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Consultation on the Review and the Revision of Directive 2012/27/EU on Energy Efficiency

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Introduction

This consultation aims to collect views and suggestions from stakeholders and citizens on the review and the revision of Directive 2012/27/EU on energy efficiency (Energy Efficiency Directive or EED), as partially amended in 2018 (Directive (EU) 2018/2002), foreseen by June 2021[1].

Energy Efficiency dimension of the Energy Union and the EED

Since the beginning, Energy Efficiency targets and policies have been one of the cornerstones of the EU Energy and Climate policy. Energy efficiency is one of the five dimensions of the Energy Union and will continue playing a key role in delivering the 2030 energy and climate framework supported by the governance process under the Governance Regulation[2]. In addition, Energy Efficiency First[3] has become a guiding principle of EU energy policy. To facilitate the operationalization of the principle, the Commission will issue a guidance.

The EED was adopted in 2012 to promote energy efficiency across the EU, to tap the existing energy saving potential with concrete measures, to remove barriers and overcome market failures that impede efficiency in energy supply and use in different sectors in order to achieve the EU headline energy efficiency targets for 2020.

The EED is part of the broader EU energy efficiency policy framework, which brings together other key instruments, such as the Energy Performance of Buildings Directive[4], as amended by Directive (2018/844 /EU) (EPBD), the Energy Labelling Regulation[5] and the Ecodesign Directive[6].

The EED is part of the overall decarbonisation policy framework and is interlinked with other energy and climate policy areas, notably, the Renewable Energy Directive (RED)[7], the EU Emissions Trading System (ETS) Directive[8] and the Effort Sharing Regulation[9] (non-ETS sectors), and security of supply and internal energy market. The EU level energy and climate targets are linked together in the Governance Regulation, which requires Member States to prepare their integrated National Energy and Climate Plans (NECPs) for 2030. In these NECPs Member States set out their national contributions to the EU level targets and policy objectives, and the intended policies and measures to implement them.

The EED was subject to a first, limited revision in 2018[10] as part of the Clean Energy for All Europeans package[11]. This revision sets the EU headline energy efficiency target for 2030 of at least 32.5% and

amended certain provisions[12], including adding a new requirement for a general review of the Directive and a possible, upwards revision of the target[13]. The transposition deadline for the amending Directive (2018/2002) was, in general on 25 June 2020, and, for Articles 9 to 11, on 25 October 2020.

The European Green Deal and the increased energy efficiency target for 2030

The Commission announced in the European Green Deal[14] 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. The Commission also committed to "review and propose to revise", where necessary, the relevant energy legislation by June 2021", including the EED.

In the impact assessment[15] accompanying the Communication on the Climate Target Plan[16] adopted on 17 September 2020, the Commission examined the effects on the economy, society and environment of reducing emissions by 50% to at least 55% by 2030 (compared to 1990 levels). The assessment also considered the mix of available policy instruments and how each sector of the economy could contribute to these increased targets.

To this end and based on this impact assessment, the Communication on the Climate Target Plan puts forward an emissions reduction target of at least net 55% by 2030 as a balanced, realistic, and prudent pathway to climate neutrality by 2050. It also highlights that, to achieve this level of greenhouse gas emission reductions, there is a need to significantly step up energy efficiency efforts (to 36-37% for final and 39-41% for primary energy consumption) by 2030 from the current headline target of at least 32.5%.

The assessment of Member States' national contributions to the current headline target[17] shows insufficient level of ambition in terms of energy efficiency. The gap is equal to 2.8 percentage points for primary energy consumption and at 3.1 percentage points for final energy consumption.

Trends in energy efficiency

In terms of energy consumption, transport is the sector with the highest energy consumption accounting for 34% of final energy consumption in 2018. It is followed by industry and the residential sectors with both representing 25%, and the services' sector representing 13% of final energy consumption. The remaining sectors including, agriculture, fishing and forestry represent 3% of final energy consumption. Following a gradual decrease between 2007 and 2014, energy consumption has started to increase in recent years, and is now slightly above the linear trajectory for the 2020 targets. This is mainly due to weather variations, notably colder winters in 2015 and 2016, but also increased economic activity, low oil prices and increase in transport. Energy intensity in industry has continued to improve by as much as 22% between 2005 and 2017 and energy savings have indeed helped offset parts of the impact of these increases.

The latest assessment of progress for 2018 shows a decline of 0.6% in primary energy consumption compared to 2017[18], but this pace of reduction is insufficient to meet the EU target in 2020.

To address the growing energy consumption since 2014, the Commission set up a dedicated Task Force in the summer 2018 to mobilise Member States' efforts to reach the EU energy efficiency targets for 2020[19].

Partial and preliminary data for 2020 indicate that the impact on energy consumption of the COVID-19 crisis is significant and, as a result, the 2020 energy efficiency targets may well be met. However, these reductions are not caused by structural changes. Moreover, it was clear before the crisis that the level of

energy efficiency efforts by Member States would not alone be sufficient to reach the 2020 targets. The subsequent recovery from the COVID-19 crisis is expected to lead to a return of energy consumption close to the pre-crisis levels.

Taking the above-mentioned elements into consideration and given the collective ambition gap of the national contributions proposed in the NECPs, the policies in place would have to be significantly increased in order to reach even the current 2030 targets

Review and the revision of the EED

The process will cover two elements:

- 1. The evaluation of those elements of the EED that were not revised in 2018.
- 2. The Impact assessment for a revision of the EED in view of meeting the increased 2030 GHG emissions reduction ambition.

Against this background, the Commission shall undertake a two-step process. As a first step, the evaluation will assess the existing framework of the EED since its entry into force in 2012[20], except for those elements already revised in 2018. It will assess whether the provisions are efficient, effective, and coherent with the broader EU legislative framework. It shall assess whether the EED is fit to overcome remaining regulatory and non-regulatory barriers, and market failures, whether there are some shortcomings, gaps and weaknesses for the existing measures or whether additional measures would be needed to deliver on their expected results.

The findings of the evaluation will then offer the basis for what needs to be streamlined, strengthened, added or changed in the EED in order (a) to address the remaining ambition gap to the 2030 EU energy efficiency targets and (b) to deliver the increased EU greenhouse emissions reduction target of at least 55% by 2030. The impact of these policy choices will be thoroughly analysed and the impact assessment will look at the impacts of the entire EED, irrespective of the articles that were revised in 2018.

The questions of this consultation are formulated to respect the requirements of the Better Regulation rules [21] and to support this two-step process of evaluation and impact assessment.

About you

*Language of my contribution	
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English Estonian

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michael.villa@smarten.eu

*Organisation name

255 character(s) maximum

smartEn, the European business association for demand-side flexibility

*Organisation size

- Micro (1 to 9 employees)
- Small (10 to 49 employees)
- Medium (50 to 249 employees)
- Large (250 or more)

*Country of origin

Please add your cour	try of origin, or that of your orga	nisation.	
Afghanista	n [©] Djibouti	Libya	Saint Martin
Aland Islan	nds Dominica	Liechtenstein	Saint Pierre and Miquelon
Albania	Dominican Republic	Lithuania	Saint Vincent and the Grenadines
Algeria	Ecuador	Luxembourg	Samoa
American Samoa	Egypt	Macau	San Marino
Andorra	El Salvador	Madagascar	São Tomé and Príncipe
Angola	Equatorial Guinea	Malawi	Saudi Arabia
Anguilla	Eritrea	Malaysia	Senegal
Antarctica	Estonia	Maldives	Serbia
Antigua an Barbuda	d Eswatini	Mali	Seychelles
Argentina	Ethiopia	Malta	Sierra Leone
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Islands

Aruba	Faroe Islands	Martinique	Sint Maarten
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Benin	Gibraltar	Morocco	Sudan
Bermuda	Greece	Mozambique	Suriname
Bhutan	Greenland	Myanmar	Svalbard and
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	Cape Verde		Indonesia		Oman		Turkmenistan
	Cayman Islands		Iran		Pakistan		Turks and
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0	Central African Republic	0	Iraq	0	Palau	0	Tuvalu
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0	Côte d'Ivoire	0	Kosovo	0	Réunion		Venezuela
0	Croatia	0	Kuwait		Romania	0	Vietnam

Cuba	Kyrgyzstan	Russia	Wallis and Futuna
Curação	Laos	Rwanda	Western Sahara
Cyprus	Latvia	Saint Barthélemy	Yemen
Czechia	Lebanon	Saint HelenaAscension andTristan daCunha	Zambia
DemocraticRepublic of theCongo	Lesotho	Saint Kitts and Nevis	Zimbabwe
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- *Does your organisation or institution primarily deal with OTHER issues than energy, climate and/or environmental issues?
 - Yes
 - No

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Part I – Questions of general nature

1. Assessing the implementation and the effectiveness of the Energy Efficiency Directive

Although the progress towards the achievement of the 2020 targets is still to be assessed, it is important to assess the effectiveness of the existing EED framework and to see how and to what extent the original

objectives were achieved in the context of the proposed higher climate ambition of at least 55% net emissions reduction by 2030.

1.1 To what extent do you agree with the following statement?

"The original objectives of the EED - to increase energy efficiency across the EU and to remove barriers and market failures in energy supply and energy use - are still relevant"?

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	No opinion
* Please select your answer	0	0	0	•	0	0

Please explain your answer:

The original objectives are still relevant and should be further expanded by taking into account the EE1st principle's effects on the system level. While relevant policies have already been defined to improve the efficiency of individual products and systems of products, now the effects on the entire energy system should be targeted.

Energy efficiency today is a static metric that does not allow for the incentivization of flexible usage patterns contributing to energy system integration.

A modern understanding of energy efficiency should incorporate actual usage patterns and the time-component of energy efficiency. This rewards the provision of dynamic energy services, such a demand-side flexibility. In practical terms this would imply that energy savings would value more when there is a supply trough. On the other hand, an increase in energy consumption should not be penalized when it is provided during a supply peak.

1.2 To what extent has the EED attained its objectives – to increase energy efficiency across the EU and to remove barriers and market failures in energy supply and energy use ?

	Not at all	To a little extent	To some extent	To a moderate extent	To a large extent	No opinion
* Please select your answer	0	0	•	©	0	0

Please explain your answer:

Decoupling economic growth from energy consumption has not been fully achieved in recent years. This is not only a European trend. As calculated by the IEA, in 2020, the global progress in energy efficiency results the lowest of the last decade, only a 1% of improvement. Efficiency improvements in the sectors with highest energy consumption rates are still not remarkable, in particular efficient consumption in reaction to (implicit and explicit) external signals is very limited across Europe.

Firm policy action is needed to ensure that climate neutrality is achieved cost-efficiently by ensuring renewable energy is consumed by all demand-side sectors in an efficient and flexible way. This will help reducing the cost of the clean energy transition while cutting emissions.

ultiple options are possible)
Binding nature of the measures of the EED (e.g. Article 5 on exemplary role for public buildings and Article 7 on energy savings obligation, etc.)
Significant flexibility left to Member States how to achieve various obligations under the EED
Existence of targets at the EU level
Requirement to set national targets
Requirement for planning policies and measures at national level
Wide scope of the EED covering both the energy supply and demand and targeting different market actors (e.g. energy suppliers and distributors, transmission grid operators, national regulators, enterprises and consumers)
Strong monitoring and reporting framework at EU level
Other (please specify)

*1.2.A Which factors helped the most to achieve the objectives of the EED? (m

1.3 To what extent could the below mentioned positive effects and outcomes (achieved to date) be associated with the EED since its entry into force in 2012? (use a rating scale of 1 to 5, where 1 = to a very little extent and 5 = to a very large extent)

	1	2	3	4	5	No opinion
* My country is more committed to energy efficiency	0	0	0	0	0	•
* There is greater awareness about energy efficiency and its role in achieving the overall climate objectives (i.e. Paris Agreement)	0	©	0	0	•	0
* More developed market of energy services	0	0	•	0	0	0
* Innovative technologies and techniques are more often used	0	0	•	0	0	0
* Greater availability of funding for energy efficiency investments	0	•	0	0	0	0
* Energy efficiency policies triggered more jobs and growth	0	•	0	0	0	0
* Energy efficiency led to an increased security of supply	0	0	•	0	0	0
* Energy efficiency led to lower energy bills	0	•	0	0	0	0
* Energy efficiency reduced energy poverty	0	•	0	0	0	0
* Energy efficiency increased resource efficiency	0	0	•	0	0	0

1.4 To what extent could the below mentioned negative effects be associated with the EED?

(use a rating scale of 1 to 5, where 1 = to a very little extent and 5 = to a very large extent)

	1	2	3	4	5	No opinion
* Obligations under the EED led to higher administrative burden besides costs	0	0	0	0	0	•
* Obligations under the EED led to disproportionately higher costs	•	0	0	0	0	0
* Enterprises have lost substantial revenues	•	0	0	0	0	0
* Obligations under the EED led to flawed investment decisions	•	0	0	0	0	0
* Obligations under the EED further complicated existing rules	•	0	0	0	0	0
* Guidance on implementation of the EED from national authorities to enterprises and consumers was unclear	0	0	0	•	0	0
* Obligations under the EED put strain on already limited national administrative resources	•	0	0	0	0	0
* Obligations under the EED led to too diverging implementation across Member States	0	•	0	0	0	0
* The benefits of the EED were unequally distributed among the population.	0	•	0	0	0	0

*1.5 Which measures stemming from the EED have been the most successful in your country in terms of energy savings and other benefits? (multiple options possible)

1	Energy	efficiency	obligation	schemes	introduced to	achieve	annual	energy
	savings	among fir	nal custom	ers				

- Obligation for public authorities to renovate buildings owned and used by the central government
- Obligation for public authorities to purchase only products, services and buildings with high energy-efficiency performance
- Obligation for large enterprises to carry out regular energy audits to learn about their energy consumption profile and identify energy saving opportunities

Support provided to small and medium-sized enterprises to carry out energy audits to learn about their energy consumption profile and identify energy saving opportunities
Measures introduced on awareness raising of energy efficiency and
promoting change of consumer behaviour
Deployment of individual meters and obligation to provide consumers with
better and more frequent information about their energy consumption
☐ Introduction of subsidies, support schemes and fiscal incentives for energy
efficiency
Increased efficiency in energy production/conversion, transmission and
distribution
Introduced measures to address regulatory barriers or split incentives in
national legal frameworks or administrative practices
None of the above
Other (please specify)
6 To what extent has the EED stimulated energy efficiency efforts in the
Illowing sectors?
I = to a very little extent and 5 = to a very large extent)

1.0 fo

(1

	1	2	3	4	5	No opinion
* Buildings	0	0	0	0	0	0
* Heating and cooling	0	0	0	0	0	0
* Industry	0	0	•	0	0	0
* Information and communication technologies (ICT)	0	•	0	0	0	0
* Transport	•	0	0	0	0	0
* Agriculture	0	0	0	0	0	•
* Services (i.e. commercial and public)	0	0	0	0	0	0

1.7 To what extent do the following factors represent barriers impeding the energy efficiency improvements across different sectors?

(use a rating scale of 1 to 5, where 1 = to a little extent and 5 = to a very large extent)

	1	2	3	4	5	No opinion	
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energy efficiency measures a	ong consume and support s				0		•	0	(
* Split incentives (different inte investors and users)	rests of owne	rs and tena	nts or	0	0	0	•	0	(
* Administrative burden associ investments	ated with ene	rgy efficiend	су	0	•	0	0	0	(
* Regulatory barriers preventing	ng energy effic	ciency inves	tments	0	0	0	•	0	(
* Lack of awareness among in investments in energy efficient	-	fitability of		0	0	0	•	0	(
* High transaction costs to fina measures	ınce the enerç	gy efficiency	,	0	0	•	0	0	(
* Limited access to capital for medium-sized enterprises to				0	0	0	•	0	(
* Lack of available skills to ma improvements	ke energy effi	ciency		0	0	0	•	0	(
* Low profitability and return or	n investment			0	0	•	0	0	(
* Complexity or hassle associated efficiency investments	ated with mak	ing energy		0	0	•	0	0	(
* Lack of fiscal measures and pricing and energy taxation to efficiency		•		0	0	•	0	0	(
To what extent were D proportionate to the	the costs	s associ ed energ	y savi	ngs a	and o	ther			
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* Please select your answer	0 0	0 0	0		•				
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have proven inappropriate?

1	NO NO
(No opinion
Ple	ease explain your answer:
	Following the Commission's proposal to increase the GHG emission reduction target from 40% to at least 55%, the energy efficiency target for 2030 should be increased accordingly. More importantly, the scope of the EED should be expanded to improve the efficiency of the entire energy system.
	0 In your view, does the EED have positive synergies with the Effort aring Regulation and the Emission Trading System? If yes, what are those?
([©] Yes
([®] No
(No opinion
Ple	ase explain your answer:
	1 In your view, does the EED have positive synergies with the Renewable ergy Directive? If yes, what are those?
(© Yes

Please explain your answer:

No opinion

No

Yes

The current EED does not build bridges with the RED. For example, although efficiency improvements achieved from on-site renewable generation are contemplated by Energy Savings Obligation Schemes, these are very limited and considered as alternatives or loopholes to the original objective to save energy. An efficient consumption should flexibly adapt to variable renewable generation. This would allow a cost-effective penetration of renewables and an efficiency increase of the overall energy system as investments in e.g. grid reinforcements would be avoided.

To strengthen synergies between EED and RED, smartEn recommends including in the RED revision a minimum target for demand-side flexibility of at least 10% of peak demand by 2030, to be applied in each Member State to increase system efficiency. A roadmap with milestones should be set by national governments to clarify how to achieve the 2030 target starting from a minimum reduction of 5% of peak demand through demand-side flexibility in 2025. Enshrining in EU law a target for demand-side flexibility would give political visibility to the contribution of demand-side flexibility to the cost-effective penetration of more variable renewables in the system while increasing the overall efficiency of the energy system.

*

1.12 In your view, does the EED have positive synergies with the Energy Performance of Buildings Directive? If yes, what are those?

- Yes
- No
- No opinion

Please explain your answer:

Synergies between EED and EPBD are more evident than with the RED as buildings are identified as relevant energy consuming sectors whose efficiency must be increased. However, it is important that all 3 legislations (EED, RED and EPBD) are complementary to: 1) foster the penetration of renewable electricity in buildings (along with other end-use sectors), 2) increase an efficient and flexible consumption in reaction to variable renewable generation and 3) increase the overall system efficiency due to avoided investments in unnecessary grid reinforcements, fuel costs and back-up (conventional) generation.

*1.13 To what extent has the EED contributed to an optimisation of the overall energy system (higher system efficiency)?

1000 character(s) maximum

This is a major failure of the current EED which should be corrected in the revised Directive. The revised EED should be coherent with the Energy System Integration Strategy to prioritise direct renewable electrification and foster its penetration in all end-use sectors which should efficiently adapt their energy consumption in a flexible way in reaction to prices and incentives received from the system they are connected to. This would enable buildings, transport and industry to efficiently adjust their energy consumption while not affecting negatively comfort, well-being, schedules and planned outputs. It will increase the efficiency of the system and reduce emissions cost-effectively. As estimated by the European Commission, at EU level, an efficient and flexible consumption would save up to €5 billion per year up to 2030.

*1.14 What are the main lessons learned from the implementation of the EED?

1000 character(s) maximum

We do not have an opinion/position on this point.

* 1.15 What is missing in the EED?

1000 character(s) maximum

The scope of the EED should be expanded to compensate missing dimensions of the current Directive in particular by:

- Applying the EE1st principle at system level. Energy efficiency improvements should not be limited to individual products or systems of products, but a broad energy system dimension covering the contribution of all end-users sectors should be prioritized to achieve climate neutrality cost-effectively,
- Activating the efficient and flexible consumption of all end-use sectors in reaction to signals received by the system (i.e. electricity/network prices and incentives from the participation to electricity markets). In this sense, buildings, industries and transport sectors should not be considered as isolated entities but flexible assets connected in the energy system they can interact with,

- Expand the scope of the Energy Savings Obligation Schemes (ESOS) to cover both efficient and flexible solutions.

2. Assessing possible options for revising the Energy Efficiency Directive (EED) in view of contributing to the 55% climate target for 2030 and addressing the ambition gap in the final NECPs

The impact assessment supporting the 2030 Climate Target Plan concluded that a contribution at the level of 36-37% for final energy consumption and 39-41% for primary energy consumption by 2030 would be required.

Therefore, the Commission has launched the EED revision process. The revision would reflect on the need to increase energy efficiency efforts to match the level of ambition of a higher 2030 climate target and would also aim to strengthen those parts of the EED, which could address the 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 revision will be vital to contribute to the implementation of the other European Green Deal Initiatives[22]. This is particularly relevant especially in the context of actions identified in the Commission's Recovery Plan[23], which need to be reflected in the national Recovery and Resilience Plans.

The EED revision also offers the important opportunity to address any shortfall in its effectiveness and efficiency. A notable case relates, for instance, to the need for a more consistent application of the Energy Efficiency First principle. Another important area is the need to address any outstanding regulatory and non-regulatory barriers for additional energy savings and emissions reduction throughout all economic sectors.

In this context, the revision of the EED will also have to consider whether the EED sufficiently addresses emerging opportunities and needs for energy efficiency improvements in sectors like ICT sector, as well as agriculture and water.

In addition to the results of the evaluation of the Directive, the impact assessment of the 2030 Climate Target Plan and the Commission assessment of the final NECPs will feed into formulation of policy options to identify which elements of the EED – and to what extent – need to be amended, and what needs to be added to achieve the objectives outlined above.

*2.1 Do you agree that energy efficiency should play a key role in delivering a
higher climate ambition (of at least 55% net) for 2030 and in view of achieving
the EU's carbon neutrality by 2050?

(0)	Agree
	Neutral

Disagree

No opinion

Please explain your answer:

An efficient and flexible consumption is the biggest source of GHG abatement from the energy sector, yet Governments' actions are still limited. Energy efficiency is crucial for achieving climate goals in the most cost-effective way. By fostering the efficient and flexible consumption of all end-use sectors, an increased system efficiency could be achieved while allowing an increased penetration of variable renewables. This would result in the achievement of climate neutrality in the most cost-effective way.

*2.2 Given the suggested increase in energy efficiency efforts by 2030, which
instruments of general nature should be considered to achieve the higher
energy efficiency ambition? (multiple options possible)

V	Making the "Energy Efficiency First" principle* a compulsory test in relevant
	legislative, investment and planning decisions
V	Strengthening the EED requirements
V	Setting a higher energy efficiency target at EU level for 2030
V	Setting energy efficiency targets in specific sectors of the economy
V	Stronger focus on implementation and on enforcement of the existing
	legislation at national and EU level
	Stronger focus on life-cycle efficiency and circularity.
	The EU should provide additional technical support to Member States
	Stronger focus on fiscal measures and incentives including through carbon
	pricing.
	Stronger focus on awareness raising of energy efficiency and behavioural
	change

*2.3 Do you agree that the EED should be strengthened by introducing new measures and stricter requirements in the context of a higher energy efficiency ambition for 2030?

0	Yes

No

No opinion

Please explain your answer:

Other (please specify)

- The system dimension of efficiency improvements should be strengthened. The EED should incentivize end-use sectors to improve their efficiency not as isolated entities, but connected in the system which can

^{*} Energy Efficiency First (in line with Article 2(18) of the Regulation (EU) 2018/1999), means taking utmost account in energy planning, and in policy and investment decisions, of alternative cost-efficient energy efficiency measures to make energy demand and energy supply more efficient, in particular by means of cost-effective end-use energy savings, demand response initiatives and more efficient conversion, transmission and distribution of energy, whilst still achieving the objectives of those decisions.

react to the prices and incentives received, and flexibly adapt their energy consumption,

- Beyond increasing renewable electrification in H&C, the EED should promote the contribution of electrified H&C as efficient and flexibility assets that can adjust their energy consumption in reaction to (explicit and implicit) signals received by the system and thus increase system efficiency.

*2.4 Could the EED be simplified while preserving its objectives and	if so,
how?	

7	1000 character(s) maximum
	We do not have an opinion/position on this point.
2.	5 With the suggested increase in ambition for energy efficiency for 2030
W	hat should the nature of the EU targets be?
	Indicative
	Binding
	Not specified
	Other (please specify)
	6 With the suggested increase in ambition for energy efficiency for 2030 hat should the nature of the national targets be?
	Indicative national targets (to contribute to EU energy efficiency target for 2030)
	■ Binding national targets
	Not specified
	Other (please specify)
2.	7 In which sectors would additional energy efficiency efforts be most
ne	eeded to achieve a higher energy efficiency ambition for 2030? (multiple
•	otions possible)
	Buildings
	Heating and cooling
	Industry
	Information and communication technologies (ICT)
	Transport
	Agriculture
	Services (i.e. commercial and public)
	Other (please specify)

Should the following measures be conbition? e a rating scale of 1 to 6, where 1 = stron							gree)
	1	2	3	4	5	6	No opinio
* Strengthening the renovation obligations for public buildings	0	0	0	0	0	•	0
* Strengthening energy efficiency requirements for public procurement	0	0	0	0	•	0	0
* Requiring that local authorities (above a certain size) develop an energy efficiency action plan with measurable impact indicators	0	0	0	0	•	0	0
* Requiring that large enterprises implement certain energy efficiency improvements identified in energy audits	0	0	0	0	•	0	0
* Requiring that small and medium-sized enterprises are offered free energy audits	0	0	•	0	0	0	0
* Extending the requirement on frequent consumption information from electricity and thermal energy to also cover gas and roll-out remotely readable gas meters	•	0	0	0	0	0	0
* Establishing sector specific goals or measures addressing sectors for which the energy efficiency potential is higher (e.g. services, data centres, energy-intensive industries)	0	0	0	•	0	0	0
* Strengthening the requirements for efficiency in energy transformation, transmission and distribution	0	0	0	0	0	•	0
* Strengthening the requirements for using energy performance contracting in renovation of public buildings	0	0	0	0	•	0	0
* Introducing or extending fiscal measures and incentives, including carbon pricing and energy taxation	0	0	0	•	0	0	0
* Other (please specify)	0	0	0	0	0	0	0

2.9 Should the following measures in the heating and cooling policy area be considered in order to achieve more effectively the decarbonisation objectives?

(use a rating scale of 1 to 6, where 1 = strongly disagree and 6 = strongly agree)

	1	2	3	4	5	6	No opinion
* Member States should introduce specific energy efficiency targets for the heating and cooling sector to ensure that energy consumption in this sector is sufficiently taken into account	0	0	0	0	•	0	0
* Fossil fuels in heating systems (in buildings and district heating) should be gradually phased out with a faster phasing out of the most polluting ones	0	0	0	0	0	•	0
* Fossil fuel heating system should be banned for new buildings whenever technical feasible	0	0	0	0	0	•	0
* Member States should unbundle the management of the generation and distribution heat network	0	0	0	0	0	0	•
* Allow public support for heating systems only to non- fossil fuel technologies	0	0	0	0	0	•	0
* The recovery of waste heat from heating and cooling (air-conditioning) systems in individual buildings should be promoted	0	0	0	0	0	•	•
* Specific requirements for utilization of waste heat and waste cold should be set for industry and services	0	0	0	0	0	•	0
* Requiring district heating and cooling operators to prepare long-term plans to improve their energy efficiency in terms of primary energy intensity energy	0	0	0	0	0	•	0
* Member States should facilitate local and district approaches to policy and infrastructure planning and development in heating and cooling	0	0	0	0	0	•	0
* Other (please specify)	0	0	0	0	0	0	•

PΙ	ease explain your answer:		

2.10 Can the following principles ensure overall consistency of energy efficiency and renewable energy as key policies for decarbonisation?

(use a rating scale of 1 to 6, where 1 = strongly disagree and 6 = strongly agree)

	1	2	3	4	5	6	No opinion
* Having distinct energy efficiency and renewable targets is the best avenue to decarbonisation.	0	0	0	0	0	•	0
* Member States' progress towards decarbonisation targets should be the primary indicator to assess the renewables and energy efficiency policies and measures.	0	0	0	0	0	•	•
* Member States need to progress on both energy efficiency and renewables to reach their decarbonisation targets.	0	0	0	0	0	•	0
* Non-binding nature of national renewable and energy efficiency targets allows Member States to choose cost-efficient decarbonisation paths.	•	0	0	0	0	0	0
* Energy efficiency policies and measures should be prioritised where fossil-based energy solutions are currently used.	0	0	0	0	0	•	0

*2.11 How could synergies between the EED and the Renewables Energy Directive be strengthened in the future?

1000 character(s) maximum

Both Directives should be revised in light of the Energy System Integration Strategy and contribute to the achievement of the following two principles:

- increase renewable electricity across all end-use sectors,
- increase the efficiency of the entire energy system by activating the efficient and flexible consumption of electrified end-use sectors.

In this light, the EED should be in synergy also with the AFID revision to align charging of electric vehicles to the times when renewable energy is abundant. This would increase system efficiency.

*2.12 How could synergies between the EED and the Energy Performance of Buildings Directive be strengthened in the future?

1000 character(s) maximum

Again, in light of the Energy System Integration Strategy, the synergy between the 2 Directives should aim at:

- Facilitating the uptake of efficient and flexible assets behind the meter,
- Integrating transport and building sectors through carbon neutral electricity. Electric vehicles will be such an important load in the buildings in the future (above HVAC) and a necessary complement to heat pumps (to absorb their peak load and spread it over time). For this reason, a synergy between EED, EPBD and AFID is also beneficial,
- Boosting the interaction of efficient and flexible buildings with the energy system by unlocking their efficient and flexible consumption/production to increase system efficiency.

*

2.13 How could synergies between the EED and the Emission Trading System (ETS) be strengthened in the future, especially in the context of a possible extension of the ETS?

100	00 character(s) maximum
	We do not have an opinion/position on this point.

*2.14 How could synergies between the EED and the Effort Sharing Regulation be strengthened in the future?

1000 character(s) maximum

We do not have an opinion/position on this point.

*2.15 How could EU citizens - and especially young people - be more engaged and contribute to achieving a higher ambition of energy efficiency?

1000 character(s) maximum

Smart technologies and data-driven energy services can support EU citizens in having greater awareness of their consumption (and generation) patterns. Consumer empowerment is essential to reduce and adjust energy consumption in response to external signals. In this way, citizens would improve efficiency at individual level while also contributing to increase efficiency at system level.

An alignment with the European Climate Pact would be beneficial to raise awareness on the opportunities of becoming active consumers.

Training and upskilling programs would also support a more engaged contribution to achieving higher ambition of energy efficiency.

- *2.16 The "Energy Efficiency First" principle is established in energy legislation to contribute to a higher energy efficiency ambition. Which measures in your view could be implemented to ensure the principle is consistently applied? (multiple options possible)
 - Providing more information to users on energy efficiency and energy consumption of products and infrastructures, considering their life-cycle.
 - Requiring that the "energy efficiency first" principle is applied to all relevant EU energy policies related to the whole energy value chain
 - Requiring that the "energy efficiency first" principle is applied to all relevant national energy policies related to the whole energy value chain
 - Developing guidelines on implementation in relevant policy, planning and investment decisions
 - Developing mechanisms to monitor implementation of the principle at national level
 - Others (please specify)

None

O No

Please elaborate on your answer:
1000 character(s) maximum
2.17 Is there a need to develop a common methodology on the application of
the "Energy Efficiency First" principle in energy networks investment programmes and operation practices?
Yes, and it should be developed by the European Commission, ENTSO(-e,-g), national energy regulator, TSO, other
 Yes, and it should be accompanied by an appropriate monitoring mechanism No, there are already specific documents and methodology developed on this
No, this would intrude into the independence of the National Regulatory Authorities
No, the energy networks in the EU are too diverse to be covered by a common methodology (principle of subsidiarity)
No, while the case can be made for a common methodology, it would be too cumbersome to implement in practice
Other (please specify)
This is the end of Part I.
f you wish to contribute on technical aspects of different articles, please continue with part II.
Do you want to continue with part II on the technical aspects of different articles? Yes

If you decide to end the survey here, we thank you very much for your valuable contribution.

Part II – Technical questions on specific Articles of the Energy Efficiency Directive

The EED lays down a set of measures aimed to step up Member States' efforts to use energy more efficiently at all stages of the energy chain – from the transformation of energy and its

- Articles 1 & 3 (energy efficiency targets) sets the EU headline energy efficiency targets for 2020 (of 20%) and for 2030 (of at least 32.5%) and Member States have to set their national indicative targets and indicative contributions in view of achieving those headline targets for 2020 and 2030 respectively. Member States shall report annually on the progress towards their national indicative energy efficiency targets and submit National Energy Efficiency Action Plans ('NEEAPs) every three years, starting from 2014. For the headline EU 2030 target, Member States shall fulfil the planning and reporting obligations under the Governance regulation (set their national contributions towards the EU 2030 target and define the national measures to fulfil those contributions in the National energy and Climate Plans to be submitted to the Commission by end 2019.
- Article 5 (exemplary role of public bodies' buildings) requires that Member States renovate 3% (or implement alternative measures resulting in equivalent savings) of their central government buildings of over 500 m² which do not meet the cost-optimal energy efficient standards. This threshold dropped to 250 m² as of 9 July 2015.
- Under Article 6 (purchasing by public bodies) central governments have the
 obligation to purchase energy efficient products, buildings and vehicles, and Member
 States should encourage public bodies of local and regional government do so as well.
 This Article was evaluated in 2016[24], however the findings were not conclusive given
 that the implementation had just started and it was too early to assess the impact[25].
- Article 7 (energy saving obligations) sets an obligation on Member States to achieve new energy savings each year (of 1.5% of the annual energy sales for the period 2014-2020 and of 0.8% (0,24% for Malta and Cyprus) of the final energy consumption for the period 2021-2030) by putting in place an energy efficiency obligations scheme or other policy measures. Article 7 is responsible for about half of the energy savings the EED is expected to deliver. As mentioned above, this Article was amended as part of the focused EED review in 2016 (amending Directive EU/2018/2002). Under
- Article 8 (energy audits and energy management systems) Member States must ensure that large companies have their first energy audit by 5 December 2015 and then every four years. The review of the implementation of the definition of small and medium size enterprises for the purposes of Article 8(4) is carried out in a separate process (in line with the amended Article 24(12)).
- Articles 9 to 11 (metering and billing) provide requirements for metering and billing of energy use. As mentioned above, those Articles were already amended as part of the focussed EED review in 2016 (amending Directive EU/2018/2002) by adding new, more precise and specific provisions applicable for thermal energy (heating and cooling)[26]. Electricity related provisions were transferred to the recast Electricity Directive (EU) 2019/944. For an overview and a detailed discussion of the changes made please refer to Commission Recommendation (EU) 2019/1660 of 25 September 2019 on the

- implementation of the new metering and billing provisions of the Energy Efficiency Directive 2012/27/EU[27].
- Article 14 (promotion of efficiency in heating and cooling) requires that Member States promote efficiency in district heating and cooling systems and carry out comprehensive territory-wide assessments of the potential for efficient heating and cooling by 31 December 2015 which should be resubmitted again by 31 December 2020 (on basis of the updated methodology and the amended Annex VIII and part of Annex IX)[28]. It also requires individual cost-benefit analysis to be carried out in the context of the planning and permitting of certain types of installation (thermal electricity generation, industrial installations, district heating and cooling network), in order to assess the potential benefits of high-efficient cogeneration installation or utilising waste heat from nearby industrial installations(Art. 14(5) and 14(7)).
- Article 15 (energy transformation, transmission and distribution) requires that
 Member States ensure that energy efficiency is taken into account in energy
 transformation, transmission and distribution and contains specific provisions to this
 end. Certain of these (parts of Art. 15(5) and Art. 15(8)) were removed as part of the
 focussed revision in 2018 and replaced with consolidation provisions in the new
 Electricity Market legislation.
- Article 16 (on qualifications and accreditation schemes for providers of energy services and energy audits) had a later transposition deadline than the rest of the Directive (31 December 2014) and it is also closely linked to the implementation of Articles 17 and 18.
- Under Article 17 (information and training) Member States shall ensure that
 information on available energy efficiency mechanisms and financial and legal
 frameworks is widely disseminated to all relevant market actors. The effectiveness of
 the implementation of this Article was assessed in 2017[29]. The findings of the
 assessment showed that while most of the Member States have put in place information
 and awareness raising measures, it is hard to assess their impact on the uptake of
 energy efficiency improvements and investments due to lack of robust monitoring results
 and ex-post evaluations.
- Member States are required to promote the energy services market under Article 18 (energy services) with a particular focus put on supporting the public sector including through the use of energy performance contracting. A number of reports to assess progress of energy service markets in the EU including the uptake of the energy performance contracting have been carried out by the JRC in the framework of an administrative arrangement with DG ENER.
- Article 19 (other measures to promote energy efficiency) requires the Member
 States to take action to remove regulatory and non-regulatory barriers to energy
 efficiency and to report on this to the Commission as part of their first National Energy
 Efficiency Action Plan (NEEAP). Progress made by Member States in relation to Article
 19(1) was assessed on basis of the notified NEEAPs 2014 and 2017 and a report was
 published in 2019[30].

- Article 20 (Energy Efficiency National Fund, financing and technical support)
 provides that the Member States shall facilitate the establishment of financing facilities
 and that they may set up an Energy Efficiency National Fund. This Article was amended
 in the focussed EED review by adding additional requirements for the Member States
 and the Commission (providing guidance on how to unlock private investments).
- Article 21 on the conversion factors set out in Annex IV was amended for the purposes of reviewing the default coefficient primary energy factor for electricity generation (in footnote 3) and which should be again reviewed by 25 December 2022 (as required by amending Directive EU/2018/2002). Article 24 (review and monitoring of implementation) contains reporting obligations for the Commission (while the reporting obligations for the Member States have been transferred to the Governance Regulation, (EU)2018/1999). This Article thus has been partially amended to ensure the coherence with the Governance framework and the amendments of Articles 3 and 7, and it is thus specifically targeted in this consultation.

About you - What is your field of expertise?	
Energy policy	
Energy efficiency	
Energy audit and management	
Energy performance of buildings	
Heating and cooling	
Other (please specify)	
If you selected 'other', please specify here:	

Article 1 and 3 - Energy efficiency targets

3.1 How do you assess the level of ambition of the existing EU energy efficiency targets?

(too high - adequate level - too low)

	Too high	Adequate level	Too low	No opinion
For 2020 targets	0	•	0	0
For 2030 targets	0	0	•	0

3.2 Could you please give your opinion on the current aspects of the Union's energy efficiency targets for 2020?

(Appropriate – Not appropriate – Difficult to say/ No opinion)

	Appropriate	Not appropriate	Difficult to say	No opinion
The nature of the target is not specified (whether it is binding or indicative)	0	•	0	0
Indicators used for defining the target: primary or final energy consumption	0	•	0	0
Same level of ambition for both primary and final energy consumption	0	•	0	0
Definition of the baseline (2007 Reference Scenario projections for 2020)	0	•	0	0
Clarity of the target	0	0	0	0

Please explain your answer here (optional):

Both primary and final energy consumption are necessary to measure improvements in system efficiency.

3.3 Could you please give your opinion on the following aspects of the national energy efficiency targets for 2020?

(Appropriate - Not appropriate - Difficult to say/ No opinion)

	Appropriate	Not appropriate	Difficult to say	No opinion
Approaches for setting national targets are not prescribed - Member States can chose the methodology and indicators for setting their target (s) (primary/ final energy consumption, savings or intensity)	•	•	•	•
Indicative nature of national targets (no sanctions for non-compliance)	•	0	0	0
No reference values/formula at EU level for assessing the level of national ambition	0	•	0	0
No need to set intermediate milestones/ trajectory to targets	•	0	0	0
Possibility to revise the national targets	0	•	0	0

1	ease explain your answer here (optional).

to achieve national energy efficiency targets?
© Yes
YesNo
No opinion
Please explain your answer:
Article 5 – Exemplary role of central government buildings
3.5 Has the EED made central government buildings in your country more
energy efficient?
○ Yes
○ No
No opinion
Please explain your answer:
3.6 What are the main factors limiting central government in effective and
efficient renovation of its buildings (multiple options possible)?
Insufficient enforcement of the regulatory framework in my country
Insufficient national budget earmarked for renovation
Requirement to renovate can be achieved by alternative measures that are
not clearly defined and are hard to monitor
Requirement to renovate does not apply to rented buildings and central
government authorities often rent their buildings
Other (please specify)
3.7 How do you assess the current 3% annual goal on renovation of central
government's buildings in line with Article 5?
The 3% goal is too low and does not go beyond the standard rate of
renovation

government's buildings
The 3% goal is too high
Other (please specify)
3.8 Given that additional energy efficiency efforts are needed, how could Article 5 be made more effective? (multiple options possible)
The obligation to renovate public buildings should be extended to regional and local authorities
The obligation should be extended to include buildings simply occupied by the central government
The obligation should be extended to include buildings simply occupied by the central, regional and local public authorities
The obligation should target specific type of public buildings, such as schools and hospitals
The required floor area to be renovated each year should be higher than 3% of all public buildings
The obligation shall require deep renovations in order to reach higher than minimal energy standards
Minimum energy performance requirements for owned and rented public buildings should be introduced
Minimum levels of renewable energy use should be introduced
Public authorities should be required to adopt an energy management system and track buildings performance
Wider approaches to achieving sustainable built environment (such as circular economy considerations) should be better considered for public buildings renovations
Other (please specify)
Article 6 Durchasing by public hadios

Article 6 – Purchasing by public bodies

3.9 Has the requirement for central governments to purchase only products, services and buildings with high energy-efficiency performance helped to develop a market for energy efficiency products and services in your country?

Yes

([®] No					
(No opinion					
Ple	ase explain your answ	/er:				
3.1	0 Given that addition	al energy	y efficienc	y efforts	are neede	ed, how could
Art	icle 6 be made more	effective	? (multiple	options	possible)	
[The energy efficiency to all levels of public authorities)					
]	Requirements on re	l buildings	should be	e gradual	ly introduce	ed
ı	A mandatory calculated public procurement effectiveness, econo	The refer	ences to li	miting co	nditions (e.	g. cost-
[Other (please speci	fy)				
	ticle 7 – Energy Savings			d higher	energy ef	ficiency efforts
for	2030, how do you as	sess the	current le	evel of a	mbition of	Article 7(1) on
ene	ergy savings obligati	on?				
(to	o high - adequate leve	l - too low)			
		Too high	Adequate	Too low	No opinion	
	Please select your answer	0	0	0	0	1
2 4	2 What alamanta of /	\ rtiala 7 a	hould be	oddross	ad to ana:	iro the bigher

3.12 What elements of Article 7 should be addressed to ensure the higher level of energy efficiency for 2030 (ranking the measures by using the scale 1-6,

1 – not important and 6 – very important; or No opinion)

	1	2	3	4	5	6	No opinion
Increase the ambition level of energy savings obligation for 2021-2030	0	0	0	0	0	•	0
Strengthen the additionality criteria for existing tax measures	0	•	0	0	0	0	0

Make the EEOS a mandatory instrument in all Member States	0	0	0	©	•	0	
Require Member States to set a certain level of energy savings to be achieved in building renovations	0	0	0	•		0	0
Require Member States to set a certain level of energy savings to be achieved in transport	0	0	0	•	0	0	0
Strengthen the monitoring and verification rules	0	0	0	0	0	•	0
Require Member States to target specific sectors with policy measures under Article 7	0	0	0	•	©	0	0
Set mandatory requirements to implement a specific share of policy measures to alleviate energy poverty	0	0	0	•	©	0	0
Other (please specify)	0	0	0	0	0	•	0

If you selected 'other', please explain here:

ESOS obligated parties should be entitled to achieve savings by deploying both efficient and flexible assets. This would require an adaptation of the calculation methodology to verify savings in view of valuing also efficiency improvements at system level. In this sense, ESOS should eventually evolve to "Carbon Saving Obligation Schemes" as the end goal of obligated parties should be to contribute to CO2 emissions reductions in the energy sector in the most cost-effective way.

Article 8 – Energy audits and energy management systems

3.13 Current rules oblige enterprises that are not small or medium-sized to carry out every four years an energy audit to learn about their energy consumption profile and identify energy saving opportunities. Should these rules be changed?

0	Vac	
\sim	Yes	5

O No

No opinion

Please explain your answer:

Also SMEs with high energy consumption should be covered by this obligation.

Concrete actions should follow energy audits to actually improve energy efficiency as well as the deployment of building energy monitoring and management systems and EPCs.

3.13.A Would the following option address the shortcomings you have observed

(select one answer for every option)?

Obligation to carry out energy audits should:	l fully agree	l agree	Neutral	l disagree	I fully disagree	No opinion
depend on energy consumption and not size or ownership	• • • •			0		
depend only on size of the enterprise but not on who owns it	se o o		•	0		
depend both on energy consumption and on size	•	0	0	0	0	0
be made more frequently than every four years	0	0	•	0	0	0
be accompanied by an obligation for enterprises to implement certain measures identified in energy audits	•	0	0 0 0	0	0	
be accompanied by a requirement to disclose non-sensitive information from energy audits	0	0	0	•	0	0
include recommendations for utilising renewable energy	0	•	0	0	0	0
Include recommendations on resource efficiency	0	0	•	0	0	0

Articles 9-11 - Metering for gas

3.14 To what extent has the EED contributed to final customers being informed of actual gas consumption and costs properly and frequently enough to understand what drives their consumption and make informed choices about possible energy saving measures?

	Contributed	to a	large	extent
--	-------------	------	-------	--------

- Contributed to some extent
- Did not contribute
- I do not know

PΙ	lease explain your answer:	

Article 14 - promotion of efficiency in heating and cooling and related Annexes and definitions

	Very high	High	М	oderate	e Lo	ow	Very low	No opinior
It increased energy efficiency of energy supply	0	0		0	(0	•
It increased energy efficiency of heating and cooling networks	0	0		0	(0	0	•
High-efficiency cogeneration was more often deployed	0	0		©	(0	0	•
Efficient district heating and cooling was more often deployed	0	0		©			0	•
Increased reuse of waste heat from industry	0	0		0	(0	0	•
It increased reuse of waste heat from services (including ICT)	0	0		0	(0	0	•
7 Given that additional energy of cle 14 and related Annexes and ective? To what extent do you a simplemented e a rating scale of 1 to 6, where 1	d definiti agree tha	ions (and the	Artic follo	cle 2) owing	be mea	nade asur	e mor es sh	e ould
		1	2	3	4	5	6	opinio
Minimum requirements for efficient district he	ootina	0				0	0	0

3.15 Have the requirements under Article 14 increased energy efficiency in

the heating and cooling sector in your country?

Yes

No

No opinion

Please explain your answer:

Minimum requirements for efficient district heating and cooling should be established separately for networks and generation units;	0	0	0	0	0	0	•
Minimum requirements for high-efficiency cogeneration should be strengthened;	0	0	0	0	•	0	0
Minimum requirements for high-efficiency cogeneration using fossil fuels should be stricter;	0	0	0	0	0	•	0
The Comprehensive assessments in line with Article 14(1) should explicitly cover renewable energy potentials in heating and cooling;	0	0	0	0	•	0	0
The requirement to address the potential identified in the Comprehensive assessments through policies and measures should be strengthened;	0	0	0	0	0	0	•
The requirements for a cost-benefit analysis in line with Article 14(5) should be based on primary energy savings;	0	0	0	0	0	0	•
Member States should better ensure that costs and benefits of more efficient heating and cooling supply are taken into account in infrastructure and investment planning and permitting;	0	0	0	0	0	•	0
Planning and permitting of infrastructure generating waste heat or cold should take into consideration geographical proximity of a potential demand (heat sink) for this energy;	0	0	0	0	0	•	0
Member States should introduce specific energy efficiency indicators for district heating and cooling to ensure that operators improve energy efficiency of their generation and reduce network losses;	0	0	0	0	0	•	0
Other (please specify).	0	0	0	0	0	0	0

3.18 Which of the following measures would be important to increase energy efficiency of data centres? (select one answer for each option)

Rules should ensure that:	Very important	Important to some extent	Not important	No opinion
large data centres are encouraged to be located where their waste heat can be used	0	•	0	0
the potential for waste heat reuse is assessed when new data centres apply for planning permissions	0	•	•	0
existing provisions to exploit industrial waste heat potential are strengthened	0	•	0	0

Please explain your answer (optional):

It is difficult for every data center to capture and make use of the warm air that is emitted from the datacenter. Utilizing the low-grade waste heat that is emitted is dependent on specific technical conditions. Air is not the best conductor of heat, but it does enable datacenters to have low emissions and high energy efficiencies through the use of free air cooling. Today in many places across Europe, waste heat recovery from data centers faces several challenges, including low quality of heat, lack of demand, difficult optimizations. Governments and local authorities should work together with data center operators and energy suppliers, to circumvent some of these barriers. This could be achieved by supporting the innovation of new technologies and setting up research projects on making data centers carbon neutral by 2030.

Article 15 – Energy transformation, transmission and distribution

3.19 Do electricity and gas networks (transmission and distribution) operate
in the most energy efficient way in your country?

Voc	•
1 -	۰

- No
- I don't know

Please explain your answer:

In the 2020 smartEn monitoring report on the implementation of the Electricity Market Design, Member States have not set clear and stringent requirements to improve the digitalization, efficiency and flexibility of their electricity networks.

3.20 Which are the main factors limiting energy efficiency improvements of the networks in your country? (multiple options possible)

e r	ietworks in your country? (multiple options possible)
	The regulatory authorities discouraged investments by not accepting the
	investment in the Regulatory Asset Base;
	Financing for investments is not easily available;
V	The tariff structure is not conducive to the minimization of energy losses in
	the grids;
	The capital expenditure would result in an inacceptable increase of network
	tariffs for the final consumers;
	The efforts needed to upgrade the physical infrastructure of the grid would
	disturb households;
	The authorisation of permits is too long;

The environmental impact of upgrading the infrastructure would be larger

than that of the energy wasted in the grids;

Other (please specify)

	A CAPEX approach previous digitalization, efficiency a	-	operators are not incentivi eir networks.	zed to make inve	estments to increase
Art	ticle 16 – Availability	of qualificat	ion, accreditation a	nd certificati	on schemes
	21 Are you aware o uivalent qualificat				
	dits, energy mana	gers and in	stallers available	in your cou	ıntry?
	Yes				
	NoNo opinion				
.	·				
Ple	ease explain your a	nswer:			
	22 How you would			the existing	g certification and
		Effective	Effective to some extent	Not effective	l do not know/ no opinion
	Please select your answer	0	0	0	•
Ρle	ease explain your a	nswer:			
2 (23 In your view, ha	e the EED /	Article 16) contrib	outed to set	tting up the
	rtification and/or a	_	•		-
	hemes, including			-	•
	Yes				
	No				
	No opinion				
Ρle	ease explain your a	nswer:			
	2 2 promit y 5 s ir a i	. 5			

If you selected 'other', please explain here:

Article 18 – Energy services

3.24 Have the requirements under Article 18 contributed to the development of energy services market in your country?
Yes
No
No opinion
Please explain your answer:
3.25 What possible elements should be considered as part of the EED revision to improve the functioning of energy services and energy
performance contracting?
 Introduction of reporting requirements for Member States on the certified energy services providers, number of energy performance contracts concluded in the public sector etc.; Introduction of requirements for independent monitoring and verification of energy performance contracts; Strengthening of requirements on independent market intermediaries /facilitators/ one-stop shops to increase trust and facilitate the use of energy services/ energy performance contracting; Other option(s). (please specify)

Article 19 – Other measures to promote energy efficiency

3.26 How do you perceive the existence of regulatory, legal or administrative barriers to energy efficiency in the following areas:

	Very significant	Somewhat significant	Not significant	No opinion
Split incentives between the owner and the tenant (s) of a building	•	0	0	0
Split incentives between owners in multi-owner properties	•	0	0	0
Investments in energy efficiency by individual public bodies prevented due to national or regional				

rules on public purchasing annual budgeting or accounting	0	•	0	©
Please explain your answer:				
Article 20 – Energy Efficiency National Fund,	financing a	nd technica	l support	
3.27 Has Article 20 facilitated access to f	inance for	energy ef	ficiency p	rojects
in your country?				
Yes				
No				
No opinion				
Please explain your answer:				

3.28 What was the impact of Article 20 in your country in the following areas?

	Very low	Low	Moderate	High	Very high	No opinion/ difficult to assess
Setting up an Energy Efficiency National Fund or a similar national financial support scheme for energy efficiency in households	0	0	•	0	©	•
Setting up specific financing facilities for increasing energy efficiency in different sectors	0	0	•	0	0	•
Setting up specific technical support schemes for increasing energy efficiency in different sectors	0	0	0	0	0	•
Dissemination of best practice in the field of financing energy efficiency	0	0	0	0	0	•
Using revenues from annual emission allocations under Decision No 406/2009 /EC for the development of innovative financing mechanisms for improving the energy performance of buildings	0	0	0	0	0	•

Article 21 - Conversion factors and Annex IV

.29 Should Annex IV on "Energy content of selected fuels for end use" be evised? If so, how?
Yes
© No
No opinion
lease explain your answer:
30 In your view, how could the default Primary Energy Factor (the oefficient referred to in footnote (3) of Annex IV) facilitate decarbonisation?
oefficient referred to in footnote (3) of Annex IV) facilitate decarbonisation?
oefficient referred to in footnote (3) of Annex IV) facilitate decarbonisation?

- evaluation-and-review
- [2] Regulation (EU) 2018/1999
- [3] Definition provided in Article 18(2) of the Regulation, EU(2018)1999 on the Governance of the Energy Union and Climate Action
- [4] Directive 2010/31/EU
- [5] Regulation (EU) 2017/1369
- [6] Directive 2009/125/EC
- [7] Directive (EU) 2018/2001
- [8] Directive 96/61/EC
- [9] Regulation (EU) 2018/842
- [10] Amending Directive (EU) 2018/2002
- $\hbox{[11] https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/clean-energy-all-europeans}$
- [12] Articles 1&3 on headline energy efficiency targets, Art 7 on energy saving obligations, 9-11 on metering and billing, 15(2), 20, 22-24, footnote 3 in Annex IV, Annex V, a new Annex VIIa, Annex IX
- [13] Cf. Article 24(15) and Article 3(6) of the revised EED
- [14] COM(2019) 640 final
- [15] COM (2020) 562 final
- [16] COM(2020) 562 final
- [17] COM/2020/564 final
- [18] COM(2020) 954 final
- [19] A report from the Task Force is available here: 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

- [20] Article 24(15) of the EED requires to carry out a general evaluation by 28 February 2024.
- [21] See https://ec.europa.eu/info/sites/info/files/better-regulation-guidelines-evaluation-fitness-checks.pdf

[22] Notably – but not limited to – the Renovation Wave initiative (COM(2020) 632), given that a significant share of energy and resource savings are expected to come from renovation of buildings, the EU Strategy for Energy System Integration (COM(2020) 299 final), the Digital Strategy (COM(2018) 7118 final), the forthcoming Zero Pollution Action Plan and new Circular Economy Action Plan (COM(2020) 98 final). Energy efficiency is relevant especially in the context of actions identified in the Commission's Recovery Plan[1], which need to be reflected in the national Recovery and Resilience Plans.

[23] COM(2020) 456 final

[24] SWD(2016) 402 final

[25] See https://ec.europa.eu/energy/sites/ener/files/documents/3_en_autre_document_travail_service_part1_v3.pdf

[26] While removing thermal energy from the original provisions thereby restricting their scope to electricity and gas. Subsequently also electricity has been removed from their scope and instead regulated under the provisions of the recast Electricity Directive (EU) 2019/944: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2019.158.01.0125.01.ENG&toc=OJ:L:2019:158:TOC

[27] See e.g. section 1.1. and 1.3 of the annex: https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1574946822907&uri=CELEX: 32019H1660

[28] C(2019) 6625 final

 $[29] \ https://ec.europa.eu/energy/sites/ener/files/final_report_of_assessment_of_the_implementation_status_and_effectivenes.pdf$

[30] https://publications.jrc.ec.europa.eu/repository/bitstream/JRC115314

/assessement_of_progress_made_by_member_states_in_relation_to_article_19_final.pdf

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