

The new 2023 Energy Efficiency Directive

Guidance and recommendations for national planning and implementation



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The Coalition for Energy Savings

The Coalition for Energy Savings strives to make energy efficiency and savings the first consideration of energy policies and the driving force towards a secure, sustainable and competitive European Union. Its membership unites businesses, local authorities, energy agencies, energy communities and civil society organisations in pursuit of this goal.

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Introduction

Energy savings and energy efficiency are at the heart of the European Union (EU) strategy to improve energy security, cut greenhouse gas emissions, and make the energy transition more affordable for citizens. With the political agreement on the recast of the Energy Efficiency Directive (EED)¹ reached this March, the EU now has a stronger legal framework to meet the objectives of the "Fit for 55 package"² and of the "REPowerEU" plan.³

In the last few years, with high energy prices and the urgent need to phase out fossil-fuel imports from Russia, the EU society and citizens have experienced the cost of the slow progress on energy efficiency policies. The implementation of the EED must provide a long-term answer to volatile energy prices and address possible future supply shortages in a way that is climate compatible and socially fair. It is the starting point to move beyond emergency measures and put in place structural solutions to save energy for this decade and beyond.

With less than seven years to go to meet the 2030 EU energy efficiency target, the implementation of the EED recast must start with no delay. At the time of writing, the 2023 recast of the EED has not yet been published in the EU Official Journal and the two-year transposition period has yet to begin. However, Member States must already integrate several new elements of the 2023 EED in the draft updates of the national energy and climate plans (NECPs), due by 30 June 2023 (as required by the Governance Regulation).⁴

This report aims to support stakeholders and national and local implementers to understand the new requirements of the 2023 EED recast for selected key articles, clarify what elements must be included in the NECP updates and present the Coalition for Energy Savings' recommendations for a strong and reliable implementation of the EED. This work does not intend to replace the European Commission's guidance notes on the application of the 2023 EED, which are expected to be released in the autumn of 2023, but should be seen as the Coalition's effort to contribute in a meaningful way to the EED transposition and implementation process.

¹The text of the 2023 EED recast, pending legal review and final adoption, can be found here.

²The "Fit for 55 package" is a series of legislative proposals put forward by the European Commission in July 2021 to make European policies fit for delivering the updated 2030 greenhouse gas emissions net reduction target of 55% below 1990 levels. See the European Commission's web page: <u>Delivering the European Green Deal</u>.

³European Commission, <u>Communication on the REPowerEU plan</u>, COM(2022) 230 final, May 2022.

⁴Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action, December 2018.



The energy efficiency first principle

The "energy efficiency first" (EE1st) principle is an overarching principle of the EU energy policies. It aims to put supply and demand-side options on an equal footing, and requires policymakers to consider whether it is more beneficial to reduce energy consumption instead of focusing on supply-side resources, such as new supply infrastructure.5 It seeks to multiply instances where demand-side alternatives are assessed and to put in place a process that properly evaluates and takes into account the multiple benefits of energy savings.

What's new?

A definition of the EE1st principle was included in the Governance Regulation,⁶ and in 2021 the Commission published Recommendations⁷ and Guidelines⁸ to help Member States operationalise the principle. The 2023 EED introduces for the first time a legal basis for the application of the EE1st principle by including a dedicated provision, the new Article 3.

1. A mandatory assessment of energy efficiency solutions

With the 2023 EED, Member States must ensure that energy efficiency solutions (including demand-side resources and system flexibility) are assessed in any planning, policy and major investment decisions related to energy sectors and non-energy sectors that have an impact on energy consumption. Major investment decisions are defined as those decisions that have a total value higher than €100 million, or €175 million for transport infrastructure projects9 (EED Art. 3.1). This mandatory assessment will start to apply at the end of the EED transposition period.

2. Appoint a responsible entity to monitor the application of the EE1st principle

The 2023 EED recast asks Member States to clearly **allocate responsibilities** to ensure the EE1st principle is applied. Member States are required to identify an entity, or several entities, that will be charged with monitoring the application of the principle. The entity responsible must be tasked to **check whether the EE1st principle has been applied** in the policy, planning and major investment decisions, as well as to monitor the impacts of those decisions on energy consumption (EED Art. 3.b).

3. Apply, promote and make publicly available cost-benefit methodologies

Member States must develop and use cost-benefit methodologies that encompass the wider benefits of energy efficiency measures **from a societal perspective**, including the reduction of greenhouse gas (GHG) emissions, the improvement in people's health and the greater energy independence they provide (EED Art. 3.3.a). When there is a legal requirement to undergo a cost-benefit analysis for a project, Member States must ensure that methodologies include the wider benefits of demand resources.

In addition, Member States must make those cost-benefit methodologies **publicly available**, to allow public scrutiny, and promote their use to all relevant actors (EED Art. 3.3.a). The Commission, six months after entry into force of the 2023 EED, is tasked to adopt guidelines to establish a common general framework to set those methodologies, which Member States are free to use.

4. Make the best use of the Commission recommendations and guidelines

Member States are invited and encouraged to take into account the Commission's recommendations and guidelines to follow the EE1st principle when implementing EED Article 3 (EED Art. 3.1b). Those guidelines provide advice to policymakers and other stakeholders on how to integrate the EE1st principle in their energy-related decisions across sectors and policy areas.

⁵ To know more about how to make the EE1st principle operational, consult the <u>ENEFIRST project.</u>

⁶ Article 18 of the Governance Regulation defines EE1st as "taking utmost account in energy planning, and in policy and investment decisions, of alternative cost-efficient energy efficiency measures to make energy demand and energy supply more efficient, in particular by means of cost-effective end-use energy savings, demand response initiatives and more efficient conversion, transmission and distribution of energy, whilst still achieving the objectives of those decisions".

⁷ European Commission, Recommendation on <u>Energy Efficiency First</u>: from principles to practice — <u>Guidelines and examples for its implementation in decision-making in the energy sector and beyond</u>, C/2021/7014, September 2021.

⁸ European Commission, <u>Annex to the Commission recommendation on Energy Efficiency First: from principles to practice. Guidelines and examples for its implementation in decision-making in the energy sector and beyond, C(2021) 7014 final, September 2021.</u>

⁹EED Article 3.1a requires the Commission to assess those thresholds at the latest two years after the deadline for the transposition of the directive and to potentially make proposals for their reduction one year after.

What must be reflected in the NECP updates?

The Governance Regulation and the Commission's guidance note on the update of the NECPs¹⁰ reconfirm the role of the EE1st principle in energy planning. The 2023 EED Article 3.c also lists several elements that Member States must include in their integrated progress reports (GR Art. 17);11 to deliver and be able to report on those, the NECP updates should already describe the planned measures. In their NECP updates, Member States must:

✓ Use the EE1st principle as an overarching principle across all the policy dimensions of the NECP (Commission's **NECP** guidance note)

Beyond the energy efficiency dimension, the EE1st principle must be applied across all dimensions of the NECP (energy security, internal energy market, decarbonisation, research, innovation and competitiveness) so that demand-side resources, and their benefits, are truly assessed and integrated in the overall policy planning.

V List the planned measures which reflect the EE1st principle (Commission's **NECP** guidance note)

To illustrate how they intend to operationalise the principle, Member States must list the policy measures they plan to adopt to put energy efficiency first.

✓ Explain how the EE1st principle will be applied and the associated benefits (EED Art. 3.c and 3.c.1)

Member States must provide details on how they plan to apply the EE1st principle in their national, policy and major investment decisions, including in regional and local planning that relates to national and local energy systems. They must also describe how the benefits of applying the EE1st principle on the energy system, in particular the reduction of energy use, will be quantified, assessed and monitored.

✓ List the planned actions to remove the barriers to the application of the EE1st principle (EED Art. 3.c.ii)

Member States must indicate how they plan to remove any non-necessary barriers, whether regulatory or non-regulatory, to the implementation of the EE1st principle. The list should also identify the national legislation, if any, that can hamper the application of the principle.

¹⁰ European Commission, Notice on the Guidance to Member States for the update of the 2021-2030 national energy and climate plans, 2022/C 495/02, December 2022.

¹¹ According to the Governance Regulation, the progress reports on the integrated national energy and climate plans are due every two years from the 15 of March 2023 onwards

Recommendations for Member States

The inclusion of mandatory requirements for the application of the EE1st principle can enable energy efficiency solutions to be the first consideration in energy decisions and planning at the EU, national and local level. To ensure the NECP updates contribute to a systematic application of the principle and that it is well implemented, Member States must:



1. Adopt a holistic approach to energyrelated decisions with EE1st at its core

Applying the EE1st principle means taking a holistic planning approach and recognising the positive role of demand-side resources to deliver a more flexible. renewables-based and integrated energy system. Europe's energy system can transition to clean resources more guickly, and at lower costs for consumers, if attention is given to eliminating wasteful and inflexible demand through energy savings and energy efficiency from the planning phase. The application of the EE1st principle enables this transformation by reducing the amount of energy needed and the size of the energy system, contributing to alleviating its climate and environmental impacts. It also reduces the overall investments and costs associated with energy production, infrastructure and use, which will save money and ultimately benefit consumers.



2. Apply the EE1st principle to smaller projects also

The high thresholds to identify a "major investment decision" limit the mandatory application of the EE1st principle to very large projects only. As a comparison, the European Local Energy Assistance (ELENA) initiative supports technical assistance for investment programmes above €30 million;¹² the thresholds set in Article 3 mean that many of the projects it supports be exempted from the application of the principle.

To maximise the benefits of reducing consumption, Member States should apply, and encourage all actors to apply, the principle to smaller projects as energy efficiency projects are often small in size and distributed. In that effort, Member States should provide technical and financial support to local authorities to apply the principle to smaller projects.



3. Develop a comprehensive national costbenefit methodology

A reliable yet adaptable national cost-benefit analysis that encompasses the wider societal benefits of energy efficiency solutions would greatly ease the application of the EE1st principle, not only for national decision-makers and regulators but for all planning and investment decisions of other actors. Such methodologies should take a societal and longer-term approach and consider the value of demand-side resources to achieve climate neutrality and other objectives at lower cost for society.

The cost-benefit methodology should first and foremost provide a reliable tool to value the non-monetary benefits of energy efficiency solutions, which are often difficult to quantify. These methodologies should be publicly available and ready to use through online tools so that all interested actors, including regional and local authorities, can access and benefit from them.

¹² See the investment programme size of <u>ELENA at ELENA – European Local ENergy Assistance (eib.org)</u>.



4. Give a clear mandate and appropriate means to the responsible authority

The responsible authority in charge of monitoring the application of the EE1st principle will be crucial to successfully implementing it. Member States should give this entity a clear mandate, defined competencies and supervisory powers to ensure that the principle is applied. The entity could, for example, be responsible for verifying the application of the cost-benefit methodology, for carrying out mandatory compliance checks based on a list of predefined indicators, and for being the focal point to answer EE1st implementation questions. To that end, the chosen entity must be provided with enough funding, staff resources and visibility to carry out those tasks.13



5. Raise awareness and provide guidance to all actors on the application of the EE1st principle

The EE1st principle can be difficult to apply for national, regional and local decision-makers. Even when it is known and understood, the practical steps for its consideration are often hard to grasp and implement. To support the systematic application of the principle, Member States should provide information, advice and assistance to all relevant entities, in particular to those at local level that often have limited capacity. This should include developing national recommendations and guidelines and sharing and promoting these to local decision-makers.14

¹³ Further guidance on the responsibilities of the authority is provided in the Commission's EE1st guidelines.

¹⁴ For instance, the Commission's EE1st quidelines include a decision-making tool for the principle designed in the form of a decision tree with quiding questions for each step of its application. This could be replicated by Member States at national level to adapt the tool to national specificities.



The 2030 EU energy efficiency target

The 2030 EU energy efficiency target is a pillar of the EU energy and climate framework as it enables the achievement of the 2030 GHG emission target and facilitates the penetration of renewables in Europe's energy system.

The energy efficiency target is crucial to drive the ambition of not only the different EED provisions, but also the overall energy efficiency framework, from the Energy Performance of Buildings Directive (EPBD)¹⁵ to the Ecodesign¹⁶ and Labelling Regulations.¹⁷ The energy efficiency target is also a key signal to provide a long-term perspective and investment certainty to all stakeholders, including businesses and investors.

What's new?

1. A higher and stronger EU 2030 energy efficiency target

The new directive raises the level of the 2030 EU energy efficiency target to at least 11.7% for both final energy consumption and primary energy consumption¹⁹ compared to forecasts of energy use made with the PRIMES 2020 reference scenario (EED Art. 4.1).²⁰ In absolute terms, this means that the EU must consume at most 763 million tonnes of oil equivalent (Mtoes) for final energy (see figure 1) and 992.5 Mtoes for primary energy consumption in 2030 (see figure 2); this is a reduction of 21.2% and 24.3%²¹ in final and primary energy compared to 2021 energy consumption.

Compared to the current target of 32.5% (calculated using the old PRIMES 2007 projections), this corresponds to a reduction of 38% in final energy and 40.5% in primary energy consumption in 2030 (EED Recital 22).

For the first time, the EU energy efficiency target in final energy is put on an equal footing with the renewables and GHG emissions targets as it becomes binding at the EU level. Its binding nature reinforces the Commission's role to enforce the target and take additional actions in case of insufficient progress. However, the EU energy efficiency target expressed in primary energy remains indicative only (EED Art. 4.2).

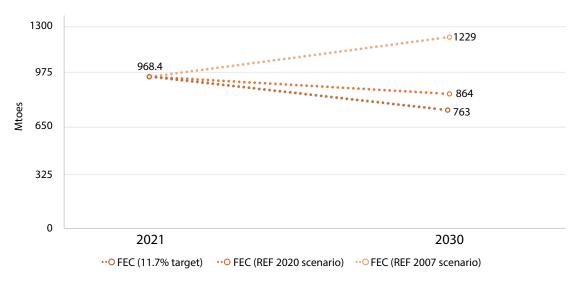


Figure 1: The 2030 EU energy efficiency target for final energy compared to projections

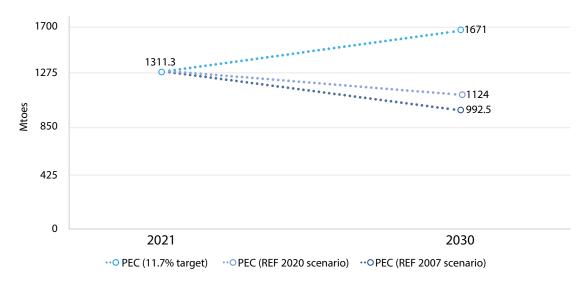


Figure 2: The 2030 EU energy efficiency target for primary energy compared to projections

¹⁵ European Commission, Directive (EU) 2018/844 on the energy performance of buildings, May 2018.

¹⁶ Directive 2009/125/EC on establishing a framework for the setting of ecodesign requirements for energy-related product, October 2009.

¹⁷ Regulation (EU) 2017/1369 setting a framework for energy labelling, July 2017.

¹⁸ The 2023 EED defines "final energy consumption" as "all energy supplied to industry, transport (including energy consumption in international aviation), households, public and private services, agriculture, forestry and fishing and other end-users (final consumers of energy. It excludes energy consumption in international maritime bunkers, ambient energy and deliveries to the transformation sector, and the energy sector and losses due to transmission and distribution."

¹⁹ The 2023 EED defines "primary energy consumption" as "gross available energy, excluding international maritime bunkers, final non-energy consumption and ambient

²⁰ For more information about the way the EU energy efficiency target is set, see the <u>Coalition for Energy Savings' guide to the energy efficiency target</u>.

²¹ See the <u>latest Eurostat data</u> for 2021 final and primary energy consumption.

2. A reliable way to set national energy efficiency contributions

With the higher EU 2030 energy efficiency target, Member States must increase their contributions compared to the pledges included in the 2019 NECPs, which were already insufficient to reach the 32.5% EU energy efficiency target.²²

The national energy efficiency contributions both in primary and in final energy remain indicative, but the revised directive improves how Member States set them, going beyond the national pledges without benchmark of the 2018 EED. The first Annex of the EED establishes a formula that guides Member States in calculating their share of the EU target (see Annex I of this report for the results of the formula calibrated to the 11.7% target). The formula allows Member States to determine their contributions to the EU target in a transparent and objective way, while also ensuring that their national situation is taken into account; indeed, the formula is composed of four factors of the same weight (early actions, GDP per capita, energy intensity and cost-effective energy savings potential) that reflect national specificities.

Despite the formula being indicative, national energy efficiency contributions (in Mtoes) must not be more than 2.5% higher than the formula's result (EED Art. 4.4). To justify any deviation, Member States can take into account national circumstances such as changes of energy imports or the energy intensity of the economy (EED Art. 4.3.e). If all Member States use the result of the formula without any deviation, the sum of the 27 national contributions will be equivalent to the EU energy efficiency target.

In parallel, no later than 30 November 2023, the Commission must update the PRIMES 2020 reference scenario with the latest energy consumption data from 2019, 2020 and 2021, given that projections were used in the current PRIMES 2020 reference scenario for those years. Following this update, Member States are entitled to amend energy efficiency contributions reported in their draft NECP update using the adjusted PRIMES 2020 reference scenario and communicate the new contributions to the Commission by 1 February 2024 (the contributions must still be within a 2.5% margin of the result of the formula) (EED Art. 4.5).

Finally, the final and primary national contributions must be accompanied by indicative trajectories describing the national path each country is planning to follow in order to achieve its 2030 final and primary objectives (EED Art. 4.2).²³

²²The Commission's assessment of the NECPs found a gap towards the EU target of 2.8 percentage points for primary energy consumption and 3.1 percentage points for final energy consumption. See European Commission, An EU-wide assessment of National Energy and Climate Plans, COM(2020) 564 final, September 2020.

²³See also: Scheuer, S. 2023. The new EU Energy Efficiency Directive – getting stronger.

3. The Ambition Gap Mechanism

If Member States set energy efficiency contributions that are less ambitious than the result of the formula, a gap between the sum of the contributions and the EU 2030 target will appear. To avoid a gap already at the planning stage, the 2023 EED requires the Commission, after an assessment, to share the potential gap among the Member States that have pledged higher (in Mtoes) than the formula's result (for final energy consumption only).

In this case, by 1 March 2024 at the latest, those Member States will receive a "corrected indicative national energy efficiency contribution" which will be shared based on the size of the gap, the GHG intensity per unit of GDP and the GDP in 2019 of the Member States concerned. Those corrected contributions must be the final contributions set by each Member State in the final update of their NECPs (EED Art. 4.5). The application of the Ambition Gap Mechanism follows a timeline with clear steps, which can be found in figure 3 below.

	Deadline	30 June 2023	30 November 2023		1 February 2	2024
	Who	Member States	European Commission	'	Member State	es
	What	Set their national contributions in the draft NECP updates	Update PRIMES 2020 reference scenario		Revise nation contributions according to updated PRIM scenario	the
Lega	al reference	GR Art. 14.1 and 14.3, EED Art. 4.2	EED Art. 4.5		EED Art. 4.5	

30 June 2024	1 March 2024
Member States	European Commission
Set their national contributions in final NECP updates	Apply the Ambition Gap Mechanism and communicate to Member States the corrected national contributions
GR Art. 14.3 EED Art. 4.5.	EED Art. 4.5

Figure 3: Timeline for the application of the Ambition Gap Mechanism

4. The Gap Filler Mechanism

The 2023 EED also introduces a mechanism to take corrective actions if Member States are not on track to achieve the 2030 EU energy efficiency target in final energy.

In line with the Governance Regulation, the Commission must assess every two years, starting from 31 October 2021, Member States' progress in the area of energy efficiency (GR Art. 29.1 and 29.3). If the Commission finds that a Member State is above its indicated trajectory for final energy consumption, **it must**, within one year following the Commission's notification, **implement additional measures to get back on track** (EED Art. 4.6).

EED Article 4.6 provides a non-exhaustive list of measures that Member States can put in place to speed up the delivery of energy savings, including increasing the annual rate of the Energy Savings Obligation in EED Article 8 or adjusting the obligation for the public sector in EED Article 5 (see following sections of this report). Importantly, Member States must describe in their subsequent progress report the measures taken and the energy savings expected to be delivered by those additional measures.

If the measures introduced by Member States are deemed insufficient and the EU as a whole is likely to miss its energy efficiency target, the Commission can propose measures and exercise its powers to ensure achievement of the target (GR Art. 32.2 and EED Art. 4.6). An overview of the timeline for the Gap Filler Mechanism is presented in figure 4.

Deadline	15 March 2025	31 October 2025	31 October	2026
Who	Member States	European Commission	Member State	es
What	Submit national progress reports	Assesses Member States' progress on energy efficiency compared to their trajectories	Member State that are above trajectories m implement ac measures	e their iust
Legal reference	GR Art. 17.1	GR Art. 29.1 and 29.3, EED Art. 4.6	EED Art. 4.6	

15 March 2027 Member States Outline the additional measures taken in their progress reports EED Art. 4.6, GR Art. 17.1

Figure 4: Timeline for the application of the Gap Filler Mechanism (repeating every two years)

What must be reflected in the NECP updates?

The Governance Regulation sets the rules and obligations for national planning and reporting to fulfil the EU's energy and climate goals. In its NECP update, to comply with Article 4 of the 2023 EED, each Member State must:

Revise upwards the national energy efficiency contribution (GR Art. 14.3, EED Art. 4.2)

Each Member State should indicate in its NECP update, including the draft update, a national energy efficiency contribution for both primary energy and final energy consumption that reflects, as a minimum, the new increased EU 2030 energy efficiency target.

In the final updates, Member States that received a corrected national energy efficiency contribution (following the application of the Ambition Gap Mechanism detailed in section I) must enshrine this contribution in their NECPs. Each Member State should also detail in its plans the underlying methodology used to set its contribution, as indicated in the Governance Regulation.

✓ Plan additional and more ambitious policies and measures (GR Art. 3.2.c)

Each Member State must plan and implement new energy savings policies, measures and programmes to accelerate the delivery of energy savings in order to achieve its higher energy efficiency contribution for 2030. These measures must be clearly described and quantified in terms of energy savings in the NECP updates.

Set a trajectory to deliver the national energy efficiency contribution (EED Art. 4.2)

Together with their national energy efficiency contributions for final and primary energy, Member States must indicate a trajectory to achieve both objectives in 2030 and describe the underlying methodology and assumptions used to develop those trajectories.

✓ Indicate the shares of energy consumption per energy end-use sector (EED Art. 4.2)

Member States must indicate the share of energy consumption persector in their national energy efficiency contribution, covering in particular the industrial, residential, services and transport sectors. For the information and communications technology (ICT) sector, projections for energy consumption must be indicated

Recommendations for Member States

Beyond the requirements of the Governance Regulation and of the 2023 EED, Member States must use the opportunity of updating their NECPs to **plan a structural shift towards a less energy-consuming energy system**. Indeed, in line with the EE1st principle, reducing energy consumption should be at the forefront of the transition to climate neutrality and energy independence. In this context, the Coalition for Energy Savings recommends that Member States:



1. Pledge energy efficiency contributions more ambitious than the formula's result

Given the increase in energy prices, the EU costeffective energy savings potential stands, with conservative estimates, at least at 19% for primary and final energy consumption,²⁴ well beyond the new level of the 2030 EU energy efficiency target. Member States have a large untapped energy savings potential and should therefore set contributions that are more ambitious than the result of the Annex I formula (see Annex I to this report for the results of the formula calibrated to a 19% target); this would deliver substantial benefits to citizens and society, including the reduction of energy bills and of fossil fuel imports (see Annex II to this report for a list of the benefits delivered by an 11.7% and a 19% energy efficiency target per Member State). Setting contributions above the formula's result would also avoid the uncertainty of being subjected to the Ambition Gap Mechanism.

In addition, we would advise Member States not to use the option to modify their national contributions after the update of the PRIMES 2020 reference scenario as waiting until February 2024 to set a contribution will delay by over eight months the implementation of energy savings policies.



2. Do not deprioritise primary energy savings

Member States should keep prioritising energy savings in the production, transmission and distribution of energy even if the 2030 EU energy efficiency target in primary energy remains indicative and certain elements of the new governance do not apply to primary energy contributions, including the Ambition Gap or Gap Filler mechanisms.

Keeping the focus in reducing primary energy needs will contribute to an efficient integrated energy system. It will encourage the deployment of renewable energy

and distributed resources, such as demand response, and reduce system costs and GHG emissions.



3. Provide a thorough description of policies and measures

The additional policies and measures needed to achieve higher contributions must be **well planned and designed**. In particular, the NECP updates should include a detailed explanation of the new policies envisaged, the targeted sectors, the timeline for the introduction of the policies, the expected energy savings and the methodology used to calculate these. The plan should also encompass an overview of the financing instruments available for private and public entities.

Such a description will enable the Commission to assess the credibility of Member States' plans and make informed recommendations (as part of the country-specific recommendations to be delivered by 31 December 2023 (GR Art. 9.2)).



4. Plan a linear reduction of energy consumption

The energy consumption trajectories must be thoroughly designed as they are a crucial element of the EED governance framework and the basis for the Commission to trigger the Gap Filler Mechanism.

We advise Member States to define a **trajectory that is coherent with a linear (or close to linear) decrease of energy consumption** to achieve the 2030 energy efficiency contribution. This will ensure that energy savings efforts start materialising in the short term and gradually increase, and prevent countries from keeping all efforts for the end of the period. Linear trajectories would also help to provide the necessary predictability for businesses, investors and citizens.

²⁴The cost-effective energy savings potential represents the energy savings that could be achieved if all energy efficiency improvements that make economic sense are implemented; if energy prices increase, more measures become economically attractive, and the potential grows. See Eichhammer, W., Scheuer, S. 2022. <u>Assessing the impact of high energy prices on the economic potentials for energy savings in the EU.</u>



Public sector leading on energy efficiency

The recast of the EED puts the public sector at the forefront of energy savings actions to reduce energy consumption. Indeed, its role in achieving the 2030 EU energy efficiency target can be substantial as the public sector represents 5-10% of the final energy consumption in the EU.²⁵

What's new?

As a complement to the existing obligation to renovate public buildings (see next chapter), the 2023 EED Article 5 requires public authorities to take actions to reduce their consumption across sectors, including, for example, healthcare, water management and wastewater treatment, public lighting, education and social services.²⁶

1. An energy reduction target for the public sector

The 2023 EED introduces a target for Member States to reduce the energy consumption of all public bodies combined by 1.9% each year (referred to in this report as "the public sector obligation"). This objective becomes binding on Member States at the end of a transitional period (two years after the transposition date of the 2023 EED). In the 2023 EED, public bodies are defined as "national, regional or local authorities and entities directly financed and administered by these authorities but not having industrial or commercial character," (EED Art. 2.10), where "directly administered" means that the public body has a majority in the administrative decisions and "financed" means that the entity is mostly financed by the public body (EED Recital 28).

²⁵ Recital 26 of the 2023 EED.

²⁶ See Recital 28 of the 2023 EED.

While the 1.9% target must be achieved with cross-sectorial actions, Member States may decide to exclude public transport or armed forces from the obligation. In any case, to calculate the reduction objective Member States must set a baseline consisting of the final energy consumption of all public bodies in 2021 (except public transport or armed forces). In the transitional period, Member States can use estimates of energy consumption for their baseline but will have to readjust those estimates with the actual data after that (EED Art. 5.1a).

2. The exclusion of smaller municipalities

In addition to the exemption for public transport and armed forces, the public sector obligation does not include the energy consumption of public bodies in municipalities with less than 50,000 inhabitants until 31 December 2026 and of public bodies in municipalities with less than 5,000 inhabitants until the end of 2029 (EED Art. 5.1b).

3. Setting energy efficiency measures in local planning

The EED recast asks Member States to ensure that **regional and local authorities include energy efficiency measures in their long-term planning** and take actions to mitigate negative direct or indirect impacts on the energy-poor and vulnerable households when designing and planning those measures (EED Art. 5.3). Public bodies are also encouraged to consider life-cycle carbon emissions and to improve the energy performance of buildings they own or occupy, in relation to Article 6 of the 2023 EED.

4. National support to public bodies to cut energy consumption

Article 5 of the 2023 EED requires Member States to support public bodies in the uptake of energy savings actions. Member States are tasked to support public bodies in implementing energy efficiency measures by, among others, providing guidelines, offering training opportunities to provide the necessary skills, and encouraging cooperation between public bodies (EED Art. 5.4).

What must be reflected in the NECP updates?

The new EED Article 5 clearly complements the Governance Regulation by requiring Member States to include in their NECP updates details on how they plan to comply with the new public sector obligation. In particular, Member States must:

Spell out their target to reduce the final energy consumption of all public bodies (EED Art. 5.2 and Commission's guidance note on NECP updates)

Member States must clearly indicate the energy consumption reduction to be achieved by all public bodies, per sector.²⁷

Outline how they plan to meet their public sector obligation (EED Art. 5.2)

Member States must describe the measures planned to achieve the energy consumption reduction objective in the public sector.

²⁷ Member States must also report as part of their integrated progress reports under Article 17 of the <u>Governance Regulation</u> the final energy consumption reduction of public bodies achieved annually.

Recommendations for Member States

The public sector must lead the energy transition. When it comes to energy efficiency, it can showcase the multiple benefits of energy savings to inspire other actors and accelerate actions to reduce energy consumption. The Coalition for Energy Savings recommends that Member States:



1. Expand the definition of public bodies

The 2023 EED definition of "public bodies" is narrow in terms of the entities it encompasses. The definition should also include all entities that are financed or administered by the national, regional or local authorities, not only those that are both directly financed and administered. For instance, municipal companies providing drinking water and wastewater treatment, though controlled by public authorities, are often financed by fees from households and companies, so would be excluded from the 2023 EED definition. Expanding the current definition will have a positive influence on the scope of both the public sector obligation and the renovation requirement of public buildings (see next chapter).



2. Address the energy consumption of public transport and armed forces

Public transport can play an important role in reducing the energy consumption of the public sector. On one side public bodies can encourage a modal shift to softer types of mobility, particularly walking and cycling; on the other, they can improve the energy efficiency of their own vehicles. Reducing energy consumption in the public sector should not, in any event, lead to a cut in public transport services for citizens, but rather support the electrification of the public transport fleet. In a similar manner, the energy consumption of armed forces should be tackled, within the limit allowed by national defence considerations.



3. Include the energy consumption of smaller municipalities from the start

According to a report from the Commission, about 40-50% of European citizens live in cities with less than 50,000 inhabitants.²⁸ Dismissing the energy consumption of these municipalities until 2027 (or 2030 for the smallest municipalities) would greatly reduce the ambition of the public sector obligation and temporary exclude millions of citizens from the multiple benefits of energy efficiency measures (such as better public lighting and more efficient wastewater treatment), exacerbating the disparities between urban and rural areas.



4. Start energy savings actions as soon as possible

The public sector obligation risks having a slow start considering its indicative nature for the first two years of the implementation period, at odds with the need to scale up efforts to meet the new EU energy efficiency target for 2030. Considering that energy savings are central for climate change mitigation, improving energy security and mitigating high energy prices, Member States should take this obligation seriously and empower public bodies to start planning and implementing energy savings measures without delay.

Given that the public sector obligation is set as an absolute cut of energy consumption, both energy efficiency and energy sufficiency measures should be introduced to ensure that energy use is structurally reduced. This will enable the public sector to truly play its exemplary role in the transition to a less energyconsuming EU so that other sectors of the economy can see the concrete benefits of such actions

The exemplary role of public bodies' buildings

Public buildings play a truly exemplary role as they are places that citizens frequently use for numerous activities. Improving their energy performance would not only deliver substantial energy savings but also showcase the many advantages of highly efficient buildings. To that end, the 2023 EED prolongs and strengthens the renovation requirement for public buildings of the 2012 directive.

What's new?

1. A broader and stronger renovation requirement for owned public buildings

The 2023 EED expands the 2012 EED requirement to renovate central government buildings to all buildings owned by public bodies.²⁹ When the transposition period is concluded, Member States will have to ensure that at least 3% of the total floor area of heated and/or cooled buildings owned by public bodies is renovated every year.

The mandatory renovations will also have to exceed minimum energy performance requirements (an improvement compared to the rules of the current EED). To be counted towards the 3% target, the renovated building must achieve, at Member States' discretion, either nearly zero-energy building (NZEB)³⁰ standards or the new zero-emission building (ZEB) standard, currently being negotiated in the EPBD recast.

The baseline to calculate the 3% requirement is set as the total floor area of buildings owned by public bodies that have a total useful floor area over 250m² and that are not NZEBs on 1 January 2024 (EED Art. 6.1).

2. Several flexibilities to the renovation requirement

To take into account national specificities and circumstances, the 2023 EED grants Member States several flexibilities, and some of them are strictly framed.

- Social housing may be excluded when renovations would have a negative impact on costs and would lead to a rent increase that is not compensated by the reduction of the energy bill (EED Art. 6.1).
- Certain building types, such as buildings with an architectural or historic value, buildings owned by armed forces or used for religious activities, while still covered by the obligation, can be renovated to a lower level of performance. Those renovations can be counted towards fulfilling the 3% renovation requirement (EED Art. 6.1a).
- New buildings owned by public bodies can also count towards the annual 3% target when they replace buildings that have been demolished in the previous two years in exceptional cases (when Member States can demonstrate with clear criteria and methodologies that this is more cost-effective in terms of energy and CO, emissions compared to renovations) (EED Art. 6.2).
- Member States can count the surplus of renovations achieved in any year before 31 December 2026 for the following three years. Then, from 1 January 2027 onwards, they can count the surplus of renovations achieved in one year for the next two years (EED Art. 6.1b).

3. A revised alternative approach to the renovation requirement

Similarly to the 2012 EED, the 2023 EED introduces an alternative approach that Member States can use instead of the default renovation obligation. However, the alternative approach in the 2023 EED is stricter and still mandates NZEB renovations. It requires Member States to issue each year a building renovation passport for buildings that represent at least 3% of the total floor area of heated and/or cooled buildings owned by public bodies (same scope as the default approach) and ensure that those buildings are renovated into NZEBs by 2040 at the latest.

Member States must ensure that the alternative approach delivers the same amount of energy savings each year as the default approach. For this purpose, they must estimate the energy savings that the default approach would have generated (using standard values for the reduction of energy consumption before and after a renovation).

By 31 December 2023, Member States that intend to choose the alternative approach must notify the Commission of this choice together with the estimated energy savings (EED Art. 6.4).

4. An obligation for public authorities to tackle buildings they occupy

The 2023 EED text adds that in buildings occupied but not owned by public bodies, the relevant public authorities must negotiate with the owner, in particular at trigger points in the lifetime of the building, to establish a contract so that the building reaches NZEB level (EED Art. 6.1).

²⁹ As mentioned in the previous chapter, EED Art. 2.10 defines public bodies as "national, regional or local authorities and entities directly financed and administered by these authorities but not having industrial or commercial character".

³⁰ For more information, see the European Commission's web page Nearly zero-energy buildings (europa.eu).

5. An inventory of public buildings

To collect data on public buildings, the 2023 EED mandates Member States to set up and make publicly accessible an inventory of all heated and/or cooled buildings with a useful floor area above 250m² either owned or occupied by public bodies. The inventory must be set up by the EED transposition deadline and be adjusted every two years.

To ensure synergies with the provisions under the EPBD recast, the inventory should be linked with the overview of the building stock that Member States are required to provide under their building renovation plans (EPBD recast Art. 3) and their national databases (EPBD recast Art. 19).

Member States' inventories must include, as a minimum, data on i) the floor area in square metres of buildings, ii) their measured annual energy consumption for heat, cooling, electricity and hot water, when this data is available, and iii) the energy performance certificates of each building (EED Art. 6.3).

What must be reflected in the NECP updates?

In order to deliver the renovation requirement, Member States must clearly plan how many buildings will have to be renovated and the policies to ensure that those renovations take place. In their NECPs, Member States must:

Spell out their public bodies' buildings renovation objective (GR Art. 4.b.4 and Art. 14.3)

Member States must indicate the total floor area to be renovated or, if the alternative approach is chosen, the equivalent annual energy savings to be achieved from 2021 to 2030.

Outline how they plan to meet their renovation objective (GR Annex I, 3.2 iv)

Member States must outline their policy measures and programmes to achieve the renovation objective, including measures to promote the exemplary role of public buildings.

Recommendations for Member States



1. Choose the default approach, or if not, ensure that the alternative approach delivers renovations this decade

The default approach is the best option to comply with the obligation of the article as it ensures that public bodies' buildings are transformed into highly performing buildings in the coming years, delivering benefits to society in the short term. If Member States decide to use the alternative approach, they should make sure that the first steps of the renovation roadmap outlined in the building renovation passport are implemented before 2030, and that NZEB level is reached long before the 2040 deadline.

Regardless, Member States should not rely on measures such as information campaigns to comply with this EED provision, as these types of measures, even when they are effective, only deliver short-term energy savings. Rather, they should introduce longerterm actions, such as staged deep renovations of public bodies' buildings or energy management solutions that optimise operational energy use.



2. Include and prioritise the renovation of social housing to support the most vulnerable households

The rise in energy prices has had severe impacts on the affordability of energy for the most vulnerable households, who often live in the worst-performing buildings.31 In this context, social housing should not be excluded from the renovation requirement but, on the contrary, be the focus of energy performance **improvements** for the benefit of its inhabitants. Otherwise, there is a risk that the Renovation Wave will not be socially fair.



3. Broaden the scope of the renovation requirement

In addition to buildings owned by public bodies, several categories of buildings should be renovated as a priority, and therefore set in the scope of the 2023 EED Article 6 renovation requirement. In particular, the renovation requirement should also encompass buildings owned by private entities but serving a public purpose, such as private hospitals or private schools. Member States are advised to set similar requirements as those of EED Article 6 for these buildings, for example through sector-by-sector roadmap agreements. In addition, public bodies should rent only buildings that comply at least with NZEB level (in coherence with the 2023 EED Annex IV.f).

The Energy Savings Obligation

The Energy Savings Obligation (ESO) is the central pillar of the EED and, more broadly, a key element of the whole EU energy efficiency framework. Since 2014, **Member States have to achieve an agreed level of end-use energy savings every year** by setting up an energy efficiency obligation scheme or by using alternative policy measures. In both cases, measures to achieve the annual objective must be additional to those that would have happened in any event because of European obligations and market trends. The 2023 EED updates the level of the required savings, the requirements on national policy measures, as well as the rules on how to account for energy savings.

What's new?

1. A stronger Energy Savings Obligation

The Energy Savings Obligation (ESO) has delivered about half of the EU 2020 energy efficiency target and the Commission's initial proposal was calibrated to achieve half of the 2030 energy efficiency target.³² As colegislators agreed to raise the level of the 2030 EU energy efficiency target, the annual rate of Article 8 was also increased to ensure the higher target can be met.

Since 2021, Member States must achieve each year 0.8% new end-use energy savings. The 2023 EED recast **introduces a progressive increase in ambition** with an annual rate of 1.3% from 1 January 2024 to 31 December 2025, 1.5% from 1 January 2026 to 31 December 2027 and 1.9% from 1 January 2028 to 31 December 2030 (EED Art. 8.1).³³ This progressive increase corresponds to a constant annual rate of **1.49**% over the period 2024-2030, which is almost a doubling of the 0.8% current annual objective.³⁴ The 1.9% savings rate will be maintained for the next obligation periods, starting with 2031-2040 (EED Art. 8.13).

³² European Commission, <u>Impact assessment report accompanying the Proposal for a Directive of the European Parliament and of the Council on energy efficiency (recast)</u>, SWD/2021/623 final, July 2021, pages 34 and 103.

³³ Cyprus and Malta have a reduced annual target; they will have to save 0.45% of energy annually from 1 January 2024 to 31 December 2030 (up from 0.24% in 2021-2023)

The end-use energy savings objective is cumulative, meaning that Member States must achieve new annual savings every year on top of those of the previous years, as shown in figure 5 below. Member States can spread the savings over the obligation period, as long as they achieve the required total cumulative amount of savings at the end of the period.

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%
		0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%
			0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%
				1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%
					1.30%	1.30%	1.30%	1.30%	1.30%	1.30%
						1.50%	1.50%	1.50%	1.50%	1.50%
	1.50% 1.50% 1.									1.50%
	1.90%									1.90%
1.90%									1.90%	
	Figure 5: Annual rate of Article 8 over the 2021-2030									

period and cumulation of savings (% of annual savings)

2. New requirements on policy measures

As in the previous EEDs, the required energy savings can be achieved by implementing energy efficiency obligation schemes, alternative policy measures or combining these options (see 2023 EED Articles 9 and 10). Member States have the flexibility to implement measures in the sector or sectors they deem most relevant to their national circumstances

New requirements on policy measures were introduced in the 2023 EED recast:

Sub-target supporting a just transition

The revised obligation introduces a requirement to deliver a share of the end-use energy savings among people affected by energy poverty, vulnerable customers, low-income households and, where applicable, people living in social housing (EED Art. 8.3). Member States have the flexibility to define the target group that will benefit from this ringfencing, among these groups. This ringfencing is a core element of the EED recast, and of the whole Fit for 55 package, to ensure that the most vulnerable benefit from the energy transition and that the negative impacts of high energy prices are mitigated.

The share of end-use savings to be achieved through policy measures targeting these target groups is equal to the proportion of households in energy poverty, as defined by each Member State in its NECP. For example, if a Member State reports that 10% of its population is in energy poverty, 10% of the cumulative end-use Energy Savings Obligation should be delivered among the priority groups listed above. If the proportion of households in energy poverty is not defined in the NECP, the 2023 EED Article 8.3 sets four indicators³⁵ to calculate the ringfencing (a calculation for each Member State using the indicators can be found in Annex III to this report).

The EED recast also requires Member States to ensure that the policies introduced in the framework of the ESO have no adverse impact on people living in energy poverty (EED Art. 8.3).³⁶

²⁴The ESO annual rate is calculated based on the annual final energy consumption of the Member State, averaged over the most recent three-year period prior to 1 January 2019, i.e., 2016, 2017, 2018. The Eurostat energy consumption data is considered to be the default source for this calculation, but Member States can choose alternative data sources if they provide the necessary justifications (Governance Regulation Annex III 1.)

³⁵ According to Article 8.3 of the EED the four indicators are i) share of the population unable to keep their home adequately warm, ii) arrears on utility bills, iii) total population living in a dwelling with a leaking roof, damp walls, floors or foundation, or rot in window frames or floor, and iv) at-risk-of-poverty rate.

³⁶ For more information on the energy poverty sub-target in the Energy Savings Obligation, see SocialWatt, Implementing the new Energy Efficiency Directive to alleviate energy poverty, 2023.

Promoting the role of energy communities

The EED recast mandates Member States to **consider and promote the role of renewable energy communities** and citizens' energy communities for the implementation and design of the obligation schemes and policy measures to achieve the ESO's objective. Support for these initiatives is therefore recognised as an eligible policy measure and the resulting energy savings from citizens' participation in energy communities can be counted towards the Article 8 yearly objective, provided that these savings are in line with other requirements of the Directive (EED Art. 8.3).

3. Updated accounting rules

While the architecture of the article and the key accounting principles remain substantially the same, the 2023 EED introduces some key amendments compared to the 2018 EED.

Bridging obligation periods

In the future, the 10-year obligation periods will **no longer be completely separated** when it comes to the end-use energy savings objective Member States must achieve.

On one hand, a new provision has been introduced that requires Member States to compensate any missing energy savings from one implementation period (for example, 2021-2030) by the end of the following period (in that case, 2031-2040).

On the other hand, Member States that overachieve their target will have the possibility to carry over some surplus energy savings into the following obligation period.³⁷ This possibility is capped to a maximum of 10% of the excess savings (EED Art. 8.13). These provisions reinforce the need for the Commission to properly assess the energy savings achieved by Member States.

Setting new rules for energy savings from direct fossil fuel combustion

In coherence with the objectives of achieving climate neutrality and phasing out fossil fuels, the new ESO prohibits the possibility of counting energy savings stemming from direct fossil fuel combustion and considering "policy measures regarding the use of direct combustion of fossil fuel technologies" (EED Annex V.2.g and h). Savings from direct fossil fuel combustion are excluded from 2024 onwards, and policy measures involving direct fossil fuel combustion are excluded from 2026 onwards.

There are two derogations to these rules. First, the requirements apply to "newly implemented" policy measures, ³⁸ suggesting that Member States can adapt policy measures when they get into a new implementation phase. Secondly, an exemption is granted for fossil fuel savings in energy-intensive enterprises in the industrial sector, which can be counted until 2030 under very strict conditions.

Providing clarity on the synergies with other EU requirements

The revised Article 8 introduces several clarifications on how to apply the principle of additionality to EU law. As long as they comply with the key principles of Article 8, energy savings resulting from emergency measures adopted as a result of the energy crisis (EED Annex V.2.ca) and the policy measures leading to renovations in buildings covered by minimum energy performance standards (MEPS) of the EPBD recast can be counted. Measures to fulfil the public sector obligation (EED Art. 5) and the renovation requirement for public buildings (EED Art. 6) can also be counted for the ESO (EED Annex V.2.c).

³⁷ Limited possibilities to carry over surplus savings with certain conditions were also foreseen for the previous obligation period, see EED Art. 8.8.g.

³⁸ Except for the residential sector, for which all policy measures, whether newly implemented or not, are excluded from 2026 onwards.

In addition, Member States can count end-use energy savings from policy measures in sectors or installations covered by the EU Emissions Trading System (ETS) Directive, including the new ETS for buildings and road transport, but only if they result from the implementation of Articles 9 or 10 of the EED. They must also go beyond the requirements of the ETS, or beyond the implementation of actions linked to the allocation of free allowances (EED Annex V.2.e).

What must be reflected in the NECP updates?

According to the EED recast and the Governance Regulation, Member States need to include the following elements in their NECP updates for the purpose of the Energy Savings Obligation:

✓ Update the calculation of the cumulative energy savings (EED Art. 8.10)

As the annual energy savings rate has been increased from 2024 onwards, the overall amount of cumulative savings for the period from 1 January 2021 to 31 December 2030 must be increased accordingly.

Provide a description of the impact of the ESO in achieving the national energy efficiency contribution (EED Art. 8.14.b)

The contribution of the ESO to support the achievement of each Member State's national energy efficiency objective must be indicated with the necessary evidence and calculations. This will also enable calculation of the ESO's impact on the EU energy efficiency target.

Indicate the amount of energy savings to be achieved among the most vulnerable (EED Art. 8.11)

For the purpose of the energy poverty ringfencing in the ESO, Member States must indicate the amount of energy savings to be delivered, spell out the reasoning for setting this objective (either the share of energy poverty in their NECP or the result of the four indicators), and the target group, or target groups, identified.

V Provide a detailed description of the policy measures (EED Art. 8.11 and 8.12)

The policy measures planned to deliver the increased ESO must be clearly explained, with a quantification of their expected savings and the methodologies used to calculate these. The description of these measures should encompass the elements listed in the Governance Regulation Annex III (including, for instance, the savings' lifetime for each policy measure).

Output Demonstrate the eligibility and accountability of policy measures (EED Art. 8.14.a and c)

Given the updated accounting rules for the ESO mentioned in the previous section, Member States must explain how their policy measures are eligible and respect the provisions set out in the 2023 EED Annex V.

The elements above will enable the Commission to make an informed assessment of whether the declared policy measures are sufficient or insufficient to achieve the ESO national cumulative objective and, if necessary, make specific recommendations.

³⁹ <u>Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community</u> and amending Council Directive 96/61/EC,

⁸ Directive (EU) 2023/959 amending Directive 2003/87/EC, May 2023.

Recommendations for Member States

The increased ESO will reinforce the role of Article 8 in the EU energy efficiency framework and its contribution to achieve the EU's long-term climate and energy goals. The Coalition for Energy Savings recommends that Member States:



1. Step up the ambition of national policy measures immediately

To meet their obligation, Member States will need to reinforce existing policy measures and potentially introduce new measures delivering additional energy savings. Given the cumulative aspect of the ESO, actions implemented at the beginning of the period which deliver savings until the end of that period are key to the successful implementation of the obligation. Ambitious early action also increases the chances to carry over part of the savings between periods, easing the achievement of the next obligation period.



2. Make use of the synergies between **Article 8 and other EU obligations**

Article 8 is not an isolated obligation: it is a crucial tool to achieve other provisions from the EED and broader EU and national policy objectives, such as the Renovation Wave. Although additionality to EU obligations must be respected, the energy savings resulting from the implementation of EED Article 5 and EED Article 6 (see previous chapters) and from building renovations under the upcoming MEPS framework can be counted to meet the ESO's objective. We advise Member States to use these synergies to both facilitate the achievement of these EU obligations and deliver substantial energy savings.



3. Prioritise long-term measures delivering structural savings

Policy measures that have long-term effects (like building renovations or heating replacement) will deliver savings for many years;⁴¹ implementing these measures provides Member States with savings they can account for until the end of each implementation period. They can also reduce countries' energy consumption in the long run, and provide longlasting environmental, social and economic benefits such as greater energy security, lower energy bills and reduced GHG emissions, in coherence with Europe's energy and climate objectives.



4. Increase the use of metered savings approaches

To ensure that the ESO plays its part to deliver energy savings on the ground, and therefore supports the achievement of the 2030 EU energy efficiency target, each Member State should undertake an ex-post evaluation of the policy measures using metered savings. Following this evaluation, they can identify the possible shortcomings of the measures, including discrepancies between expected and metered savings, and adopt corrective actions. Member States should also pilot support schemes based on metered savings methodologies, including in the residential sector.



5. Provide the right scrutiny on savings accounting, including for taxation measures

Previous literature shows that several shortcomings related to the eligibility and additionality of measures in the past period have been reported, notably when it comes to taxation measures.⁴² The 2023 EED recast clarifies some of the points related to the calculation of energy savings from taxation measures. Member States should therefore ensure that they respect these rules as well as the definitions outlined in Article 2 of the 2023 EED.



6. Foster and facilitate the creation of energy communities

Energy communities are crucial to promote citizen participation in energy saving actions (such as renovations of buildings or less energy consuming behaviours). However, they often struggle with complex administrative procedures and a lack of access to financing. Simplifying administrative procedures for creating energy communities and encouraging schemes to finance them will increase their role in delivering long-term energy savings, which can be accounted for in the framework of the ESO.

⁴¹ For more information on the expected lifetime of savings from policy measures, see European Commission, Annex to Commission Recommendation on transposing the Energy Savings Obligations under the Energy Efficiency Directive, C(2019) 6621 final, September 2019.

⁴² See Rosenow, J., Scheuer, S., 2019. Closing the loopholes: Assessment of the potential impact of tax measures on energy savings claimed under Article 7 of the EED.

Conclusion

Meeting the new 2030 EU energy efficiency target will require a substantial acceleration and strengthening of energy savings policies and measures at the national, regional and local level. 2030 is around the corner and Member States must urgently start planning additional measures and investments, allocate resources, engage with citizens, and mobilise stakeholders and local authorities to save energy across sectors.

The update of the NECPs, with the implementation of the 2023 EED as a central pillar, is a pivotal moment. Member States must use this opportunity to align with the higher EU climate and energy objectives and provide a well-designed strategy to save energy, granting a clear outlook for businesses and investors.

Bold action on energy savings is needed to improve the resilience and security of the EU energy system, and alleviate environmental and climate impacts at lower costs for consumers. It is time for the EU and its Member States to turn commitments into actionable programmes and delivery mechanisms so that the Fit for 55 package and REPowerEU objectives can become reality.

This report has outlined several recommendations to plan and implement the key new provisions of the 2023 EED. The common thread running through them is that the new EED requirements are the absolute minimum to achieve the EU's climate and energy objectives, but much more is feasible given the existing energy savings potential and the current available technologies. To achieve a more sustainable, fair and resilient energy system for all Europeans, energy savings must be maximised without any delay.

Annex I

	REF2020 baseline	11.7% 2030 EU energy efficiency target			030 EU iency target
	FEC	FEC target	Calibrated FEC	FEC target	Calibrated FEC
	[Mtoe]	[%]	[Mtoe]	[%]	[Mtoe]
BE	33.07	-12.9%	28.78	-21.0%	26.13
BG	9.98	-11.0%	8.88	-17.8%	8.20
CZ	22.92	-11.7%	20.24	-19.0%	18.57
DK	15.38	-9.8%	13.87	-15.9%	12.94
DE	178.73	-13.0%	155.56	-21.0%	141.18
EE	2.87	-10.3%	2.57	-16.6%	2.39
IE	11.12	-11.0%	9.89	-17.9%	9.13
EL	16.23	-9.8%	14.65	-15.9%	13.66
ES	72.41	-9.3%	65.65	-15.2%	61.43
FR	118.06	-12.1%	103.75	-19.6%	94.87
HR	6.64	-12.0%	5.84	-19.5%	5.34
IT	102.78	-10.3%	92.17	-16.7%	85.57
CY	2.04	-11.8%	1.80	-19.1%	1.65
LV	3.71	-11.0%	3.31	-17.8%	3.05
LT	4.80	-11.6%	4.25	-18.8%	3.90
LU	3.13	-13.3%	2.72	-21.5%	2.46
HU	18.37	-11.8%	16.20	-19.2%	14.85
MT	0.77	-10.4%	0.69	-16.8%	0.64
NL	43.18	-10.8%	38.51	-17.6%	35.60
AT	24.56	-13.0%	21.36	-21.1%	19.38
PL	66.02	-12.6%	57.73	-20.3%	52.58
PT	14.84	-9.5%	13.43	-15.5%	12.55
RO	25.25	-9.8%	22.77	-16.0%	21.22
SI	4.79	-10.5%	4.29	-17.0%	3.98
SK	9.61	-12.0%	8.46	-19.4%	7.74
FI	24.10	-14.8%	20.55	-23.9%	18.34
SE	29.02	-13.6%	25.08	-22.0%	22.64
EU27	864.41	-11.70%	763.00	-19.0%	700.00

Table 1: Result of the EED formula calibrated to a 2030 EU energy efficiency target of 11.7% and 19% for final energy consumption (FEC)⁴³

⁴³ See also: Scheuer, S. 2023. <u>The new EU Energy Efficiency Directive – getting stronger</u>.

	REF2020 baseline	11.7% 2030 EU energy efficiency target			2030 EU ciency target	
	PEC [Mtoe]	PEC target [%]	Calibrated PEC [Mtoe]	PEC target [%]	Calibrated PEC [Mtoe]	
BE	38.34	-11.9%	33.77	-19.3%	30.95	
BG	15.59	-12.2%	13.69	-19.8%	12.51	
CZ	32.76	-12.1%	28.80	-19.6%	26.35	
DK	17.23	-9.0%	15.68	-14.5%	14.72	
DE	221.37	-12.5%	193.62	-20.3%	176.46	
EE	4.54	-14.1%	3.90	-22.7%	3.51	
IE	12.57	-10.7%	11.22	-17.4%	10.39	
EL	18.80	-8.3%	17.23	-13.5%	16.26	
ES	91.50	-10.7%	81.76	-17.2%	75.73	
FR	179.19	-12.3%	157.23	-19.8%	143.65	
HR	7.63	-10.8%	6.80	-17.4%	6.30	
IT	125.42	-10.9%	111.77	-17.6%	103.33	
CY	2.30	-11.7%	2.03	-18.9%	1.87	
LV	4.17	-10.3%	3.74	-16.6%	3.48	
LT	5.67	-8.2%	5.20	-13.3%	4.91	
LU	3.21	-12.0%	2.83	-19.5%	2.59	
HU	26.08	-10.4%	23.37	-16.8%	21.69	
MT	0.91	-7.4%	0.84	-12.0%	0.80	
NL	52.30	-11.1%	46.49	-18.0%	42.89	
AT	28.44	-12.6%	24.85	-20.4%	22.63	
PL	89.15	-12.9%	77.66	-20.9%	70.55	
PT	16.92	-10.3%	15.18	-16.6%	14.11	
RO	33.22	-9.0%	30.23	-14.6%	28.38	
SI	6.47	-10.5%	5.79	-17.0%	5.37	
SK	15.37	-11.1%	13.66	-18.0%	12.61	
FI	34.32	-13.2%	29.78	-21.4%	26.97	
SE	40.83	-13.4%	35.37	-21.6%	32.00	
EU27	1,124.31	-11.70%	992.50	-19.0%	911.00	

Table 2: Result of the EED formula calibrated to a 2030 EU energy efficiency target of 11.7% and 19% for primary energy consumption (PEC)

Annex II

The calculation of the multiple benefits is made using the coefficients for each Mtoe of energy saved available in the <u>Cambridge Econometrics study: "2030 EU energy efficiency target: The multiple benefits of higher ambition,"</u> page 26.

	<u>.e</u> e	Householde	Households.	re billion	Ports .		
nibe	y State	din	re enolds	re le il fuel in	Engloynent		ું હવો
EU Membe	Hitoe save	Hourpene	Hourpener	Fosifien	Engloynend	eo? billion	CHC CO Ed
BE	4.3	-3.04	-1.93	-1.63	28.30	3.98	-11.43
BG	1.1	-0.78	-0.49	- 0.42	7.25	1.02	-2.93
CZ	2.7	-1.90	-1.21	-1.02	17.70	2.49	-7.15
DK	1.5	-1.07	-0.68	-0.57	9.95	1.40	-4.02
DE	23.2	-16.45	-10.43	-8.80	153.15	21.55	-61.86
EE	0.3	-0.21	-0.13	-0.11	1.94	0.27	-0.78
IE	1.2	-0.87	-0.55	-0.47	8.09	1.14	-3.27
EL	1.6	-1.13	-0.71	-0.60	10.49	1.48	-4.24
ES	6.8	-4.80	-3.04	-2.57	44.70	6.29	-18.06
FR	14.3	-10.16	-6.44	-5.44	94.58	13.31	-38.21
HR	0.8	-0.57	-0.36	-0.30	5.27	0.74	-2.13
IT	10.6	-7.53	-4.77	-4.03	70.14	9.87	-28.33
CY	0.2	-0.17	-0.11	-0.09	1.59	0.22	-0.64
LV	0.4	-0.29	-0.18	-0.16	2.70	0.38	-1.09
LT	0.6	-0.39	-0.25	-0.21	3.68	0.52	-1.48
LU	0.4	-0.30	-0.19	-0.16	2.75	0.39	-1.11
HU	2.2	-1.54	-0.98	-0.82	14.35	2.02	-5.80
MT	0.1	-0.06	-0.04	-0.03	0.53	0.07	-0.21
NL	4.7	-3.32	-2.10	-1.78	30.89	4.35	-12.48
AT	3.2	-2.27	-1.44	-1.22	21.14	2.97	-8.54
PL	8.3	-5.88	-3.73	-3.15	54.78	7.71	-22.13
PT	1.4	-1.00	-0.64	-0.54	9.35	1.32	-3.78
RO	2.5	-1.77	-1.12	-0.95	16.44	2.31	-6.64
SI	0.5	-0.36	-0.23	-0.19	3.33	0.47	-1.35
SK	1.2	-0.82	-0.52	-0.44	7.62	1.07	-3.08
FI	3.6	-2.53	-1.60	-1.35	23.52	3.31	-9.50
SE	3.9	-2.80	-1.77	-1.50	26.04	3.66	-10.52
EU27	101.4	-72.00	-45.63	-38.54	670.31	94.31	-270.76

Table 3: Multiple benefits delivered by the 11.7% EU energy efficiency target for each Member State

	. 0.	30	ergy illion	ansport illion	aoris		
EU Mentre	Hege save	dir 2030 Householder	Refer dilloon	are billion	Root Employment	CDR billion	G eð
EUMer	Mtoess	Hourpene	Hourpent	FOE PILLIO	Embouse	GO billio	CHC PO
BE	6.9	-4.93	-3.12	-2.64	45.87	6.45	-18.53
BG	1.8	-1.26	-0.80	-0.68	11.75	1.65	-4.75
CZ	4.3	-3.08	-1.95	-1.65	28.70	4.04	-11.59
DK	2.4	-1.73	-1.10	-0.93	16.15	2.27	-6.52
DE	37.5	-26.66	-16.90	-14.27	248.19	34.92	-100.25
EE	0.5	-0.34	-0.21	-0.18	3.16	0.44	-1.28
IE	2.0	-1.41	-0.89	-0.75	13.12	1.85	-5.30
EL	2.6	-1.83	-1.16	-0.98	17.02	2.40	-6.88
ES	11.0	-7.79	-4.94	-4.17	72.57	10.21	-29.31
FR	23.2	-16.47	-10.44	-8.81	153.32	21.57	-61.93
HR	1.3	-0.92	-0.58	-0.49	8.55	1.20	-3.45
IT	17.2	-12.22	-7.75	-6.54	113.79	16.01	-45.96
CY	0.4	-0.28	-0.18	-0.15	2.57	0.36	-1.04
LV	0.7	-0.47	-0.30	-0.25	4.38	0.62	-1.77
LT	0.9	-0.64	-0.41	-0.34	5.96	0.84	-2.41
LU	0.7	-0.48	-0.30	-0.26	4.46	0.63	-1.80
HU	3.5	-2.50	-1.58	-1.34	23.26	3.27	-9.40
МТ	0.1	-0.09	-0.06	-0.05	0.85	0.12	-0.34
NL	7.6	-5.38	-3.41	-2.88	50.10	7.05	-20.24
AT	5.2	-3.68	-2.33	-1.97	34.26	4.82	-13.84
PL	13.4	-9.54	-6.05	-5.10	88.79	12.49	-35.87
PT	2.3	-1.63	-1.03	-0.87	15.18	2.14	-6.13
RO	4.0	-2.87	-1.82	-1.53	26.68	3.75	-10.78
SI	0.8	-0.58	-0.37	-0.31	5.40	0.76	-2.18
SK	1.9	-1.33	-0.84	-0.71	12.36	1.74	-4.99
FI	5.8	-4.09	-2.59	-2.19	38.09	5.36	-15.39
SE	6.4	-4.53	-2.87	-2.43	42.20	5.94	-17.05
EU27	164.4	-116.73	-73.98	-62.47	1,086.74	152.90	-438.97

Table 4: Multiple benefits delivered by the 19% EU energy efficiency target for each Member State

Annex III

The table below is taken from the policy brief of the SocialWatt project of April 2023, available <u>here</u>.

Country	Inability to keep home adequately warm	Arrears on utility bills	Total population living in a dwelling with a leaking roof, damp walls, floors or foundation, or rot in window frames or floor	At-risk-of-poverty rate, cut-off point: 60% of median equivalised income after social transfers	Average
Indicator	Eurostat, SILC [ilc_mdes01]	Eurostat, SILC, [ilc_mdes07]	Eurostat, SILC [ilc_ mdho01]	Eurostat, SILC, ECHP [ilc_li02]	
Unit and year	% population, 2019	% population, 2019	% population, 2019	% population, 2019	% population, 2019
BE	3.9	4.1	16.7	14.8	9.9
BG	30.1	27.6	11.6	22.6	23.0
CZ	2.8	1.8	7.3	10.1	5.5
DK	2.8	3.6	14.9	12.5	8.5
DE	2.5	2.2	12.0	14.8	7.9
EE	2.5	7.2	13.8	21.7	11.3
IE	4.9	8.9	12.5	13.1	9.9
EL	17.9	32.5	12.5	17.9	20.2
ES	7.5	6.5	14.7	20.7	12.4
FR	6.2	5.6	11.5	13.6	9.2
HR	6.6	14.8	10.2	18.3	12.5
IT	11.1	4.5	14.0	20.1	12.4
CY	21.0	10.4	31.1	14.7	19.3
LV	8.0	8.7	19.3	22.9	14.7
LT	26.7	7.5	14.0	20.6	17.2
LU	2.4	2.4	15.4	17.5	9.4
HU	5.4	10.2	22.3	12.3	12.6
MT	7.8	6.5	7.6	17.1	9.8
NL	3.0	1.5	14.7	13.2	8.1
AT	1.8	2.4	9.4	13.3	6.7
PL	4.2	5.8	10.8	15.4	9.1
PT	18.9	4.3	24.4	17.2	16.2
RO	9.3	13.7	9.4	23.8	14.1
SI	2.3	11.2	20.6	12.0	11.5
SK	7.8	8.4	5.7	11.9	8.5
FI	1.8	7.8	4.1	11.6	6.3
SE	1.9	2.3	7.0	17.1	7.1

Table 5: Energy poverty ringfencing per Member State calculated using the Article 8.3 indicators





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