

Stefan Scheuer

Environmental &
Energy Policies
EU Affairs



Brussels, 31 March 2023

The new EU Energy Efficiency Directive – getting stronger

A high-level assessment of the target and its governance

By Stefan Scheuer and Ioana Bere

With the support of Deutsche Unternehmensinitiative Energieeffizienz e.V. (DENEFF) and the European Climate Foundation.



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Glossary

EED – the new Energy Efficiency Directive, consolidated text as made available to the Council’s Energy Working Party on 24th March 2023

FEC – final energy consumption

GR – [Governance Regulation](#)

NECP – National Energy and Climate Plans

PEC – primary energy consumption

REF2020 - [EU Reference Scenario 2020, Energy, transport and GHG emissions - Trends to 2050](#)



Executive Summary

A new era for energy policies is about to start. On the 10th of March 2023, EU law-makers achieved a deal for the recast of the Energy Efficiency Directive (EED).

The 2030 energy efficiency target has become more ambitious, responding to soaring energy costs and to the war in Europe. But it still falls short of what would make sense from a climate protection and responsible investor perspective.

But most importantly, the EU's 2030 target has become more focused and comes with a credible governance to reassure investors, businesses and citizens that it is much more serious this time around. Member States have new obligations vis-à-vis the EU target and to put in place energy efficiency measures that will be checked against delivery.

Implementation will have to be very fast to catch up with the cycle of National Energy and Climate Plans. It will require timely delivery by the Commission to work with the new benchmarks and to correct national contributions.

Not all countries are happy with the benchmarks set in the new EED for their national contributions. Those who think they did more in the past than others tend to feel disadvantaged. That was the case with the first EED, the 2018 revision and now again.

With a bit of distance, we hope that the perspective becomes clearer, that national energy saving efforts are not an altruism, but are bottom line services to lower costs for citizens and business and shield national interests from fossil fuel wars.

In a nutshell

The new EED has increased the 2030 energy efficiency ambition: the EU targets are set at 763 Mtoe final energy consumption and 992,5 Mtoe primary energy consumption, which is 11.7% below the Reference Scenario 2020. However, this remains still well below the cost-effective potential which kept increasing with higher energy prices.

The governance of the 2030 target for final energy consumption has been significantly strengthened. The binding character of the EU level target is manifested by legal obligations on the European Commission and Member States.

The EED comes now with a new gap-avoider tool: the Commission has to ensure that national contributions leave no gap to the EU target. In case of low ambition, Member States have to accept and apply a corrected contribution handed over by the Commission. A last-minute addition to the baseline used for the assessment of national contributions causes uncertainties about the functioning of the governance tools. But in our understanding, the impact will be limited.

Furthermore, a new gap-filler tool is added: the adequacy of national energy efficiency measures will be checked against delivery. Member States have to set an indicative trajectory. If a Member State is above the trajectory, it will be obliged to put in place additional energy efficiency measures.

The EU's target for primary energy demand is only indicative and the governance tools do not apply to it. It weakens energy efficiency policies targeting the whole energy system, including generation, storage and transmission.



Background

"This [the new Energy Efficiency Directive] will mean real change for the benefit of the climate and disadvantage of Putin", said rapporteur MEP Fuglsang after a political deal was found on the EU energy efficiency law.¹

The first Energy Efficiency Directive from 2012 and the revision of 2018 came with less pomp. The ambition of the 2020 and 2030 targets were far off the potential² and the target governance was missing. Not all Member States did take it seriously and the target achievement was all but certain. Most stakeholders relied on the legally binding annual energy savings obligations. After all, the 2020 target was achieved, but by accident: it was the Covid pandemic year.

The EED recast proposal from July 2021 came with more ambition and new governance tools to overcome past problems, boosted by the Green Deal and RePowerEU.

The 2030 target ambition proposed by the Commission, of 9% below Reference 2020 projections, moved a bit closer to the cost-effective potential³. But the goal post kept moving with energy prices further increasing, driving the potential up to 23%⁴. A national benchmark formula, which should be at the heart of any serious target governance, was put forward to allow setting and comparing national contributions in an objective manner⁵.

The legislators took 19 months to find a political agreement. In July 2022, the European Parliament adopted under the leadership of MEP Fuglsang its negotiation mandate. It included increasing the 2030 target to 14.5%, up from 9%, and making national contributions binding. In June 2022, the Council agreed under the French Presidency its general approach for a binding EU level target of 9% with indicative national contributions, but added a new mechanism to ensure that any gap to the EU target will be closed.

The inter-institutional negotiations between Parliament, Council and Commission, known as trilogues, started in autumn 2022 and closed on 10th of March.

On 24th March, a final text was provided by the Council secretariat to Member States, which is the basis for our analysis.

In this briefing, we will focus on the target article (Article 4 EED):

- the EU targets and national contributions (1); and
- their governance (2), including the formula used for calculating contributions and the uncertainty brought by the update of the 2020 Reference scenario.

¹ [MEP Niels Fuglsang on Twitter \(10 March 2023\)](#)

² The 2030 targets were set at 32.5%, but modelling at that time found that 40% could be achieved with investments that are cost-effective over their life-time (Fraunhofer ISI (2013), Analysis of a European Reference Target System for 2030)

³ Stefan Scheuer Consulting (Jan. 2022), [Input for the discussion on the EU 2030 target level for energy efficiency](#)

⁴ Fraunhofer ISI & Stefan Scheuer (2022), [Assessing the impact of high energy prices on the economic potentials for energy savings in the EU](#)

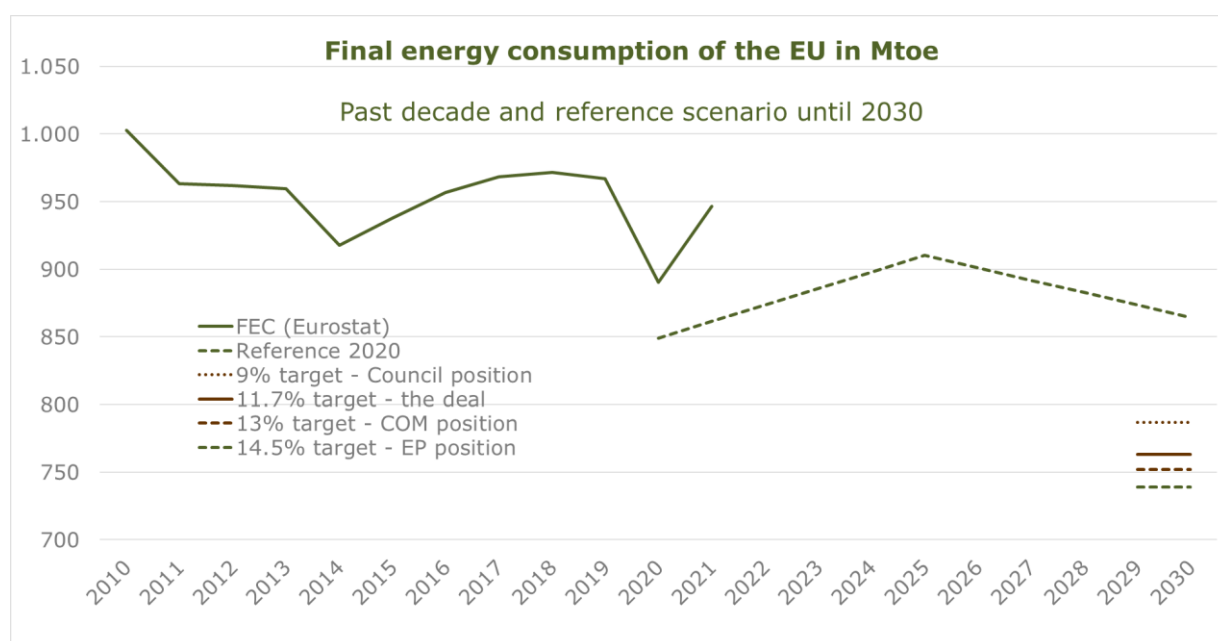
⁵ Fraunhofer ISI & Stefan Scheuer (2021), [Will the Fit for 55 package deliver on energy efficiency targets? A high-level assessment](#)



1. EU targets and national contributions

The EU target

The Parliament and Council settled for a 11.7% EU target compared to the Reference scenario 2020⁶. This means that the EU's final energy consumption (FEC⁷) stays below 763 Mtoe in 2030 and the EU's primary energy consumption (PEC) stays below 992.5 Mtoe (Article 4.1 EED).



It is important to note the difference between the EU FEC and PEC targets: only the FEC target is binding at EU level, while the PEC target is indicative which weakens energy efficiency policies targeting the whole energy system, including generation, storage and transmission.

The Commission had initially proposed a binding 9% target in its revision proposal, for both FEC and PEC, updating this value to 13% in the REPowerEU legislative proposals⁸. The starting negotiation position of the Council was a binding 9% target for FEC only, while the European Parliament was asking for a binding 14,5% for both FEC and PEC.

National contributions

The Parliament and Council agreed to an indicative national contribution for FEC only. Regarding PEC, Member States shall take efforts at the national level to contribute to the EU PEC indicative target. The indicative FEC contribution, together with an indicative trajectory, shall be submitted as part of the updated NECPs (Article 4.2 EED).

⁶ European Commission DG ENER (July 2021), [EU Reference Scenario 2020, Energy, transport and GHG emissions - Trends to 2050](#)

⁷ Final energy demand includes international aviation and ambient heat, and excludes energy consumed in blast furnaces.

⁸ European Commission (May 2022), [COM/2022/222 final](#)



The European Commission gives Member States a benchmark for setting their national contributions (Article 4.3 EED). The contribution must not be more than 2.5% above the value resulting from using the formula in Annex I (Article 4.4 EED)⁹. Further to that, Member States may need to accept a corrected contribution if necessary to avoid a gap to the EU target (Article 4.5 EED).

The Commission had initially proposed indicative national contributions for both FEC and PEC, explaining that Member States had opposed binding national targets in the public consultations and in other fora prior to Commission's proposal¹⁰. The starting position of the Council was an indicative national contribution for FEC, while the Parliament wanted binding national contributions for both FEC and PEC.

<u>The timetable of national contributions</u>	
30 Jun. 2023	Member States notify their indicative contribution (in Mtoe FEC for 2030) and indicative trajectory in the draft update of NECP (Article 4.2 EED and Article 14 GR).
30 Nov. 2023	Commission provides an update of the 2020 Reference scenario (Article 4.5 EED).
1 Feb. 2024	Member States may update their contributions considering the update of the 2020 reference scenario (Article 4.5 EED).

⁹ The formula uses four factors with equal weighting: early action, wealth, energy intensity and savings potential, to allocate to each country a specific share in achieving the EU level target.

¹⁰ [Explanatory memorandum](#) to the Energy Efficiency Directive recast proposal, COM(2021) 558 final (14 July 2021), page 20



2. How the governance works

The governance of the new Energy Efficiency Directive is made up of two mechanisms: the gap-avoider and the gap-filler. These apply only to the FEC and not to the PEC target.

The gap-avoider mechanism

The gap-avoider mechanism avoids a gap by design to the EU target, meaning that all national contributions add up to the EU target from the moment they are set up (Article 4.5 EED).

The gap-avoider is built around a set of obligations on the European Commission and on Member States:

- The Commission has to ensure that the sum of indicative national contributions does not leave a gap to the EU FEC target. Therefore, the Commission has been given the power to address Member States with a corrected national contribution based on the formula in Annex I of the EED and additional criteria. It must do so when the collective Member States' contributions do not add up to the EU target (Article 9.2 Governance Regulation);
- Member States which set an insufficient ambitious contribution receive a corrected contribution from the Commission. They are obliged to update their contribution, together with the indicative trajectory.
- Member States which set a contribution equal or more ambitious than the result of the formula in Annex I using the Reference 2020 benefit from a 'get-out' clause: they cannot be addressed by the Commission with a corrected contribution and thus do not participate in the gap-avoider mechanism (Article 4.5 paragraph 5 EED).

This gap-avoider mechanism comes from the Council's negotiation position, which also gives Member States a bigger role in determining their national contributions. The Parliament wanted to make the use of the formula in Annex I mandatory, thus ensuring that no gap could occur.

The updated 2020 reference scenario and how to use it

Before the Commission can apply the formula in Annex I to make its assessment and to address Member States with a corrected contribution, the Commission has to update the Reference 2020 scenario, using the latest Eurostat data. This update should happen at the latest by 30 November 2023 (Article 5.5 paragraph 2 EED). Subsequently, Member States can update their contributions latest by 1 February 2024.

The update of the Reference 2020 scenario was a last moment concession to those Member States who were concerned that the scenario is not reflecting their specific national circumstances and gives them a disadvantage.

But the update adds another layer of complexity to the gap-avoider mechanism, while it provides no guarantee that it will address those Member States' concerns, as intended.

Our understanding is that this 'get-out' clause cannot be reclaimed by Member States that will work with the updated Reference 2020, because:

- the 'get-out' clause (Article 4.5 paragraph 5 EED) does not mention the updated scenario, but "the formula in Annex I". If the co-legislators had the intention to open the "get-out" clause to the Member States using the updated scenario, they would



- have used a similar wording to Article 4.5 paragraph 3 EED - "formula defined in Annex I with the use of the updated reference scenario 2020";
- the formula in Annex I specifically refers to Reference 2020 and not the updated Reference 2020; and
 - the main objective of the gap-avoider, which is to ensure that the sum of national contributions do not leave a gap to the EU target, would not be achievable if both references, the 2020 and the future update, could be used.

This means that most likely, those Member States which appear to benefit from an update of the Reference Scenario 2020 will end up having to share the resulting gap to the EU target.

In setting the corrected contributions, the Commission will use the formula in the Annex I with the updated Reference 2020 scenario and it will also take into account three other elements: the gap towards the EU FEC target; the GHG intensity per GDP unit in 2019 of those Member States; and the 2019 GDP of those Member States (Article 4.5 paragraphs 1 and 2).

The timetable of the gap-avoider mechanism

Latest by 1 Mar. 2024	Commission addresses a corrected contribution to Member States. (Article 4.5 EED and Article 9 GR).
30 Jun. 2024	Member States who received a corrected contribution have to update their contribution in their final updated NECPs (Article 4.5 EED and Article 14 GR).

The gap-filler mechanism

The gap-filler mechanism ensures that any gap to the EU target is closed during the implementation period (Article 4.6 EED). It works in conjunction with the Governance Regulation:

- the Commission does an assessment of progress towards the EU efficiency target (Article 29.1 Governance Regulation) by 31 October 2025 and every two years after, and concludes if there is a gap or not;
- in case there is a gap, the Commission shall assess who are the Member States above their indicative trajectory and notify them (Article 29.1 Governance Regulation);
- Member States that are above their indicative trajectory have the obligation to take additional measures within one year from Commission's notification, in order to get back on track. They shall explain in the NECP progress report the measures intended to close the gap and the amount of energy savings expected (Article 17 Governance Regulation);
- the Commission must assess if the measures are sufficient. If they are not, the Commission can propose measures and exercise its powers at the EU level (Article 32.2 Governance Regulation).



The timetable of the gap-filler mechanism

31 Oct. 2025	Commission assesses progress based on the latest Eurostat data (in principle 2023 data) and notifies those Member States who are above their indicative trajectory (Article 4.6 EED and Article 29 GR).
Latest by 31 Oct 2026	Member States notified by Commission take additional measures to get back on track (Article 4.6 EED).
31 Oct. 2027	Commission assesses progress based on 2025 Eurostat data and notifies those Member States who are above their indicative trajectory.
Latest by 31 Oct. 2027	Member States notified by Commission take additional measures to get back on track.
31 Oct. 2029	Commission assesses progress based on 2027 Eurostat data and notifies those Member States who are above their indicative trajectory.
Latest by 31 Oct. 2030	Member States notified by Commission take additional measures to get back on track.



3. The benchmark for setting national contributions

The table below presents the results from applying the formula in Annex I.

We have used the factor values as provided by the Commission on 17th January 2023 to the Energy Working Party of the Council.

Outcome of run of the formula in annex I EED recast deal												
	Factors					REF2020		Contribution, before correction factor*		Contribution after correction factor*		
	F _{earlyaction}	F _{Wealth}	F _{Intensity}	F _{Potential}	F _{Total}	FEC in Mtoe	% below REF2020	FEC in Mtoe		% below REF2020	FEC in Mtoe	
Austria	1,00	1,27	1,10	0,82	1,05	24,56	12,3%	21,55	Austria	13,0%	21,36	
Belgium	0,94	1,18	1,18	0,86	1,04	33,07	12,2%	29,04	Belgium	12,9%	28,78	
Bulgaria	0,83	0,51	1,26	0,89	0,87	9,98	10,2%	8,96	Bulgaria	11,0%	8,88	
Croatia	0,50	0,64	1,21	1,49	0,96	6,64	11,2%	5,89	Croatia	12,0%	5,84	
Cyprus	0,70	0,90	1,11	1,05	0,94	2,04	11,0%	1,82	Cyprus	11,8%	1,80	
Czechia	0,81	0,92	1,16	0,84	0,93	22,92	10,9%	20,41	Czechia	11,7%	20,24	
Denmark	0,39	1,29	0,90	0,50	0,77	15,38	9,0%	13,99	Denmark	9,8%	13,87	
Estonia	0,68	0,82	1,24	0,50	0,81	2,87	9,5%	2,60	Estonia	10,3%	2,57	
Finland	1,00	1,11	1,50	1,18	1,20	24,10	14,0%	20,73	Finland	14,8%	20,55	
France	0,70	1,05	0,95	1,19	0,97	118,06	11,3%	104,67	France	12,1%	103,75	
Germany	1,00	1,22	0,96	0,99	1,04	178,73	12,2%	156,93	Germany	13,0%	155,56	
Greece	0,50	0,67	1,04	0,86	0,77	16,23	9,0%	14,78	Greece	9,8%	14,65	
Hungary	1,00	0,71	1,20	0,86	0,94	18,37	11,0%	16,34	Hungary	11,8%	16,20	
Ireland	0,37	1,50	0,61	1,02	0,87	11,12	10,2%	9,98	Ireland	11,0%	9,89	
Italy	0,49	0,97	0,90	0,90	0,82	102,78	9,5%	92,98	Italy	10,3%	92,17	
Latvia	0,88	0,68	1,42	0,50	0,87	3,71	10,2%	3,34	Latvia	11,0%	3,31	
Lithuania	0,93	0,81	1,11	0,85	0,92	4,80	10,8%	4,29	Lithuania	11,6%	4,25	
Luxembourg	0,66	1,50	1,26	0,86	1,07	3,13	12,5%	2,74	Luxembourg	13,3%	2,72	
Malta	1,00	1,00	0,64	0,64	0,82	0,77	9,6%	0,69	Malta	10,4%	0,69	
Netherlands	0,55	1,29	1,01	0,58	0,86	43,18	10,0%	38,85	Netherlands	10,8%	38,51	
Poland	0,88	0,71	1,20	1,23	1,01	66,02	11,8%	58,24	Poland	12,6%	57,73	
Portugal	0,50	0,78	0,96	0,74	0,75	14,84	8,7%	13,55	Portugal	9,5%	13,43	
Romania	0,61	0,66	0,84	0,98	0,77	25,25	9,1%	22,97	Romania	9,8%	22,77	
Slovakia	1,00	0,70	1,21	0,93	0,96	9,61	11,2%	8,53	Slovakia	12,0%	8,46	
Slovenia	0,53	0,87	1,26	0,67	0,83	4,79	9,7%	4,33	Slovenia	10,5%	4,29	
Spain	0,50	0,92	0,92	0,59	0,73	72,41	8,5%	66,22	Spain	9,3%	65,65	
Sweden	1,00	1,20	1,18	1,00	1,10	29,02	12,8%	25,30	Sweden	13,6%	25,08	
EU27						864,41		769,70			763,00	
Target		763,00	*Correction factor (not further explained in the briefing, technical tool related to the way how Factors are capped)						0,991			

An update of the Reference Scenario 2020 changes the baseline not only for the EU, but also for each country. The overall EU target is set as an absolute level of FEC and will not change.

In case the update shows that:

- FEC declines faster in country A than the EU average, country A would have a larger share to contribute to the EU target, and
- FEC declines slower in country B than the EU average, country B would have a smaller share to contribute to the EU target.

In case a) we would expect country A to stick to the formula in Annex I, which uses the Reference scenario 2020, and get out of the gap-avoider mechanism.

In case b) we would expect country B to update its contribution using the update Reference Scenario 2020, though it would then be part of the gap-avoider mechanism and will receive a corrected contribution from the Commission.

