the energy savings, Member States shall make use of the common methods and principles detailed in Annex V of the EED.

Member States shall then calculate the investment cost of achieving their obligation to determine the size of the required contribution to the National Energy Efficiency Fund. The data used to make these calculations should be associated with the historical performance of the National Energy Efficiency Fund (where one is already in place), or with financial instruments designed to support public building renovation or other public energy efficiency schemes. As part of the notification of methodology under Annex V, when making use of an option detailed in Article 30(14) and Article 4(6), Member States shall describe the approach used to estimate the investment costs, including the methodology and data. The calculation should be subject to an ex-ante and ex-post independent assessment. The Commission will monitor the methods employed through regular interaction with Member States.

[29] In accordance with Article 9 of Directive 2010/31/EU on energy performance of buildings.

4. REPORTING REQUIREMENTS

Table 4-1.

Article 30, paragraphs 17 and 18

#	Paragraph from Article 30
17	Member States shall report to the Commission by 15 March 2025 and every two years thereafter, as part of their integrated national energy and climate progress reports in accordance with Articles 17 and 21 of Regulation (EU) 2018/1999 [30] the following data: (a) the volume of public investments on energy efficiency and the average leverage factor achieved by public funding supporting energy efficiency measures; (b) the volume of energy efficiency lending products, distinguishing between different products; (c) where relevant, national financing programmes put in place to increase uptake of energy efficiency and best practices, and innovative financing schemes for energy efficiency. To facilitate the preparation of the report referred to in the first subparagraph of this paragraph, the Commission shall integrate the requirements set out in that subparagraph in the common template laid down in the implementing acts adopted pursuant to Article 17(4) of Regulation (EU) 2018/1999.
18	For the purpose of fulfilling the obligation referred to in paragraph 17, point (b), and without prejudice to additional national measures, Member States shall take into consideration the existing disclosure obligations for financial institutions, including: (a) the disclosure rules for credit institutions under Commission Delegated Regulation (EU) 2021/2178 [31]; (b) the ESG risks disclosure requirements for credit institutions in accordance with Article 449a of Regulation (EU) No 575/2013 of the European Parliament and of the Council [32]. To facilitate the collection and aggregation of data on volume of energy efficiency lending product for the purpose of fulfilling the obligation referred to in paragraph 17, point (b), the Commission shall by 15 March 2024 provide guidance to Member States on the arrangements for accessing, collecting and aggregating data on the volume of energy efficiency lending products at national level.

4.1. Scope and objectives

Article 30(17) requires Member States to report on progress against the implementation of Article 30 every two years as part of the integrated National Energy and Climate Progress Reports (NECPR). In particular, Member States are required to report data on volume of public investments on energy efficiency, average leverage factor and market-volume regarding energy efficiency lending products.

(30) Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council.

(31) Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation (OJ L 443, 10.12.2021, p. 9).

(32) Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and amending Regulation (EU) No 648/2012 (OJ L 176, 27.6.2013, p. 1).

Member States are already required to report in their NECPRs on policies and measures that support the delivery of objectives, targets and contributions set out in the NECPs. This reporting obligation encompasses national financing programmes put in place to increase uptake of energy efficiency and best practices, and innovative financing schemes for energy efficiency. Member States will utilise this system to report all relevant information to fulfil the reporting obligation under Article 30 EED recast. These will include measures that provide public funding for energy efficiency objectives. Policy and measures that aim to promote private financing for energy efficiency should also be reported, for example, through technical assistance, project development assistance or measures to enable privately-funded innovative financing schemes (e.g. on-bill financing).

To report on the aggregated volume of public investments and average leverage factors, Member States should make use of, and aggregate, the information already required in the existing NECPRs to measure the volume of public investments and the average leverage factor achieved by public funding supporting energy efficiency measures.

As part of the update of the reporting guidelines for the NECPRs, the Commission will provide further guidance on reporting obligations for point b above on volume of energy efficiency lending products.

To report on the total volume of energy efficiency lending products, Member States will need to exploit synergies and avoid duplication with the requirements on data disclosed by financial institutions under the Sustainable Finance Disclosure Regulation (SFDR), the EU Taxonomy ([33]), and the ESG risks disclosure requirements for credit institutions in accordance with Regulation (EU) No 575/2013 on Capital Requirements ([34]). This system of classification and financial disclosure can be used by Member States to fulfil elements of the reporting requirements laid out in Article 30. In 2024, large financial institutions with securities listed in an EU regulated market will have to disclose Taxonomy-aligned activities related to climate objectives. As of January 2026, all EU credit institutions will also have to report on the Taxonomy-alignment of their trading book.

The Taxonomy framework includes several economic activities that are relevant to the objectives of the EED recast (e.g., Individual renovation measures consisting in installation, maintenance or repair of energy efficiency equipment, and integrated renovation of existing buildings). To calculate the total volume of energy efficiency lending products, Member States will need to aggregate the reported lending that has been tagged by companies as aligned with those economic activities that are relevant to the objectives of the EED recast and add it to the volume of public energy efficiency lending products. Member States will need to establish which domestic entities overseeing the implementation of the existing disclosure obligations will support this reporting by providing access to data disclosed by financial institutions (banking regulatory authority, etc.).

Finally, next to taxonomy alignment, Member States will also have to include in their reporting an estimate of the volumes of energy efficiency lending products which are not taxonomy-aligned but which nonetheless lead to higher energy efficiency.

([33]) Regulation (EU) 2019/2088 on sustainability-related disclosure in the financial services sector (SFDR) creates a comprehensive reporting framework for financial products and financial entities. The SFDR requirements are linked with those under the EU Taxonomy by including ‘environmentally sustainable economic activities’ as defined by the Taxonomy Regulation in the definition of ‘sustainable investments’ in the SFDR. The EU Taxonomy and the SFDR collectively specify the content, methodology and presentation of information to be disclosed by financial and non-financial undertakings concerning the proportion of environmentally sustainable economic activities in their business, investments or lending activities.

([34]) In particular, data disclosures and reporting should exploit synergies and avoid duplication with requirements for credit institutions in accordance with Article 449a of Regulation (EU) No 575/2013 (CRR), disclosed as per the ITS - Commission Implementing Regulation (EU) 2022/2453 of 30 November 2022, amending the ITS laid down in Implementing Regulation (EU) 2021/637 as regards the disclosure of environmental, social and governance risks.