

# Article 7 of the Energy Efficiency Directive 3.0

How to maximise the energy efficiency opportunity for climate neutrality

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#### Introduction

The European Commission has proposed a new objective for the EU to be climate neutral by 2050.<sup>2</sup> Reaching this goal requires significantly boosting the 2030 climate target, currently set at a 40% reduction in greenhouse gas (GHG) emissions compared to 1990 levels. The Commission therefore presented the 2030 Climate Target Plan to cut GHG emissions by at least 55%.<sup>3</sup> The Parliament reacted shortly after the publication of the plan, calling for a more ambitious climate target of 60%.<sup>4</sup>

Either target level would require significant additional policy action. The 2030 Climate Target Plan recognises this need and reviews options, preparing for the broad overhaul of climate and energy policies that the Commission will propose in 2021.

This revamp will impact the energy efficiency legislation, which was updated in 2018 with the adoption of the clean energy package. The Commission suggests raising the EU's 32.5% headline energy efficiency target for 2030 in the Energy Efficiency Directive (EED).<sup>5</sup> To achieve a more ambitious headline target, it outlines several options to reinforce energy efficiency measures. One option is to increase "the level of ambition of [the] energy savings obligation

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<sup>&</sup>lt;sup>2</sup> European Commission. (2020, March). Proposal for a Regulation of the European Parliament and the Council establishing the framework for achieving climate neutrality and amending regulation (EU) 2018/1999 (European Climate Law). COM/2020/80 final. <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020PC0080">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020PC0080</a>

<sup>&</sup>lt;sup>3</sup> European Commission. (2020, September a). Stepping up Europe's 2030 climate ambition – Investing in a climate-neutral future for the benefit of our people. COM(2020) 562 final. https://ec.europa.eu/clima/sites/clima/files/eu-climate-action/docs/com\_2030\_ctp\_en.pdf

<sup>&</sup>lt;sup>4</sup> European Parliament. (2020). Amendments adopted on 8 October 2020 on the proposal for a regulation of the European Parliament and of the Council establishing the framework for achieving climate neutrality and amending regulation (EU) 2018/1999 (European Climate Law). https://www.europarl.europa.eu/doceo/document/TA-9-2020-0253\_EN.html

<sup>&</sup>lt;sup>5</sup> European Union. (2018). Directive (EU) 2018/2002 of the European Parliament and of the Council of 11 December 2018 amending directive 2012/27/EU on energy efficiency. https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32018L2002&from=EN

under Article 7 [of the EED] on energy savings obligation."<sup>6</sup>

This measure is of particular importance. While Member States are not legally required to meet their national 2030 energy efficiency targets — as stated in Article 3 of the EED — Article 7 guarantees a minimum level of energy savings. This paper provides a rationale for increasing the contribution of EED Article 7 in line with more ambitious energy efficiency and climate goals, as well as recommendations on how to do this.

### Why reinforce EED Article 7?

#### 1. Article 7 ensures a minimum level of energy savings

The 2030 Climate Target Plan presents different scenarios compatible with a 55% climate target. These new scenarios assume different policy mixes, but they all involve larger reductions in final energy consumption than in the scenarios used to set the current energy efficiency headline target and the Article 7 energy savings obligations. The Commission therefore suggests a significant increase of the 2030 energy efficiency headline target.

#### **About Article 7**

Under Article 7 of the EED, Member States must trigger a certain amount of energy savings among energy end users. For the forthcoming 10-year period (2021-2030), this amount corresponds to new annual energy savings of 0.8% calculated on the basis of annual final energy consumption.

These savings must be the result of national policy measures, which complement and go beyond EU measures such as product standards. The savings reported by Member States need to be additional to what would have happened in the absence of the policy measure.

For an introduction to Article 7 of the EED, please refer to:

- European Commission. (2019, 25 September). <u>Commission</u> <u>Recommendation on transposing</u> <u>the energy savings obligations</u> <u>under the EED.</u> (EU) 2019/1658.
- The Coalition for Energy Savings. (2019). <u>Article 7 Energy</u> <u>Efficiency Directive: new period,</u> <u>new savings.</u>
- The <u>ENSMOV</u> project, which aims to facilitate and expand sharing of knowledge and experience amongst Member States for the implementation of policies under Article 7.

<sup>&</sup>lt;sup>6</sup> European Commission. (2020, September b2). Commission staff working document. Impact assessment accompanying COM(2020) 562 final. SWD(2020) 176 final. Part 2. p.119. <a href="https://ec.europa.eu/clima/sites/clima/files/eu-climate-action/docs/impact\_part2\_en.pdf">https://ec.europa.eu/clima/sites/clima/files/eu-climate-action/docs/impact\_part2\_en.pdf</a>

<sup>&</sup>lt;sup>7</sup> European Commission. (2020, September b1). Commission staff working document. Impact assessment accompanying COM(2020) 562 final. SWD(2020) 176 final. Part 1, p.50. <a href="https://ec.europa.eu/clima/sites/clima/files/eu-climate-action/docs/impact\_en.pdf">https://ec.europa.eu/clima/sites/clima/files/eu-climate-action/docs/impact\_en.pdf</a>

#### 2030 energy efficiency headline target: from 32.5% to 36%-37%?

The current EU energy efficiency headline target for 2030 is a reduction of at least 32.5% compared to projections of the expected energy use in 2030.8 The scenarios presented in the 2030 Climate Target Plan as compatible with a 55% GHG reduction target involve a final energy consumption cut of 36%-37%.9 This would require substantial additional effort compared with what Member States have pledged in their national energy and climate plans. 10

With such a revamped energy efficiency headline target, the EU's absolute final energy consumption would decrease from 989 million tonnes of oil equivalent (Mtoe) in 2018 to 790-802 Mtoe in 2030 — against 846 Mtoe with the current energy efficiency headline target. The additional energy savings that are required to meet the new target surpass the annual energy consumption of Czechia and Portugal combined. An increase from a 32.5% to a 36%-37% energy efficiency headline target involves a step change in the pace of energy consumption reduction.<sup>11</sup> It would, however, not exhaust the cost-effective potential of energy efficiency, which was presented in the 2016 EED impact assessment and recently reassessed by Fraunhofer ISI.12

The Commission recognises that a "rigorous enforcement of existing legislation on energy efficiency is necessary but insufficient" 13 to reach more ambitious climate and energy efficiency goals. It describes a number of policy options, including a reinforcement of Article 7 of the EED. The Commission does not provide details about how the reductions in energy consumption should be brought about, noting that more specific impact assessments will be carried out in the coming months.

Article 7 has been expected to deliver more than half of the energy savings required to reach the 2030 energy efficiency headline target. 14 It is instrumental to achieving the 32.5% target and should be reinforced in view of reaching a more ambitious target. Indeed, while the energy efficiency headline target is not binding on Member States, Article 7 guarantees a minimum level of energy savings.

<sup>&</sup>lt;sup>8</sup> This target is also translated in absolute terms (846 Mtoe for EU27 in final energy, 1,128 Mtoe in primary energy). Source: European Union. (2019, March). Decision amending directive 2012/27/EU on energy efficiency for the withdrawal of the United Kingdom from the EU. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CONSIL%3APE\_19\_2019\_REV\_1

<sup>&</sup>lt;sup>9</sup> European Commission. (2020, September a). p. 9. Note: Primary energy consumption would achieve savings of 39%-41%.

<sup>&</sup>lt;sup>10</sup> Member States' contributions have proved insufficient to reach the existing EU target, as stated in European Commission. (2020, September c). An EU-wide assessment of national energy and climate plans: Driving forward the green transition and promoting economic recovery through integrated energy and climate planning. COM(2020) 564 final. https://eur-lex.europa.eu/legalcontent/EN/TXT/?qid=1600339004657&uri=COM:2020:564:FIN

<sup>11</sup> With a 36% target, annual reductions in energy consumption will need to be four times greater over the 2018-2030 period than we have seen over the period since EU energy consumption peaked (2005-2018). Source: Own calculation comparing Eurostat data and energy savings to be achieved with a 36% target, divided by relevant number of years.

<sup>&</sup>lt;sup>12</sup> European Commission. (2016, November). Impact assessment accompanying the document proposal for a directive of the European Parliament and of the Council amending directive 2012/27/EU on energy efficiency. SWD/2016/0405 final. Part 1, p.17. https://eurlex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016SC0405; and Brugger, H., Eichhammer, W., and Dönitz, E. (2019). Study on Energy savings scenarios 2050. Fraunhofer ISI. https://www.isi.fraunhofer.de/en/competence-center/energiepolitikenergiemaerkte/projekte/energy-saving-scenarios-2050.html

<sup>&</sup>lt;sup>13</sup> European Commission. (2020, September a). p.19

<sup>&</sup>lt;sup>14</sup> European Commission. (2016, November). Part 1, p.18 and p.114.

### 2. Article 7 secures new and increasingly ambitious national energy efficiency policy measures

Article 7 has triggered the development and reinforcement of energy efficiency policy measures at a national level. These are essential to overcome the well-documented market and behavioural change barriers to efficiency actions, and to prompt investments in efficient technologies.

Before the EED came into force in 2012, only five Member States had mandatory energy efficiency obligation (EEO) schemes on energy utilities in place. <sup>15</sup> Now, 15 Member States and the UK have EEO schemes delivering energy savings, with more in development. Member States also use a variety of other policy measures to fulfil their Article 7 obligations, including subsidy and grant schemes, tax rebates, voluntary agreements, behaviour change programmes, regulatory measures, and energy and CO<sub>2</sub> taxes. <sup>16</sup> In some cases, Member States have stepped up the ambition of existing policies. This is the case in France, for example, which has substantially increased the energy savings of its EEO scheme over time. <sup>17</sup>

During its evaluation of Article 7, the Commission highlighted the role of Article 7 in mobilising the private sector and creating a market for energy efficiency products and services. The Article "addresses a wide range of market and regulatory failures and can, in particular, be instrumental for making energy efficiency services and investments a business case." It also "allows ensuring the stability to investors that in turn helps unlock the needed financing for implementing the energy efficiency measures." <sup>18</sup>

### 3. Article 7 can ensure complementarity between EU and national policies

The measures put in place by Member States under Article 7 work hand in hand with EU-wide policy measures which provide:

- A baseline of standards beyond which further action can be taken (ecodesign, building codes).
- Information to aid decision making (labelling, audits).
- Improvements to the economics of energy efficiency investments (energy and carbon pricing).
- A source of revenue to help fund energy efficiency investments, particularly in low-income and deprived rural households (energy and carbon pricing).

Article 7 policy measures can go further than EU measures via standards, information and pricing. The measures could also focus on overcoming other market failures or barriers through

<sup>&</sup>lt;sup>15</sup> IEA. (2017). Market-based Instruments for Energy Efficiency. OECD/IEA, Paris.

<sup>&</sup>lt;sup>16</sup> ENSMOV. (2020a). Snapshot of Energy Efficiency Obligation Schemes in Europe (as of end 2019). <a href="https://ensmov.eu/snapshot-of-energy-efficiency-obligation-schemes-in-europe-as-of-end-2019/">https://ensmov.eu/snapshot-of-end-2019/</a>. <a href="https://ensmov.eu/snapshot-of-alternative-measures-in-europe-article-7-eed-as-of-end-2019/">https://ensmov.eu/snapshot-of-alternative-measures-in-europe-article-7-eed-as-of-end-2019/</a>

<sup>&</sup>lt;sup>17</sup> Ministère de la Transition écologique. (2020, November). *Dispositif des Certificats d'économies d'énergie*. https://www.ecologie.gouv.fr/dispositif-des-certificats-deconomies-denergie

<sup>&</sup>lt;sup>18</sup> European Commission. (2016, November). p.19-20

financial support schemes, behaviour change programmes and regulations.

EEO schemes combine many of these elements. These regulations on utilities oblige them to deliver energy savings. Utilities have the flexibility to meet the obligation through financial subsidies or behaviour change projects across different sectors and fuels. EEO schemes can therefore guarantee energy savings and ensure a focus on cost-effective delivery. <sup>19</sup>

Table 1 presents what we think are the most impactful energy efficiency options mentioned in the 2030 Climate Target Plan and the newly released Renovation Wave strategy. A reinforcement of Article 7 complements the other measures outlined by the Commission. Indeed, national policy measures under Article 7 have a key role in overcoming non-price barriers, such as split incentives, lack of information, access to finance and behavioural barriers that hinder the deployment of energy efficiency solutions. More details about the complementarity of Article 7 and EU-wide policy measures are provided in Annex 1.

Table 1. Selected energy efficiency policies from the Commission 2030 Climate Target Plan and the Renovation Wave strategy

Туре	Instrument	
Standards	Product standards (ecodesign).  New vehicle emissions targets for manufacturers.  Mandatory minimum energy performance standards for existing buildings.	
Carbon pricing	Extension of the scope of the EU Emissions Trading System to road transport and buildings or equivalent measure.  Revision of the Energy Taxation Directive.	
Planning	Enhanced planning for regional/municipal heating and cooling.	
Information	<ul> <li>Reform of energy performance certificates.</li> <li>Extension of energy audit requirements to non-residential buildings.</li> </ul>	
Financing	Update of state aid rules.	
Savings obligations	<ul> <li>Extension of the renovation obligation on public buildings beyond central government buildings to all public administration levels.</li> <li>Reinforcement of Article 7 of the EED.</li> </ul>	

Article 7 guarantees a minimum level of energy savings. Unless national energy efficiency targets are made binding on Member States during the upcoming EED revision, it will remain the cornerstone of energy efficiency policies. Indeed, the policy measures put in place by Member States to fulfil their obligations under Article 7 play a key role to mobilise the private sector. Article 7 and EU-level measures are complementary, suggesting that reaching a reinforced 2030 energy efficiency goal would require boosting both types of measures.

<sup>&</sup>lt;sup>19</sup> For a review of EEO schemes in the EU, see Rosenow, J. and Bayer, E. (2017). Costs and benefits of energy efficiency obligations: A review of European programmes. *Energy Policy* 107. 53-62. 10.1016/j.enpol.2017.04.014.

<sup>&</sup>lt;sup>20</sup> European Commission. (2020, October a). A Renovation Wave for Europe – greening our buildings, creating jobs, improving lives. COM(2020) 662 final. <a href="https://ec.europa.eu/energy/sites/ener/files/eu\_renovation\_wave\_strategy.pdf">https://ec.europa.eu/energy/sites/ener/files/eu\_renovation\_wave\_strategy.pdf</a>. This strategy aims to at least double the annual energy renovation rate of buildings by 2030 and to foster deep energy renovations.

<sup>&</sup>lt;sup>21</sup> Gillingham, K., Newell, R. and Palmer, K. (2009). Energy efficiency economics and policy. *Annual Review of Resource Economics* 2009 1:1, 597-620. https://www.annualreviews.org/doi/pdf/10.1146/annurev.resource.102308.124234

#### Recommendations

The Commission should propose an upgrade of Article 7 of the EED as part of the 2021 legislative package and ensure synergies between Article 7 and other policy measures. The legislative proposal should aim to include a number of measures highlighted in Table 2.

#### Table 2. Legislative recommendations for a potential Article 7 of the EED upgrade



Increase the energy savings obligation in line with the 2030 and 2050 goals by:

- Setting an additional obligation on Member States, starting as soon as possible.
- Encouraging actions with long lifetimes.



Increase the reliability of energy savings estimates from Member States by:

- Setting up a compliance mechanism.
- Creating a public scrutiny board.
- Encouraging greater use of "metered savings."



#### Ensure complementarity between Article 7 and carbon pricing measures by:

- Modifying the treatment of taxation measures under Article 7.
- Directing revenues from carbon pricing to energy efficiency support schemes.



#### Ensure complementarity between Article 7 and the Renovation Wave by:

 Promoting synergies between mandatory minimum energy performance standards for renovation and Article 7.



Align eligibility of individual actions under Article 7 with the 2050 climate goal by:

Ensuring that subsidies for fossil fuel-using technologies are not eligible.

### 1. Increase the energy savings obligation in Article 7 of the EED in line with the 2030 and 2050 goals

To reach a GHG emissions reduction target of at least 55%, the EU needs more ambition in Member States' Article 7 energy efficiency policies. These additional activities should have an impact after 2030 to ensure that the EU is on track with its 2050 climate neutrality objective.

• The Commission should propose raising the level of ambition in Article 7. By the time a revised EED is transposed, the 2021-2030 obligation period will already be well under way. It is nevertheless possible to set an additional obligation on Member States, starting in as soon as possible. The level of the obligation should be sufficient to bridge the gap to a reinforced 2030 energy efficiency headline target. To encourage an immediate increase in the ambition of Member States' policy measures, the Commission should signal that energy savings from actions throughout the 2021-2030 period would be eligible for the additional obligation achievement.

For this additional obligation, the Commission should **propose a different accounting method to encourage actions with long lifetimes**. Currently, Member States can only report energy savings that take place during the Article 7 obligation period, which seriously undervalues long-term savings compared with shorter-term measures, especially towards the end of each obligation period. For example, if equipment with a lifetime of 20 years was installed in 2029, only 2 of the 20 years of energy savings would be counted against the Article 7 obligations. One solution would be for legislation to allow Member States to account for the full lifetime of individual actions. This will encourage deeper building renovations, in line with the Renovation Wave objective. With such a system, the Article 7 obligations <u>must</u> be amended upward to reflect the fact that Member States can book higher energy savings from long-lived energy efficiency actions. To take account of the increasing uncertainty associated with energy savings over time, a discount factor could be applied, meaning that eligible energy savings would decline year on year from individual energy efficiency actions, as is the case in the French White Certificate programme.

### 2. Increase the reliability of energy savings estimates reported by Member States

In an analysis published in October 2020, the Commission reports that 12 Member States are not on track to achieve their 2012-2020 Article 7 obligation. This analysis only considers the energy savings reported by Member States. In a 2016 report for DG Energy, experts found "credibility issues in relation to the eligibility, additionality, materiality and double counting" for some policy measures notified under Article 7, posing "a risk to the delivery of the expected energy savings." This suggests that the situation is likely to be worse than has been reported by Member States. <sup>24</sup>

 The Commission should propose setting up a compliance mechanism for Member States and the Commission to identify potential breaches of Article 7 and take corrective actions well before the 2030 target deadline expires.<sup>25</sup>

 $\underline{\text{https://ec.europa.eu/energy/sites/ener/files/documents/final report evaluation on implementation art. 7 eed.pdf}$ 

Note: In 2019, the Commission and Member States acknowledged the need for "a proper measurement and verification of reported energy savings." See European Commission. (2019, January). Report of the work of the task force on mobilising efforts to reach the EU energy efficiency targets for 2020. p.6.

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

http://energycoalition.eu/sites/default/files/20200911 Article%207%20EED corrected%20version%20September%202020.pdf

EU energy efficiency directive (EED) - evaluation and review.

 $\underline{ https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12552-Review-of-Directive-2012-27-EU-on-energy-efficiency/feedback? \underline{p\_id=8284993}$ 

<sup>&</sup>lt;sup>22</sup> Seven Member States (Bulgaria, Croatia, Czechia, Lithuania, Luxemburg, Portugal, Romania) will very likely not achieve the required amount of energy savings by end of 2020, if they do not take additional actions. Another five (Estonia, Greece, Slovenia, Spain, Sweden) are unlikely to achieve the required amount of energy savings without additional actions. Source: European Commission. (2020, October b). 2020 assessment of the progress made by Member States towards the implementation of the Energy Efficiency Directive 2012/27/EU and towards the deployment of nearly zero-energy buildings and cost-optimal minimum energy performance requirements in the EU in accordance with the Energy Performance of Buildings Directive 2010/31/EU. COM(2020) 954 final. p.6. https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1602695747015&uri=COM:2020:954:FIN

<sup>&</sup>lt;sup>23</sup> Forster, D., Kaar, A. L., Rosenow, J., Leguijt, C., and Pató, Z. (2016). *Study evaluating progress in the implementation of Article 7 of the Energy Efficiency Directive*. Final Report: Report for DG energy, p. 119.

<sup>&</sup>lt;sup>24</sup> For an analysis by stakeholders, see Coalition for Energy Savings. (2020). *Energy Efficiency Directive Article 7, National progress and outlook on the energy savings obligation.* 

<sup>&</sup>lt;sup>25</sup> See proposal by ClientEarth: European Commission. (2020). Feedback received on:

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- The Commission should **create a public scrutiny board** looking at Member States' measurement, verification and evaluation of reported energy savings. The board should aim at improving the accuracy and consistency of energy savings estimates across the EU and in individual Member States. Best international experience teaches that evidence-taking at open proceedings can lead to continuous improvement in energy efficiency programmes and more accurate estimates of impacts. The proceedings and reports of this board should be transparent and open to public comment. The board could review individual Member States' monitoring and verification protocols and evaluation efforts, identifying problems and best practices across the EU and publishing an annual assessment of the credibility of energy savings reported by Member States under Article 7.
- The Commission should **encourage greater use of "metered savings"** where appropriate to estimate energy savings by proposing the use of standardised *ex post* measurement and verification protocols. The use of metering can improve the accuracy of estimates and drive "real" as opposed to "paper" savings, by focusing the attention of programme participants on outcomes (energy saved) as opposed to actions (e.g., installation of equipment). For example, the energy savings from building renovations depend on the quality of fabric and equipment installation, the operation and maintenance of equipment and the behaviour of occupants, all of which will be reflected in metered energy consumption. Where *ex ante* "deemed savings" methods continue to be used, a minimum level of on-site inspections should be undertaken to better assure the quality of building renovations and enable corrective action where necessary.

### 3. Ensure complementarity between Article 7 and carbon pricing measures

The Commission intends to propose a reinforcement of carbon pricing measures at EU level. It is aware that this "does not address all barriers to the deployment of low and zero emissions solutions" and notes that "complementary policy actions" are needed to ensure that incentives align, to trigger further investments in clean energy technologies and infrastructure, or to overcome financing difficulties for low-income households. <sup>27</sup> Considering the prevalence of behavioural and non-price barriers to end-use efficiency investments, we conclude that the Commission should consider carbon pricing as the complementary policy measure – not the other way around. Carbon pricing can improve the return on investment for consumers implementing energy efficiency actions, making the achievement of Article 7 obligations easier. It also provides a useful revenue stream for Member States which can reinvest in energy efficiency programmes. Some Member States have used energy and carbon taxation measures to comply with their Article 7 obligation. Many of these taxation measures are not new and have not increased in ambition over time, which puts a question mark over real impact during the 2014-2020 period. <sup>28</sup> Member States have sometimes estimated the impact of these measures by

<sup>&</sup>lt;sup>26</sup> Programme managers already use these methodologies to monitor energy savings in the industry sector. With the deployment of smart meters, collecting data in the residential and service sector will become easier. For examples of innovative methodologies, see SENSEI. (2020). Experience and lessons learned from pay-for-performance (P4P) pilots for energy efficiency. https://senseih2020.eu/publicdeliverables/

<sup>&</sup>lt;sup>27</sup> European Commission. (2020, September a). p.14.

Rosenow, J., and Scheuer, S. (2019). Closing the loopholes: Assessment of the potential impact of tax measures on energy savings claimed under Article 7 of the EED. Regulatory Assistance Project. <a href="https://www.raponline.org/knowledge-center/closing-loopholes-assessment-impact-tax-measures-claimed-energy-savings-eed/">https://www.raponline.org/knowledge-center/closing-loopholes-assessment-impact-tax-measures-claimed-energy-savings-eed/</a>

using elasticity analysis from other countries. It is difficult to assess the accuracy of these savings estimates.

- Carbon pricing generates a revenue stream for the EU and national governments to invest in energy efficiency schemes. It provides the means for public authorities to help those consumers least able to pay for energy efficiency improvements. The Commission should propose to direct revenues from carbon pricing schemes like the EU Emissions Trading System to energy efficiency support schemes, especially those targeting low-income and disadvantaged rural households. These households are disproportionally affected by carbon prices and less able to make the required investments.<sup>29</sup> Redirecting carbon revenues will improve the fairness and effectiveness of carbon pricing schemes.<sup>30</sup>
- The Commission should propose **modifying the treatment of taxation measures** under Article 7. A number of options are available, not all of which are mutually exclusive.
  - 1. Exclude all energy-related taxation measures from the new obligations. This would neatly separate the role of energy pricing in internalising the carbon costs of energy production and consumption from the role of Article 7 policies in tackling other barriers and market failures. This would also fit well with the EU-wide efforts to extend and reinforce carbon pricing across the EU, making it part of the baseline upon which Article 7 should deliver.
  - 2. Tighten rules for the baseline upon which taxation measures deliver savings through a revision of the Energy Taxation Directive.
  - 3. Strengthen the measurement rules related to energy savings from taxation measures. At the moment, the measurement and verification requirements for taxation measures are significantly less onerous than for other policy measures, with estimates of the elasticity of demand (often from studies in other Member States) being the only information needed. In order to claim energy savings from taxation measures, Member States could be required to provide independently peer-reviewed assessments of their impacts on investment decisions and user behaviour, taking into account interactions with other complementary policy measures. This would bring the assessment of taxation measures in line with the requirements for other policy measures.
  - 4. Limit "elasticity only" assessments of energy savings to the use of short-run elasticity estimates and assign lifetimes of one year to all savings estimated in this way. If combined with a more ambitious energy savings obligation and a new accounting framework in which lifetime savings can be reported (see point 1), this would reduce the relative importance of poorly evidenced taxation measures in meeting the energy savings obligation.

<sup>&</sup>lt;sup>29</sup> Sunderland, L., Jahn, A., Hogan, M., Rosenow, J. and Cowart, R. (2020, May). *Equity in the energy transition: Who pays and who benefits?*.Regulatory Assistance Project. <a href="https://www.raponline.org/knowledge-center/equity-in-energy-transition-who-pays-who-benefits/">https://www.raponline.org/knowledge-center/equity-in-energy-transition-who-pays-who-benefits/</a>

<sup>&</sup>lt;sup>30</sup> Wiese, C., Cowart, R., and Rosenow, J. (2018). Carbon leverage: Investing Europe's carbon revenues in energy efficiency.
Regulatory Assistance Project. <a href="https://www.raponline.org/knowledge-center/carbon-leverage-investing-europes-carbon-revenues-in-european-energy-efficiency/">https://www.raponline.org/knowledge-center/carbon-leverage-investing-europes-carbon-revenues-in-european-energy-efficiency/</a>

#### 4. Ensure complementarity between Article 7 and the **Renovation Wave**

The building sector has a large cost-effective potential to reduce emissions.<sup>31</sup> It is characterised by long investment cycles, meaning that there are limited "natural investment moments" to upgrade the building's performance. 32 It is therefore essential to combine standards (i.e., regulation which ensures a minimum level of efficiency for a new installation) with measures that increase the rate of renovation activity. The Commission intends to propose mandatory minimum energy performance standards as part of the review of the Energy Performance of Buildings Directive next year. These standards can set out a clear trajectory of improvements for individual buildings.<sup>33</sup> Policy measures put in place by Member States under Article 7 will help building owners achieve the standard. At the same time, having such standards will increase the take up of support schemes in Member States, making it easier to achieve Article 7 obligations.

The Commission should promote synergies between mandatory minimum energy performance standards for renovation and Article 7, including linking building renovation passports and measures under Article 7.

#### 5. Align eligibility of individual actions under Article 7 with the 2050 climate goal

Article 7 of the EED does not include or exclude certain technologies based on the fuel they use. Member States can, for example, claim energy savings from the replacement of an old oil boiler with a new, more efficient oil boiler, or the replacement of an old gas boiler with a gas-fired condensing boiler.<sup>34</sup> The installation of more efficient fossil-fuel boilers, supported by policy measures, has brought significant energy savings over the past decade. However, the EU should reassess the relevance of such interventions in view of its goal of reaching climate neutrality by 2050 and the declining role of natural gas in the energy mix.

The Commission should propose additional rules to ensure that subsidies for fossil fuel-using technologies are not eligible under Article 7.

<sup>&</sup>lt;sup>31</sup> European Commission. (2020, September a). p.8.

<sup>32</sup> CE Delft. (2020). Zero carbon buildings 2050 - Background report. p.33-35. Delft, The Netherlands. https://www.cedelft.eu/en/publications/2474/net-zero-buildings-2050

<sup>33</sup> Sunderland, L., and Santini, M. (2020). Filling the policy gap: Minimum energy performance standards for European buildings. Regulatory Assistance Project. https://www.raponline.org/knowledge-center/filling-the-policy-gap-minimum-energy-performancestandards-for-european-buildings/

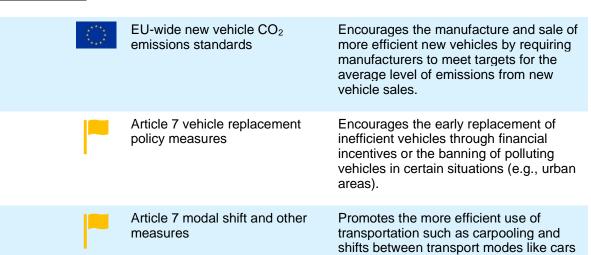
<sup>34</sup> According Annex V(2)(e) of the EED, energy savings resulting from the replacement of appliances regulated by ecodesign legislation, e.g., space heaters, may be counted only if they exceed the minimum ecodesign requirements, except in the case of early replacement. Source: European Commission. (2019, 25 September). Commission Recommendation on transposing the energy savings obligations under the EED. (EU) 2019/1658. https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1574946467190&uri=CELEX:32019H1658

## **Annex 1: Complementarity between EU-wide and Article 7 policy measures**

Policy measure		Role in energy efficiency policy framework
<u>Products</u>		
	EU-wide minimum standards (ecodesign)	Bans the sale of the least efficient appliances and equipment, cutting off the bottom end of the market across the EU.
	Article 7 product policy measures	Go beyond EU legislation owing to national circumstances. Examples include the early banning of the sale of incandescent lamps and noncondensing gas boilers, and accelerating replacement of inefficient products beyond autonomous market replacement rate through financial incentives.
<u>Buildings</u>		
	EU-wide requirement for building codes	Mandates the setting of minimum standards for new buildings and during major renovations of existing buildings.
	EU-wide requirement for long- term renovation strategy	Requires Member States to prepare strategies to transform their building stocks to being highly energy-efficient and decarbonised by 2050.
	Article 7 building renovation policy measures	Accelerates the rate of building renovation through labelling schemes, financial incentives, mandatory minimum performance standards (going beyond or faster than EU-wide requirements) and the provision of information and advice.
	Article 7 new building policy measures	Increases the proportion of new buildings built to more efficient standards than in building codes through financial incentives or local requirements.

to bikes or public transport.

#### **Transport**





Energy Solutions for a Changing World