

## COMBINED EVALUATION ROADMAP / INCEPTION IMPACT ASSESSMENT

This combined evaluation roadmap/Inception Impact Assessment aims to inform citizens and stakeholders about the Commission's work in order to allow them to provide feedback on the intended initiative and to participate effectively in future consultation activities. Citizens and stakeholders are in particular, invited to provide views on the Commission's understanding of the current situation, problem and possible solutions and to make available any relevant information that they may have, including on possible impacts of the different options.

|   |   |
|---|---|
| <b>TITLE OF THE INITIATIVE</b>                | Review of the Directive 2012/27/EU on energy efficiency |
| <b>LEAD DG – RESPONSIBLE UNIT – AP NUMBER</b> | DG ENER Unit C3 [PLAN/2020/6834]                        |
| <b>LIKELY TYPE OF INITIATIVE</b>              | Legislative proposal                                    |
| <b>INDICATIVE PLANNING</b>                    | June 2021   |
| <b>ADDITIONAL INFORMATION</b>                 |   |

**This combined roadmap/Inception Impact Assessment is provided for information purposes only. It does not prejudice the final decision of the Commission on whether this initiative will be pursued or on its final content. All elements of the initiative described by this document, including its timing, are subject to change.**

### A. Context, Evaluation, Problem definition and Subsidiarity Check

#### Context

Efficient use of energy is key to achieve the European Green Deal<sup>1</sup> objectives. It allows ensuring cost-effective delivery of the EU's current and future climate ambition and contribute to other EU policy objectives. Energy Efficiency First<sup>2</sup> is a guiding principle of EU energy policy, and is highlighted in the European Green Deal as a key means to decarbonise the energy system by 2050. The EU has set headline targets to increase energy efficiency by 20% for 2020 and by at least 32.5% for 2030. These targets are embedded in the Energy Efficiency Directive (EED)<sup>3</sup>.

The Commission announced in the European Green Deal that it would present an impact-assessed plan to increase the EU's greenhouse gas emission reductions target for 2030 to at least 50% towards 55% in a responsible way, and committed to "*review and propose to revise, where necessary, the relevant energy legislation by June 2021*", including the EED<sup>4</sup>.

In this context, the Commission is currently preparing its impact-assessed plan for 2030 (to be published by September 2020). This plan is expected to provide indications on the necessary contribution of energy efficiency and renewable energy by 2030 to enable the achievement of the higher climate ambition for 2030. This would potentially require revising the EED.

Other ongoing and planned Commission initiatives will have an impact on the possible revision of the EED, notably the assessment of National Energy and Climate Plans (NECPs), the Renovation Wave and the EU Strategy for Energy System Integration, the review and a possible revision of the Renewable Energy Directive, the Effort Sharing Regulation and the EU Emissions Trading System Directive (ETS).

#### Evaluation

The EED was adopted in 2012 to promote energy efficiency across the EU, by removing barriers and overcoming market failures that impede efficiency in energy supply and use in different sectors, with a view

<sup>1</sup> COM(2019) 640 final

<sup>2</sup> Definition provided in Article 18(2) of the Regulation, EU(2018)1999 on the Governance of the Energy Union and Climate Action

<sup>3</sup> Directive 2012/27/EU

<sup>4</sup> Annex to the Green Deal Communication, page 2

to achieving the EU headline energy efficiency targets for 2020.

It was subject to a limited revision in 2018<sup>5</sup> as part of the Clean Energy for all Europeans package<sup>6</sup>, which, amongst others, added the 2030 target (and a clause on a possible, upwards revision of that target)<sup>7</sup>, extended the energy savings obligation for 2021-2030 and streamlined some of its aspects. It also introduced a requirement for a further review of the Directive by 2024. Furthermore, in line with the Better Regulation principles, the Governance Regulation streamlined the EED planning and reporting provisions via the introduction of integrated NECPs and integrated Reports.

The main goal of the present evaluation is to assess the effectiveness of the framework of the EED since its entry into force in 2012<sup>8</sup>, except for those elements already evaluated as part of the Clean Energy for all Europeans package, and to establish to what extent the objectives of the policy intervention have been achieved.

This evaluation will also assess whether the framework of the EED is fit to overcome remaining regulatory and non-regulatory barriers, and market failures, which do not allow energy efficiency to be fully part of the energy systems. It will also assess whether there are shortcomings, gaps and weaknesses for the existing measures to deliver on their expected results.

These elements will offer the basis for what needs to be streamlined and strengthened in order to a) address any remaining ambition gap, in case the national contributions in the final NECPs submitted by Member States do not add up to achieve the existing 2030 targets, and b) deliver on the potential contribution of energy efficiency to a higher greenhouse emissions reduction target.

Overall, the evaluation aims to assess the policy intervention based on the evaluation criteria: effectiveness, efficiency, relevance, coherence and EU added value, in line with the Better Regulation guidelines. The findings and recommendations of the evaluation will feed into policy options of the impact assessment for possible further amendments of the EED as outlined above.

#### **Problem the initiative aims to tackle**

The initiative is driven by a political aspiration to achieve greenhouse gas reductions of 50% and towards 55% in a responsible way by 2030, in order to support Europe's progress towards climate neutrality by 2050 as announced in the European Green Deal communication and presented in the Commission proposal for a regulation on the European Climate Law<sup>9</sup>.

It is also important to underline that progress in achieving the 2020 targets has been slowing down due to the increasing energy consumption trend since 2014, partly because of insufficient measures implemented at national level<sup>10</sup>. While the Covid-19 crisis is likely to result in a decrease in energy consumption in 2020, there are concerns that recovery would lead to a rebound in energy consumption, barring further efforts in energy efficiency.

The ongoing impact assessment of the 2030 Climate Target Plan is expected to assess how climate and energy policies would need to be revised in a coherent manner including for energy efficiency, in order to reach the more ambitious greenhouse gas emissions reduction target by 2030. In this context, it would need to be seen whether the existing framework of the EED and measures put in place would be sufficient.

The NECPs were developed to collectively achieve the agreed EU targets for 2030 (e.g., share of renewable energy of at least 32%, achieving energy efficiency of at least 32.5%, and greenhouse gas reductions of at least 40%). The assessment of the draft plans in 2019 indicated a substantial ambition gap in the collective contributions of energy efficiency. The assessment of the final NECPs (expected after the summer 2020) will indicate whether the contributions to which Member States eventually committed to add up to the existing EU energy efficiency targets for 2030. In case there is a persistent ambition gap, additional EU-wide measures would be required in line with the Governance Regulation, including through a

<sup>5</sup> Directive (EU) 2018/2002

<sup>6</sup> <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/clean-energy-all-europeans>

<sup>7</sup> Cf. Article 24(15) and Article 3(6) of the revised EED

<sup>8</sup> Article 24(15) of the EED requires to carry out a general evaluation by 28 February 2024.

<sup>9</sup> COM(2020) 80 final

<sup>10</sup> [https://ec.europa.eu/energy/sites/ener/files/report\\_of\\_the\\_work\\_of\\_task\\_force\\_mobilising\\_efforts\\_to\\_reach\\_eu\\_ee\\_targets\\_for\\_2020.pdf](https://ec.europa.eu/energy/sites/ener/files/report_of_the_work_of_task_force_mobilising_efforts_to_reach_eu_ee_targets_for_2020.pdf)

possible revision of the EED. Other initiatives, for example, new Ecodesign Working Plan 2020-2024 and the “Renovation Wave” initiative (expected by September 2020)<sup>11</sup> would also contribute to reaching the target

This evaluation will review the adequacy of the Directive in the light of the already existing energy efficiency targets and policies and measures set out in the NECPs to achieve them. The findings of the evaluation of the existing framework of the EED will provide insights on the remaining economic, environmental, behavioural and organisational barriers, which will help identify additional solutions.

#### **Basis for EU intervention (legal basis and subsidiarity check)**

The legal basis is Article 194 TFEU. In the context of the European Green Deal and in view of achieving a climate-neutral EU by 2050, the European Council of December 2019<sup>12</sup> recognised “*the need to put in place an enabling framework that benefits all Member States and encompasses adequate instruments, incentives, support and investments to ensure a cost-effective, just, as well as socially balanced and fair transition, taking into account different national circumstances...*”.

As mentioned above, the EED was adopted in 2012 as the key instrument for reducing the EU's primary and final energy consumption in 2020 and it was recently partially revised in view of the 2030 time horizon.

The experience from the implementation of the EED indicates that having a common EU framework reduces costs, increases benefits from the internal market and allows national policy-makers to learn from each other. The EED effectively complements and catalyses national measures. Policies adopted at EU level reflect the close interrelation of policy areas of climate change, security of supply, sustainability, environment, internal market, and economic development. The EED establishes a common framework while leaving discretion for Member States to set concrete policies and actions that contribute to the EU energy efficiency targets.

### **B. Objectives and Policy options**

The **overall objective** is to ensure that energy efficiency sufficiently contributes to the achievement of a higher EU climate ambition of at least 50% and towards 55% for 2030 in a responsible way, and also other objectives such as security of supply, resource-efficiency, circular economy, competitiveness and jobs and growth, and reducing pollution amongst others. The initiative also aims to strengthen those parts of the EED that could address any remaining ambition gap for energy efficiency in the NECPs, to ensure the achievement of the current level of the EU energy efficiency target for 2030.

In addition, the initiative will contribute to the decarbonisation objectives together with other European Green Deal Initiatives, notably the Renovation Wave, the EU Strategy for Energy System Integration and Digitalisation Strategy, Zero Pollution Action Plan, Circular Economy Action Plan, especially in the context of actions identified in the Commission's Recovery Plan<sup>13</sup>. It will also contribute to the EU Strategy for Adaptation to Climate Change by preparing the EU to future climate through the co-benefits of energy efficiency measures in climate resilient housing and in decreasing water use associated with energy supply.

Furthermore, the initiative aims to address the outstanding regulatory and non-regulatory barriers in order to deliver additional energy savings in all sectors of the economy, considering insufficient progress at national level so far and the possible need to increase the efforts to match the level of ambition of a higher climate target. The findings of the EED evaluation will provide insights on remaining barriers, market failures and allow identifying potential measures to address the problems and causes outlined above, including by increasing synergies with the other initiatives.

Taking into account the findings of the evaluation, also the outcome of the impact assessment of the 2030 climate target plan and the assessment of the final NECPs, the following **policy options** will assess which elements of the EED and to what extent need to be adapted to achieve the objectives outlined above. The baseline for this analysis will take into account the contributions of the final NECPs.

<sup>11</sup> The Renovation wave and the related Long Term Renovation Strategies have a longer term vision up to 2050 for decarbonisation of the building stock.

<sup>12</sup> <https://www.consilium.europa.eu/media/41768/12-euco-final-conclusions-en.pdf>

<sup>13</sup> COM(2020) 456 final

### **Option 1 – No policy change (baseline scenario)**

The baseline scenario analyses the impacts of continued implementation of the existing framework without changes to the EED. Member States had to transpose and implement the EED by 5 June 2014 and the amended provisions by 25 June 2020 (with the exception for Articles 9-11 and Annex VIIa due by 25 October 2020).

### **Option 2 – Non regulatory measures**

The introduction of non-regulatory alternative policy instruments will be considered. This could encompass training, information dissemination and awareness raising campaigns, financing measures etc. Additional guidance and support measures could be considered to further improve the implementation, and to reinforce the application of the energy efficiency first principle, which could allow achieving further energy savings across different sectors.

### **Option 3 – Revision of the EED**

This option would explore revising a number of provisions of the EED in order to address the problems and causes outlined above. The scope and magnitude of the revision would largely depend on the nature of any shortfall identified by the evaluation and the extent of efforts needed by energy efficiency to:

- i) Address a gap to the existing 2030 targets (subject to the assessment of the final NECPs),
- ii) Contribute to the implementation of other European Green Deal initiatives, and
- iii) Contribute to the achievement of a more ambitious EU climate target for 2030 (subject to the outcome of the impact assessment of the 2030 climate target plan).

Provisions that would potentially be considered (subject to the evaluation) concern renovation of public buildings, public procurement, energy audits, heating and cooling and recovery of waste heat, energy services and skills amongst others. This option may be combined with Option 2 above.

This option would thus include a series of sub-options to analyse the impacts of the revision of the EED of varying degrees of ambition, from a targeted revision of a limited number of key provisions to a comprehensive revision covering a wide range of energy-using activities and mechanisms.

## **C. Preliminary Assessment of Expected Impacts**

### **Likely economic impacts**

The revision of the EED, if leading to additional energy savings, is likely to have positive impacts on economic growth and investments, and increasing the EU competitiveness, reduced fossil fuel imports, changes in the fuel mix and enhanced energy security, as well as distributional and social impacts. The overall impact of the costs is not expected to be negative given that new capital expenditures will be offset by reduced energy bills. If wider impacts are considered (e.g. reduction of health costs) the costs could be even lower. Nonetheless, it is clear that new actions will require substantial investments. Efficiency improvements, which can also occur in the generation, conversion and transmission of energy, can reduce the need for primary energy inputs for energy production and the end-use demand for specific fuels. In doing so, energy efficiency affects the fuel and technology mix of a region or country. In addition, end-use changes, i.e. changes at the end of the energy supply chain, positively affect the energy security at all earlier stages of the value chain such as international imports. Demand reduction as a result leads to an increased energy security.

In addition, impacts on businesses include increased sectoral competitiveness, promotion of technology leadership and business opportunities (including for SMEs) for energy efficient technologies including for export, increased innovation/research and technological development, stronger digital economy, creation of new business models and a stronger SME growth. From the perspective of energy systems, it will have an impact on costs and energy prices, investment needs and climate resilience of the renovated or newly installed assets.

The impact of the COVID-19 crisis would most likely reduce the energy consumption in 2020, but the subsequent recovery is expected to bring its level up to the previous trends unless additional action is taken. The initiative would help ensure that the recovery could be decoupled from the rebound in energy consumption and direct the recovery investments to energy savings measures, especially where they have positive impacts on local economies.

|  |
|--|
| <b>Likely social impacts</b>   |
| <p>Greater energy efficiency efforts are likely to lead to positive direct impacts for employment in the sectors linked to energy efficiency (such as construction) provided the necessary skills are available. Employment impacts on energy supply sector would depend on the overall impact on energy demand.</p> <p>Energy efficiency measures also have the potential to facilitate social inclusion and reduce energy poverty provided they are properly targeted and financially supported in cases where relatively high upfront investment is needed.</p>   |
| <b>Likely environmental impacts</b>  |
| <p>Energy efficiency is a key driver to reduce greenhouse gas emissions. Thus, the higher energy efficiency levels would result in reduced greenhouse emissions, in particular in sectors that are not covered by the EU Emission Trading System. Given that energy consumption reduction efforts focus on fossil fuels, air pollution is also expected to be reduced leading to lower health, environmental and economic costs. Air pollution (mainly derives from fossil fuel and biomass combustion) causes every year more than 400,000 premature deaths in Europe, and harms human health, ecosystems, agricultural crops and the built environment with massive economic costs.</p> <p>Energy efficiency measures would also result in healthier ecosystems and preserved natural resources, such as water, or raw materials linked to the extraction and conversion of fossil fuels. It could foster wider benefits of the circular economy, if taking a full life cycle perspective to the related carbon emissions, for example by considering impacts of the construction or renovation of buildings activities together with energy efficiency impacts that those activities would bring. Extraction and energy conversion of fossil fuels (energy resources) for energy production causes considerable pollution on air, water and soil along the whole value chain. A reduction in overall energy and resource use or energy and resource demand saves natural resources and reduces waste.</p> |
| <b>Likely impacts on fundamental rights</b>  |
| <p>The initiative is in line with Article 37 of the Charter of Fundamental Rights of the European Union, which requires that a high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development.</p>   |
| <b>Likely impacts on simplification and/or administrative burden</b>   |
| <p>The initiative will likely reduce administrative burden thanks to streamlined provisions and greater synergies with the other legislation acts, which are also subject to review in view of achieving an increased ambition for 2030.</p> <p>The evaluation of the EED will indicate which parts of the legislation could be streamlined, strengthened and simplified. The 2018 revision of the EED only looked into some articles (covering target, energy efficiency obligation schemes and alternative measures, metering and billing) as it was a targeted action, to reflect a higher energy efficiency objective for 2030.</p>  |
| <b>D. Evidence base, Data collection and Better Regulation Instruments</b>   |
| <b>Impact assessment</b>   |
| <p>The aim of this impact assessment is to provide information on whether and how amending the EED to address any remaining ambition gap to the EU energy efficiency target of 32.5% for 2030 and in view of a higher climate ambition for 2030, which would require more efforts in energy efficiency.</p> <p>It will build on the impact assessment carried out for the comprehensive plan to increase the EU 2030 climate target to at least 50% and towards 55% in a responsible way<sup>14</sup>.</p> <p>In addition, findings of the evaluation will help identify the needed measures to address the objectives outlined above.</p>   |
| <b>Evidence base and data collection</b>   |
| <p>As a key input, the Commission will use a dedicated technical assistance study commissioned to the</p>  |

<sup>14</sup> See [Inception Impact Assessment on 2030 Climate Target Plan](#)

external consultant. The study will cover both - the evaluation and the impact assessment in line with the better regulation rules.

Set of economic modelling tools also will be used. It may include global energy and macro-economic models such as the POLES, GEM-E3, and E3ME model allowing looking into overall socio-economic and environmental (notably on air quality) impacts of the transition.

For the EU detailed modelling, the Commission will use a toolbox of sectoral models that allow looking at impacts across the energy system and the whole of the economy. This constitutes out of the PRIMES and PRIMES REMOVE model for the energy and transport sectors. Other relevant studies on assessing energy efficiency policies will also be used.

This, together with extensive stakeholder input (see next point) will further constitute the evidence base for this impact assessment.

**Consultation strategy**

A wide stakeholder consultation will be organised to seek feedback from different stakeholder groups (notably Member States, businesses including SMEs, industry, NGOs, academia and citizens) on the performance of the EED and to what extent the EED has attained its objectives, and what improvements are needed to ensure that the framework remains fit to reach the agreed the 2030 targets and a higher ambition for 2030 and beyond.

The Commission intends to launch an online public consultation in the autumn 2020 in line with the Commission Better Regulation rules. It would contain multiple choice and open questions covering a wide range of issues on the performance of the EED (ex-post assessment) and also seeking views on possible options for revising the Directive (ex-ante assessment).

Stakeholders will also be consulted 2020 in the EED Expert Group bringing together Member States and a wide range of experts representing various stakeholder groups and sectors with the aim to discuss possible options for revising the EED. Dedicated workshops on specific topics identified will also be organised with the relevant stakeholder groups to complement the findings of the evaluation and to contribute to the impact assessment. Feedback received from stakeholders on the other European Green Deal Initiatives notably the Renovation Wave Initiative and the EU Strategy for Energy Sector Integration with relevance to the EED, will also be taken into account.

A synopsis report will be prepared to summarise the different contributions and views received during the consultation process. The report will be published on the website once consultation activities will be closed.

**Will an Implementation plan be established ?**

In case of the amendments to the EED, an implementation plan will be established as the Commission might consider the need for updating the guidance notes, and will check the transposition and implementation of any newly amended provisions in the Member States.