The Coalition for ENERGY SAVINGS

Policy Brief

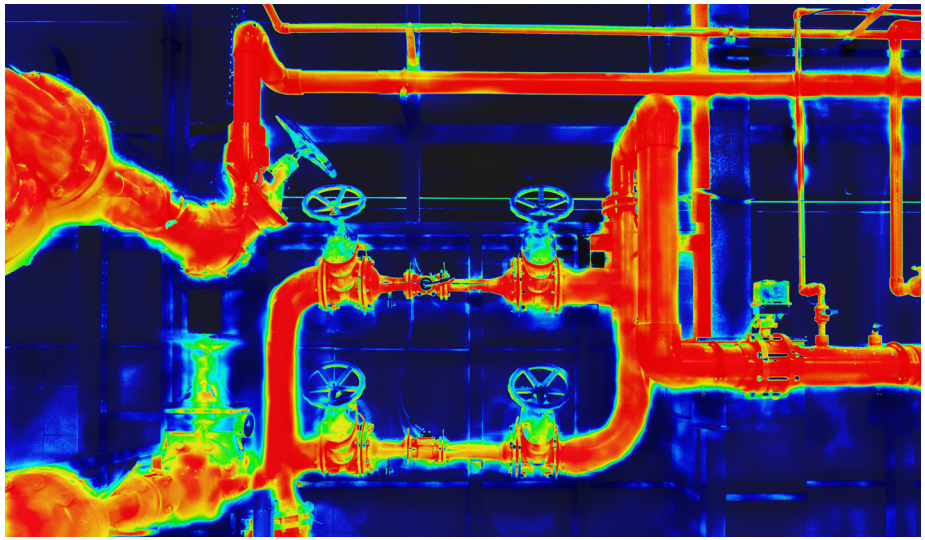
A GUIDE TO THE 2030 ENERGY EFFICIENCY TARGET

April 2022

Introduction

Stepping up efforts on energy savings is crucial to cut greenhouse gas (GHG) emissions and improve EU's energy security, while delivering multiple benefits for citizens such as lower bills, better comfort, and improved air quality. **The ambition and governance of the EU energy efficiency target are the cornerstones of the EU energy efficiency framework** as they drive ambition and delivery of other efficiency legislation, provide a signal to stakeholders and investors, and ultimately help the materialisation of energy savings on the ground.

The briefing aims to explain how the current 2030 energy efficiency target works, what the Commission has proposed in the Energy Efficiency Directive (EED) recast, and what are the suggested changes to the target governance and ambition proposed by the Parliament's Industry, Research & Energy (ITRE) committee draft report and the draft opinion of the Environment, Public Health and Food Safety (ENVI) committee.



What is in the current EED?

How is the energy efficiency target designed?

The current EED, as agreed in 2018, sets an **EU energy efficiency target for 2030 at - 32.5% compared to PRIMES projections done in 2007.** The energy efficiency target is therefore not a cut in energy use compared to a reference year (as for the GHG emissions target), but it is a reduction of consumption compared to projections of energy use in 2030 (both in final and primary energy) carried out with the energy model PRIMES. The 32.5% cut corresponds to an absolute level of energy consumption measured in Million of tonnes of oil equivalent (Mtoes). In absolute terms, the 2030 energy efficiency target means that the **EU's energy consumption should be no more than 846 Mtoe of final energy and 1128 Mtoe of primary energy by 2030.**

A weak governance system

The current EU energy efficiency target is not yet supported by an adequate governance framework. Contrary to the renewable energy and the GHG emissions reduction targets, t**he EU headline target for energy efficiency is not binding**. Member States must indicate their national contributions to the EU target, and a trajectory to achieve them,[1] **but those are indicative as well.** In addition, full flexibility is left to Member States on how their contributions are expressed (either in final energy consumption (FEC), primary energy consumption (PEC), primary or final energy savings, or energy intensity).[2] The weak governance framework of the energy efficiency target greatly limits the possibility for the European Commission to ensure that Member States deliver their contributions to the EU target. Unsurprisingly, this has led to significant gaps in delivery and ambition.[3]

What is the Commission proposing for the 2030 energy efficiency target?

The Commission recast proposal strengthens the overall level of ambition and governance of the energy efficiency target for 2030. This is positive given the multiple benefits of energy savings for society. However, the level of ambition proposed is in the low range of what was modeled in the Climate Target Plan[4] (respectively 36-37% for final energy consumption and 39-41% for primary energy consumption).

An increased ambition based on an updated scenario

With the EED recast proposal, the European Commission proposes to set the energy efficiency target by **using up-to-date projections of energy use made with PRIMES 2020**. PRIMES 2020 takes into account the impacts on energy use caused by the COVID pandemic and integrates the energy efficiency policy framework in place in 2020, by taking as a baseline the pledges made by Member States in their National Energy and Climate Plans (NECPs). However, it shall be noted that the Commission's own assessment of the NECPs shows a collective ambition gap of 2.8% for primary and 3.1% for final energy consumption towards the 32.5% EU energy efficiency target.[5] This means that the current level of effort in the baseline is lower of what it is needed to achieve the EU target.

The update of the PRIMES reference scenario has implications on the way the target is expressed in percentage terms but does not change the level of the EU target expressed in absolute terms (Mtoes). In that sense, **the 2030 EU energy efficiency target proposed by the Commission equals a 9% reduction for both FEC and PEC in 2030, compared to the new 2020 Reference Scenario projections**; this amounts to 787 Mtoe and 1023 Mtoe in 2030 for FEC and PEC respectively. With the old PRIMES 2007 reference scenario, the 9% corresponds to a target of 36% in FEC and 39% in PEC; the absolute amounts in Mtoe remain the same.

A binding target in PEC and FEC

The EED recast proposal suggests making the **EU headline target binding for both its PEC and FEC objectives**. Therefore, the EED recast grants the energy efficiency target the same legal weight as the climate and renewable energy targets.

Indicative national contributions based on an indicative formula

While the EED recast proposal still keeps the indicative nature of the national contributions, **the proposed national governance system is slightly strengthened**. Instead of Member States setting their contributions with full discretion, **the EED recast proposal requires Member States to apply a formula** based on four transparent criteria with equal weight (energy intensity, GDP per capita, energy savings potential and a fixed energy consumption reduction). The application of the formula provides Member States with a clear benchmark to set their national contributions, and, if all Member States would pledge the resulting benchmark, the sum of all contributions would equal the EU 2030 energy efficiency target.

In case the sum of national contributions does not add up to the binding EU target due to a modification of the formula, the Commission has introduced a correction factor, which would divide the remaining gap between all Member States equally.[6]

However, according to the EED recast proposal, **only the use of the formula is binding, not its result**, to set Member States' contributions. Additionally, other criteria, listed in Article 4 of the proposal,[7] can be used by Member States to adjust their contributions to specific national circumstances, which can lead to a deviation from the formula's result and ultimately could mean that national contributions would not add up to the required level of the EU target.

Finally, Member States still have the flexibility to set their national targets with their preferred metrics, but must report to the Commission their national contributions to the EU target in final and primary energy consumption to facilitate assessments and comparability.

The introduction of a "gap-filler mechanism"

The EED recast introduces a mechanism which grants additional power to the Commission to ensure that Member States fulfill their national contributions. Notably, the proposal suggests that **if a Member State is found above its outlined trajectory to its national contribution, it must increase efforts and get back on track within one year of the Commission's assessment**. The Commission is set to undergo this assessment every two years starting in 2023.

The proposal lists four possible ways (which are not exhaustive) for Member States to increase efforts, including strengthening national measures, increasing the energy savings obligation (Article 8), adjusting the obligation for the public sector (Article 5) or making a contribution to the National Energy Efficiency Fund. In addition to the gap-filler mechanism, the proposal adds that if the Commission finds that national measures referred to above are insufficient to achieve the EU target, it shall propose, as appropriate, additional measures.

What is the European Parliament proposing on the 2030 energy efficiency target?

The ITRE committee is the leading committee in the EED recast, with other committees giving an opinion, including the ENVI committee. Both the draft ITRE report and draft ENVI opinion provide comprehensive suggestions to amend the Commission's proposal on the 2030 energy efficiency target.

A significant increase of the target

The draft ITRE report and the draft ENVI opinion both propose raising the level of the energy efficiency target for 2030 to maximise the benefits for citizens and ensure a fair and affordable transition.

→ **The ITRE draft report suggests an increase of the target to 19% for both primary and final energy based on the PRIMES 2020 reference scenario** (Amendment 41). This corresponds to an increase of 43% for final energy and 45.5% for primary energy according to the PRIMES 2007 reference scenario.[8] In absolute numbers, those levels translate into 700 Mtoes for final energy and 911 Mtoes for primary energy in the all EU in 2030.

→ **The ENVI draft opinion suggests raising the target to 45% for both primary and final energy based on the PRIMES 2007 reference scenario** (Amendment 46), without providing an indication of the corresponding percentage with the PRIMES 2020. In absolute numbers, this corresponds to 689 Mtoes for final energy and 919 Mtoes for primary energy in 2030.

Figure 1 shows the projected level of the EU's 2030 energy consumption according to the PRIMES 2007 and PRIMES 2020 reference scenarios and the different levels of the 2030 energy efficiency target as proposed by the Commission, ITRE draft report, and ENVI draft opinion.

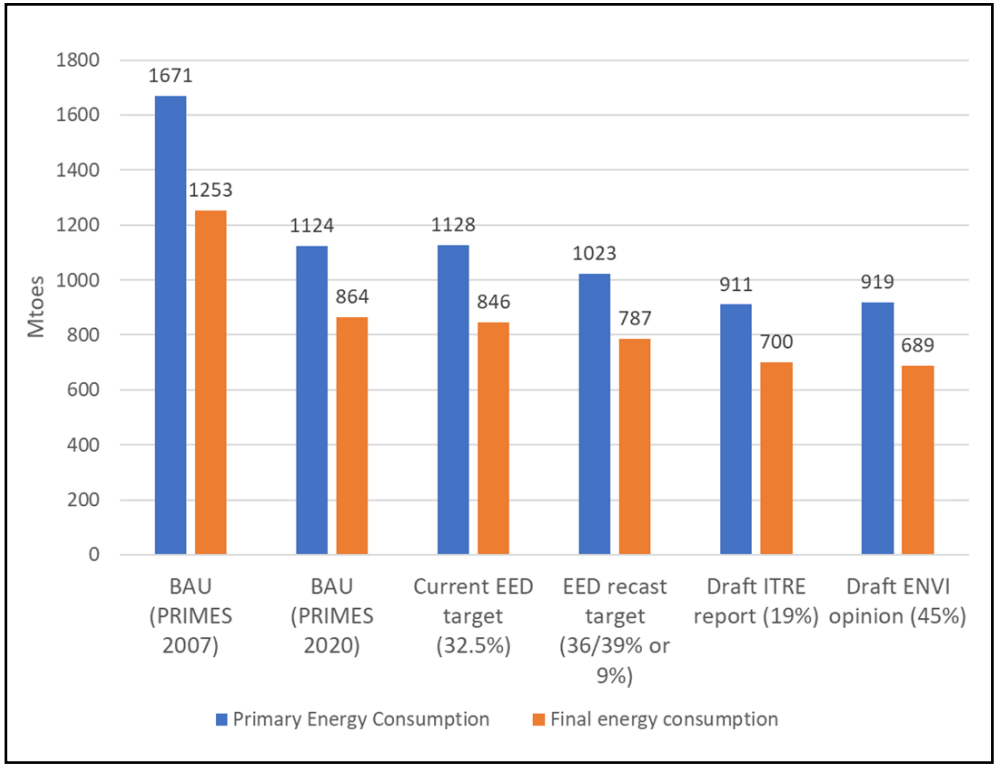


Figure 1 - Comparison between projections and energy efficiency target for 2030

A stronger governance framework

The ITRE draft report and ENVI draft opinion also propose to strengthen the Commission's proposal on the governance of the 2030 energy efficiency target.

→ **The ITRE draft report proposes to introduce binding national contributions as a complement to the binding EU target and it mandates Member States to use the result of the formula to set their national contributions** (Amendment 42). The draft report also suggests adding a new criterion in the formula, the greenhouse intensity of the Member State's economy[9] dubbed "FClimate". This new criterion has a similar weight as the other criteria in the formula.[10] The draft report also suggests setting binding national trajectories with two reference points, or milestones, for Member States to achieve in 2025 and 2027.

→ **The ENVI draft opinion proposes making the energy efficiency contributions binding and suggests that those contributions should be set according to the formula proposed in Annex I.** It also adds a mandatory reference point for Member States' trajectories of at least 65% by 2027 (Amendment 47).

CURRENT EED	EED RECAST PROPOSAL	ITRE DRAFT REPORT	ENVI DRAFT OPINION
AMBITION	At least -9% (PRIMES 2020)	At least -19% (PRIMES 2020)	
At least -32,5% (PRIMES 2007)	At least -36% FEC and -39% PEC (PRIMES 2007)	At least -43% FEC and -45,5% PEC (PRIMES 2007)	At least -45% FEC and -45% PEC (PRIMES 2007)
846 Mtoes FEC 1128 Mtoes PEC	787 Mtoes FEC 1023 Mtoes PEC	700 Mtoes FEC 911 Mtoes PEC	689 Mtoes FEC 919 Mtoes PEC
NATURE OF TARGET			
Indicative EU target, national indicative contributions	Binding EU target, national indicative contributions	Binding EU target and binding national contributions	Binding EU target and binding national contributions
GOVERNANCE MECHANISM			
Self-determined indicative trajectories, no benchmarks to set national contributions	Indicative formula with 4 criteria, gap filler mechanism	Mandatory formula with 5 criteria, binding linear trajectory and reference points in 2025 and 2027, gap filler mechanism	Mandatory formula, binding trajectory with reference point in 2027 of at least 65%, gap filler mechanism

Figure 2 - Overview of the ambition and governance of the 2030 energy efficiency target according to different proposals

The Coalition's perspective on the 2030 energy efficiency target

A level of ambition achieving at least the cost-effective energy savings potential

The Coalition welcomes the level of ambition for the 2030 energy efficiency target proposed in the ITRE draft report (at least 19% by 2030 both in primary and final energy). A study from Stefan Scheuer Consulting and Fraunhofer ISI[11] founds that **if all measures and investments that make economic sense are implemented**, the cost-effective potential stands at around **17%**. The study also showed that the technical potential for energy efficiency is even more significant, at around **23%**. The technical potential is achieved when all processes, equipment, and related infrastructure are upgraded with technically feasible energy efficient solutions.

Considering the increase in energy prices that the EU is experiencing since autumn, exacerbated by the Russian invasion of Ukraine, **the cost-effective energy savings potential was re-evaluated in a recent update of this study.**[12] Assuming a 30% increase in energy prices compared to 2030 projections (as observed with today's oil prices), the recently updated study found that the cost-effective potential increases to around **19%** (when energy prices increase, more energy efficiency measures become economically viable). If a doubling of energy prices compared to 2030 projections is assumed (while today's observed energy prices have tripled on average compared to 2030 projections), all technical potentials become economic. Therefore, the current surge in energy prices provides the economic incentive to rapidly scale up energy efficiency improvements and raise the 2030 EU energy efficiency target.

A robust and enforceable governance system

To ensure the accountability of Member States, **the binding EU energy efficiency target needs to be supported by binding national contributions**. The current indicative nature of national targets, the lack of clear national benchmarks and the little transparency in how national contributions are set and delivered by certain Member States, have made their enforcement extremely challenging. To ensure a fair distribution of effort, Member States **should determine their binding national contributions by applying the formula and using its result**. Additionally, clear milestones should be set during the period to the 2030 target to guarantee that savings are delivered overtime and are not planned at the last moment.

Figure 3 provides an overview of possible different governance systems of the energy efficient target from the weakest to the most stringent.

EU TARGET	NATIONAL CONTRIBUTIONS	FORMULA	TRAJECTORIES
Indicative	Indicative	Result indicative (acts as a benchmark)	Indicative
Binding	Indicative	Result indicative (acts as a benchmark)	Indicative
Binding	Binding	Result indicative (acts as a benchmark)	Indicative
Binding	Binding	Result binding using the four criteria	Indicative
Binding	Binding	Result binding using the four criteria	Binding milestones

Figure 3 - 2030 energy efficiency target governance categorised from the weakest (red) to the strongest option (dark green).

Endnotes

1. The obligation for Member States to set their contributions and their trajectories is set under the Governance Regulation (REGULATION (EU) 2018/1999)

2. COM 2012/27/EU, Article 3

3. Regarding the 2020 target, the most recent assessment of the Commission, based on Eurostat data, showed the EU's final energy consumption in 2019 was still 2.3 % above the linear trajectory to achieve the 2020 target of 1086 Mtoes and, for primary energy consumption, 1.8 % above the linear trajectory to achieve the 2020 target of 1483 Mtoes. Given the large impact of the COVID-19 pandemic on energy consumption, a recent assessment of the European Environment Agency finds that the target was reached in 2020 but warns that any likely rebound in energy consumption due to economic recovery will need to be counterbalanced by an even higher effort to improve energy efficiency.

4. SWD(2020) 176 final

5. European Commission Communication: "An EU-wide assessment of National Energy and Climate Plans"

6. For more information about the test run of the formula for each Member States, see Fraunhofer ISI & Stefan Scheuer (2021): Will the Fit for 55 package deliver on energy efficiency targets? A high-level assessment

7. Article 4, paragraph 2 point (e) highlights that other national circumstances affecting energy consumption, as the developments in a country's energy mix and the deployment of new sustainable fuels, shall be taking into account to set national contributions.

8. The corresponding numbers in absolute energy consumption can be found in figure 3.

9. The report provides the methodology to calculate this criterion for each Member State: "Fclimate shall be calculated for each Member State based on its three-year average greenhouse gas emissions in the energy sector per FEC or PEC index to the Union's three-year average over the 2017-2019 period."

10. The inclusion of a fifth criteria in the formula could lead to a situation where the sum of all national contributions are not equal to the EU target, creating the need for the application of a correction factor, set by the Commission, to share the remaining gap (whether positive or negative) between Member States. This would complexify the sequencing of setting national contributions.

11. See Fraunhofer ISI & Stefan Scheuer (2021): Will the Fit for 55 package deliver on energy efficiency targets? A high-level assessment

12. See Fraunhofer ISI & Stefan Scheuer (2022): Assessing the impacts of high energy prices on the economic potentials for energy savings in the EU

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.

Coalition members represent:

- more than 500 associations, 200 companies, 1,500 cooperatives
- 15 million supporters and 1 million citizens as members of cooperatives
- 2,500 cities and towns in 30 countries in Europe

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The coalition for energy savings
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