# Consultation on the Review and the Revision of Directive 2021/27/EU on Energy Efficiency

A Eurelectric response paper

February 2021

Eurelectric represents the interests of the electricity industry in Europe. Our work covers all major issues affecting our sector. Our members represent the electricity industry in over 30 European countries.

We cover the entire industry from electricity generation and markets to distribution networks and customer issues. We also have affiliates active on several other continents and business associates from a wide variety of sectors with a direct interest in the electricity industry.

## We stand for

The vision of the European power sector is to enable and sustain:
- A vibrant competitive European economy, reliably powered by clean, carbon-neutral energy
- A smart, energy efficient and truly sustainable society for all citizens of Europe

We are committed to lead a cost-effective energy transition by:

**investing** in clean power generation and transition-enabling solutions, to reduce emissions and actively pursue efforts to become carbon-neutral well before mid-century, taking into account different starting points and commercial availability of key transition technologies;

**transforming** the energy system to make it more responsive, resilient and efficient. This includes increased use of renewable energy, digitalisation, demand side response and reinforcement of grids so they can function as platforms and enablers for customers, cities and communities;

**accelerating** the energy transition in other economic sectors by offering competitive electricity as a transformation tool for transport, heating and industry;

**embedding** sustainability in all parts of our value chain and take measures to support the transformation of existing assets towards a zero carbon society;

**innovating** to discover the cutting-edge business models and develop the breakthrough technologies that are indispensable to allow our industry to lead this transition.

Dépot légal : D/2021/12.105/2

WG Electrification & Energy Efficiency
WG RES & Storage
WG Climate Change & Decarbonisation
WG Customers & New Services
WG Institutional Frameworks
WG Technology
Electrification & Sustainability Committee
Generation & Environment Committee
Customers & Retail Services Committee
Distribution & Market Facilitation Committee

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February 2021

## KEY MESSAGES

- The power sector is committed to deliver carbon neutral power supply well before 2050 and to make a key contribution to the decarbonisation of transport, buildings and industry through electrification. We support the target revision of at least 55% GHG emission reduction by 2030 as proposed by the Commission. This will go hand in hand with the upward revision of the EU's 2030 renewable and energy efficiency targets.

- The upcoming review of the Energy Efficiency Directive (EED) - coupled with the review of the Energy Performance of Buildings Directive, the Renovation Wave initiative alongside the technical work on labelling and eco-design - is a key tool to help meeting the EU's climate and energy objectives. When reviewing the Directive, opportunities for streamlining its objective and scope to align it with higher 2030 targets should be assessed to overcome existing and expected future overlaps among the different aforementioned tools.

- The EED needs to be revised to meet the climate ambition of the Green Deal, including the achievement of carbon neutrality by 2050. In particular, it needs to promote decarbonisation by making sure that there is a link between energy savings and a reduction in GHG emissions, which has not always been automatic nor explicit, while ensuring policy coherence between existing policies. In this context, the potential for the EED to support energy savings by supporting electrification should also be enhanced.

- The EED should also recognise the most efficient vectors considering cross-effects between energy sources. Obligations on energy savings cannot be established as targets for reducing one energy vector per se, as fuel switching (particularly electrification) has a significant potential for improving energy efficiency (namely for mobility and heating and cooling). The potential for other sectors of the economy to contribute to the energy efficiency efforts should be considered.

- The way obligation schemes for utilities has been implemented has not always worked out homogenously across Member States. In some countries, identifying utilities as the obligated parties to provide energy savings specifically to low-income households to address situations of poverty has not always been successful. Affordability and up-front costs of low-carbon solutions (EVs, PVs, batteries or heat pump) are sometimes holding back consumers from engaging in the energy transition, especially for low-income households that might benefit the most from adopting them.

- The slow rate of building renovation of the existing building stock and the lack of national legislation or regulations to engage the energy efficiency and the electrification remains as the major issues. An increase in this renovation rate is necessary. In industry and services, energy efficiency and electrification solution require novel solutions and lifecycle thinking. So, stimulating programs to adopt this solution should be prepared.

- The Primary Energy Factor (PEF) coefficient should be reflective of the evolution of the energy mix. The current EED rules allow Member States to use another PEF than the revised 2.1. In reality, not many Member States have opted for reconsidering their national PEF since the adoption of the Clean Energy Package, resulting in many Member States still having a PEF of 2.5 or higher for electricity. Ideally, the PEF should be as low as possible to reflect equality between electricity and other energy sources as well as the adaptation of the energy mix during the energy transition. On one hand it is necessary to harmonise the calculation method to determine the PEF, on the other hand Member State should adapt their PEF to their energy mix and its evolution. The Commission should assess any PEF-related barriers to electrification, with a view to ensuring a level playing field between energy carriers.

- In suitable areas, the connection to networks of high-efficient and decarbonized district heating and cooling, coupled with the installation of the necessary devices for its use should be promoted via the revised EED. Buildings both in urban and rural areas are a natural site for sectoral integration between heat and electricity, various combinations of which may fit different local needs and require the necessary grid planning, i.e. deploying big heat pumps in existing district heating systems, utilising waste heat coming from industry, integrate heat coming from all carbon neutral sources.

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

Fields marked with * are mandatory.

## 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

- ○ Bulgarian
- ○ Croatian
- ○ Czech
- ○ Danish
- ○ Dutch
- ◉ English
- ○ Estonian
- ○ Finnish

- French
- German
- Greek
- Hungarian
- Irish
- Italian
- Latvian
- Lithuanian
- Maltese
- Polish
- Portuguese
- Romanian
- Slovak
- Slovenian
- Spanish
- Swedish

* I am giving my contribution as

- Academic/research institution
- Business association
- Company/business organisation
- Consumer organisation
- EU citizen
- Environmental organisation
- Non-EU citizen
- Non-governmental organisation (NGO)
- Public authority
- Trade union
- Other

* First name

Gilda

* Surname

Amorosi

* Email (this won't be published)

gamorosi@eurelectric.org

* Organisation name

*255 character(s) maximum*

Eurelectric

* 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 country of origin, or that of your organisation.

- Afghanistan
- Åland Islands
- Albania
- Algeria
- American Samoa
- Andorra
- Angola
- Anguilla
- Antarctica
- Antigua and Barbuda
- Argentina
- Armenia
- Djibouti
- Dominica
- Dominican Republic
- Ecuador
- Egypt
- El Salvador
- Equatorial Guinea
- Eritrea
- Estonia
- Eswatini
- Ethiopia
- Falkland Islands
- Libya
- Liechtenstein
- Lithuania
- Luxembourg
- Macau
- Madagascar
- Malawi
- Malaysia
- Maldives
- Mali
- Malta
- Marshall Islands
- Saint Martin
- Saint Pierre and Miquelon
- Saint Vincent and the Grenadines
- Samoa
- San Marino
- São Tomé and Príncipe
- Saudi Arabia
- Senegal
- Serbia
- Seychelles
- Sierra Leone
- Singapore

- Aruba
- Australia
- Austria
- Azerbaijan
- Bahamas
- Bahrain
- Bangladesh
- Barbados
- Belarus
- Belgium
- Belize
- Benin
- Bermuda
- Bhutan
- Bolivia
- Bonaire Saint Eustatius and Saba
- Bosnia and Herzegovina
- Botswana
- Bouvet Island
- Brazil
- British Indian Ocean Territory
- British Virgin Islands
- Brunei
- Faroe Islands
- Fiji
- Finland
- France
- French Guiana
- French Polynesia
- French Southern and Antarctic Lands
- Gabon
- Georgia
- Germany
- Ghana
- Gibraltar
- Greece
- Greenland
- Grenada
- Guadeloupe
- Guam
- Guatemala
- Guernsey
- Guinea
- Guinea-Bissau
- Guyana
- Haiti
- Martinique
- Mauritania
- Mauritius
- Mayotte
- Mexico
- Micronesia
- Moldova
- Monaco
- Mongolia
- Montenegro
- Montserrat
- Morocco
- Mozambique
- Myanmar /Burma
- Namibia
- Nauru
- Nepal
- Netherlands
- New Caledonia
- New Zealand
- Nicaragua
- Niger
- Nigeria
- Sint Maarten
- Slovakia
- Slovenia
- Solomon Islands
- Somalia
- South Africa
- South Georgia and the South Sandwich Islands
- South Korea
- South Sudan
- Spain
- Sri Lanka
- Sudan
- Suriname
- Svalbard and Jan Mayen
- Sweden
- Switzerland
- Syria
- Taiwan
- Tajikistan
- Tanzania
- Thailand
- The Gambia
- Timor-Leste

- Bulgaria
- Burkina Faso
- Burundi
- Cambodia
- Cameroon
- Canada
- Cape Verde
- Cayman Islands
- Central African Republic
- Chad
- Chile
- China
- Christmas Island
- Clipperton
- Cocos (Keeling) Islands
- Colombia
- Comoros
- Congo
- Cook Islands
- Costa Rica
- Côte d'Ivoire
- Croatia
- Heard Island and McDonald Islands
- Honduras
- Hong Kong
- Hungary
- Iceland
- India
- Indonesia
- Iran
- Iraq
- Ireland
- Isle of Man
- Israel
- Italy
- Jamaica
- Japan
- Jersey
- Jordan
- Kazakhstan
- Kenya
- Kiribati
- Kosovo
- Kuwait
- Niue
- Norfolk Island
- Northern Mariana Islands
- North Korea
- North Macedonia
- Norway
- Oman
- Pakistan
- Palau
- Palestine
- Panama
- Papua New Guinea
- Paraguay
- Peru
- Philippines
- Pitcairn Islands
- Poland
- Portugal
- Puerto Rico
- Qatar
- Réunion
- Romania
- Togo
- Tokelau
- Tonga
- Trinidad and Tobago
- Tunisia
- Turkey
- Turkmenistan
- Turks and Caicos Islands
- Tuvalu
- Uganda
- Ukraine
- United Arab Emirates
- United Kingdom
- United States
- United States Minor Outlying Islands
- Uruguay
- US Virgin Islands
- Uzbekistan
- Vanuatu
- Vatican City
- Venezuela
- Vietnam

- Cuba
- Curaçao
- Cyprus
- Czechia
- Democratic Republic of the Congo
- Denmark
- Kyrgyzstan
- Laos
- Latvia
- Lebanon
- Lesotho
- Liberia
- Russia
- Rwanda
- Saint Barthélemy
- Saint Helena Ascension and Tristan da Cunha
- Saint Kitts and Nevis
- Saint Lucia
- Wallis and Futuna
- Western Sahara
- Yemen
- Zambia
- Zimbabwe

Transparency register number

*255 character(s) maximum*

Check if your organisation is on the transparency register. It's a voluntary database for organisations seeking to influence EU decision-making.

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* What is the scope of your organisation or institution?

- [ ] International
- [x] European Union
- [ ] National
- [ ] Local
- [ ] Other (please specify)

* Does your organisation or institution primarily deal with energy, climate and/or environmental issues?

- (•) Yes
- ( ) No

* In which sector / activity? (more choices are possible)

- [x] Energy
- [x] Climate
- [ ] Environment

* Does your organisation or institution primarily deal with OTHER issues than energy, climate and/or environmental issues?

- ○ Yes
- ◉ No

The Commission will publish all contributions to this public consultation. You can choose whether you would prefer to have your details published or to remain anonymous when your contribution is published. **For the purpose of transparency, the type of respondent (for example, 'business association, 'consumer association', 'EU citizen') country of origin, organisation name and size, and its transparency register number, are always published. Your e-mail address will never be published.** Opt in to select the privacy option that best suits you. Privacy options default based on the type of respondent selected

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- ○ **Anonymous**
  Only organisation details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose behalf you reply as well as its transparency number, its size, its country of origin and your contribution will be published as received. Your name will not be published. Please do not include any personal data in the contribution itself if you want to remain anonymous.
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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 | ○ | ○ | ○ | ◉ | ○ | ○ |

Please explain your answer:

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 very relevant. Efficient use of energy is key to achieve the European Green Deal targets and also a privileged tool for successfully implementing the Paris Agreement. In this sense, energy efficiency is one of the key drivers to address the EU's strategic policy objectives of carbon neutrality by 2050, ensuring security of supply and enhancing competitiveness, which place the "energy efficiency first" principle in the center of the energy policy in Europe. By simply electrifying end uses like transport, heating and cooling and industrial processes one can obtain significant energy efficiency gains in the next 3 decades (Decarbonisation Pathways).

Eurelectric supports the ambition of net-zero GHG emissions in the EU by 2050 and an at least 55% GHG target by 2030 as proposed by the Commission. This will go hand in hand with the upward revision of the EU' s 2030 RES and EE targets. However, as showed in the Commission's assessment of final NECPs, there is an ambition gap between how much energy savings Member States committed to provide by 2030 and the 32.5% energy efficiency target. Addressing the challenges that Member States are facing to meet the current target is going to be key in the process of reviewing the EED, the EPBD and implementing the Renovation Wave. In the context of the upcoming revision of the EED, as well as of the EPBD and the current technical updates to the Ecodesign lots, it is important for the European legislator to assess whether the approach and the measures in the EED can be streamlined further to avoid overlaps and obstacles in its implementation.

### 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 | ○ | ○ | ◉ | ○ | ○ | ○ |

Please explain your answer:

EED has attained to some extent its objectives to increase energy efficiency. EU-level guidance has had a significant impact. However, the effects vary from one Member State to another. Please see our paper on

the Renovation Wave here as well (at this link: https://cdn.eurelectric.org/media/4707/renovation_wave_position-2020-030-0569-01-e-h-C40E865B.pdf)

Other aspects to be considered are the following:

1. Depending on the Member State, the split incentive between tenants and landlords or the case of buildings under regulated rents are very concrete barriers to carrying out energy efficiency measures. Good practices can be shared across Member States and taken as inspiration, as it is the case in Finland, where the landlord is responsible for the condition of the building, the efficiency of its heating system and also the heating costs (the tenant can only slightly adjust the inside temperature with a thermostat).

2. Most efficient vectors must be recognized, considering cross-effects between energy sources. Obligations on energy savings cannot be established as targets for reducing one energy vector per se, as fuel switching (particularly electrification) has a significant potential for improving energy efficiency (namely for mobility and heating and cooling);

3. The EED needs to be revised to meet the climate ambition of the Green Deal, including the achievement of carbon neutraliy by 2050. In particular, it needs to promote decarbonisation by making sure that there is a link between energy savings and a reduction in GHG emissions, which has not always been automatic nor explicit, while ensuring policy coherence between existing policies. In this context, the potential for the EED to support energy savings by supporting electrification should also be enhanced.

4. The EED should also recognise the most efficient vectors. Obligations on energy savings cannot be established as targets for reducing one energy vector per se, as fuel switching (particularly electrification) has a significant potential for improving energy efficiency (namely for mobility and heating and cooling). The potential for other sectors of the economy to contribute to the energy efficiency efforts should be considered.

5. The way obligation schemes for utilities has been implemented has not always worked out homogenously across Member States. In some countries, identifying utilities as the obligated parties to provide energy savings specifically to low-income households to address situations of poverty has not always been successful but a source of distortion in the retail market, with only part of the players being involved in the programs. Affordability and up-front costs of low-carbon solutions (EVs, PVs, batteries or heat pump) are sometimes holding back consumers from engaging in the energy transition, especially for low-income households that might benefit the most from adopting them.

6. The slow rate of building renovation of the existing building stock and the lack of national legislation or regulations to engage the energy efficiency and the electrification remains as the major issues. An increase in this renovation rate is necessary. In industry and services, energy efficiency and electrification solution require novel solutions and lifecycle thinking. So, stimulating programs to adopt this solution should be prepared.

7. The Primary Energy Factor (PEF) coefficient should be reflective of the evolution of the energy mix. The current EED rules allow Member States to use another PEF than the revised 2.1. In reality, not many Member States have opted for reconsidering their national PEF since the adoption of the Clean Energy Package, resulting in many Member States still having a PEF of 2.5 or higher for electricity. Ideally, the PEF should be as low as possible to reflect equality between electricity and other energy sources as well as the adaptation of the energy mix during the energy transition. On one hand it is necessary to harmonise the calculation method to determine the PEF, on the other hand Member State should adapt their PEF to their energy mix and its evolution. The Commission should assess any PEF-related barriers to electrification, with a view to ensuring a level playing field between energy carriers.

8. In suitable areas, the connection to networks of high-efficient and decarbonized district heating and cooling, coupled with the installation of the necessary devices for its use should be promoted via the revised EED. Buildings both in urban and rural areas are a natural site for sectoral integration between heat and electricity, various combinations of which may fit different local needs and require the necessary grid planning, i.e. deploying big heat pumps in existing district heating systems, utilising waste heat coming from industry, integrate heat coming from all carbon neutral sources.

* **1.2.A Which factors helped the most to achieve the objectives of the EED?** (multiple options are possible)

- [x] 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.)
- [x] 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
- [x] Requirement for planning policies and measures at national level
- [x] 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)
- [x] Strong monitoring and reporting framework at EU level
- [x] Other (please specify)

* If you selected 'other', please explain your answer here:

In some cases, lack of financing or financial incentive for consumers to seek and carry out energy efficiency measures.

**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 | ○ | ○ | ◉ | ○ | ○ | ○ |
| * There is greater awareness about energy efficiency and its role in achieving the overall climate objectives (i.e. Paris Agreement) | ○ | ○ | ◉ | ○ | ○ | ○ |
| * More developed market of energy services | ○ | ○ | ○ | ◉ | ○ | ○ |

| | | | | | | |
|---|---|---|---|---|---|---|
| * Innovative technologies and techniques are more often used | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Greater availability of funding for energy efficiency investments | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Energy efficiency policies triggered more jobs and growth | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Energy efficiency led to an increased security of supply | ○ | ◉ | ○ | ○ | ○ | ○ |
| * Energy efficiency led to lower energy bills | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Energy efficiency reduced energy poverty | ◉ | ○ | ○ | ○ | ○ | ○ |
| * Energy efficiency increased resource efficiency | ○ | ○ | ◉ | ○ | ○ | ○ |

### 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 | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Obligations under the EED led to disproportionately higher costs | ○ | ◉ | ○ | ○ | ○ | ○ |
| * Enterprises have lost substantial revenues | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Obligations under the EED led to flawed investment decisions | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Obligations under the EED further complicated existing rules | ○ | ○ | ○ | ◉ | ○ | ○ |
| * Guidance on implementation of the EED from national authorities to enterprises and consumers was unclear | ○ | ○ | ○ | ○ | ◉ | ○ |
| * Obligations under the EED put strain on already limited national administrative resources | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Obligations under the EED led to too diverging implementation across Member States | ○ | ○ | ◉ | ○ | ○ | ○ |
| * The benefits of the EED were unequally distributed among the population. | ○ | ○ | ○ | ◉ | ○ | ○ |

Please explain what administrative burden you perceive:

The obligations scheme is far more complex and involves a higher administrative burden than the other policy measures, Member States may adopt instead alternative measures, which was the most commonly chosen option. In fact, the obligations scheme:

1. Makes it more difficult to measure the savings, with estimated savings for specific measures, per agent, with theoretical assumptions, and also to capture cross-effects related with fuel switching.
2. Adds complexity as it requires standardization of assumptions, with a very high degree of detail per technology, to assure comparability
3. Leads to higher administrative and transaction costs, with an increasing number of agents and data exchanges
4. It's more difficult to establish control and mitigate free-riding situations
5. Methodologies to measure savings resulting from EE measures are designed at national level and sometimes the process is very slow narrowing the scope of opportunities that obliged parties may offer to clients as EE solutions.

* **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)

- [ ] Energy efficiency obligation schemes introduced to achieve annual energy savings among final customers
- [x] 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
- [x] Obligation for large enterprises to carry out regular energy audits to learn about their energy consumption profile and identify energy saving opportunities
- [x] 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
- [x] Measures introduced on awareness raising of energy efficiency and promoting change of consumer behaviour
- [x] Deployment of individual meters and obligation to provide consumers with better and more frequent information about their energy consumption
- [x] Introduction of subsidies, support schemes and fiscal incentives for energy efficiency
- [x] 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)

* If you selected 'other', please explain your answer here:

Voluntary Energy Efficiency Agreements in some Member States, the creation of a National Energy Efficiency Fund, or any alternative entailing all energy suppliers to participate in the EE efforts.

### 1.6 To what extent has the EED stimulated energy efficiency efforts in the following sectors?

( 1 = to a very little extent and 5 = to a very large extent)

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

### 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 |
|---|---|---|---|---|---|---|
| * Lack of clear information among consumers about available energy efficiency measures and support schemes | ○ | ○ | ○ | ◉ | ○ | ○ |
| * Split incentives (different interests of owners and tenants or investors and users) | ○ | ○ | ○ | ◉ | ○ | ○ |
| * Administrative burden associated with energy efficiency investments | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Regulatory barriers preventing energy efficiency investments | ○ | ○ | ○ | ◉ | ○ | ○ |
| * Lack of awareness among investors of profitability of investments in energy efficiency | ○ | ○ | ◉ | ○ | ○ | ○ |
| * High transaction costs to finance the energy efficiency measures | ○ | ○ | ◉ | ○ | ○ | ○ |

| | | | | | | |
|---|---|---|---|---|---|---|
| * Limited access to capital for households and small and medium-sized enterprises to invest in energy efficiency | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Lack of available skills to make energy efficiency improvements | ○ | ○ | ○ | ◉ | ○ | ○ |
| * Low profitability and return on investment | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Complexity or hassle associated with making energy efficiency investments | ○ | ○ | ○ | ◉ | ○ | ○ |
| * Lack of fiscal measures and incentives including carbon pricing and energy taxation to provide incentives for energy efficiency | ○ | ○ | ○ | ○ | ○ | ◉ |

Please explain your answer (optional):

The revision of the EED needs to tackle the remaining barriers to energy efficiency and to ensure its contribution to the achievement of carbon neutrality.
If the EU wants to structurally tackle energy efficiency, renewables and clean energy vectors, barriers that are hampering the adoption of the most efficient energy vectors should be removed. Energy taxation is one good example, where the high quantities of taxes and levies that electricity often stands compared to other energy vectors is deferring energy efficiency gains. A wider concept of the 'energy efficiency first' principle, links between energy efficiency policies, decarbonization policies and environmental policies should be promoted.
Firstly, regarding the lack of information on energy efficiency, improvements need to be made to increase the access of final consumer to their energy consumption. A reference to final energy needs to be introduced in each EU tool (e.g. Energy Performance Certificates) to guarantee a better understanding of the energy bills and energy use, and to accurately describe the performance of the building.
Secondly, on access to funding and investments, the ESIF should be revised to stimulate investments in energy efficiency by enhancing synergies with Energy Performance Contracting (EPC). The ESIF can greatly contribute to addressing market gaps in the access to finance for EPC providers by guaranteeing an easier access to long-term investment and reducing risks.
Finally, regarding the lack of fiscal measures and incentives in some Member States, there are no incentives currently which encourage actors to invest in low-carbon technologies. This is a real obstacle to the switch towards low-carbon and energy-efficient solutions and hence, to Europe's carbon neutrality.

## 1.8 To what extent were the costs associated with the implementation of the EED proportionate to the achieved energy savings and other benefits?

(please rate 1 to 5, where 1 - disproportionate, 5 - proportionate)

| | 1 | 2 | 3 | 4 | 5 | No opinion |
|---|---|---|---|---|---|---|
| * Please select your answer | ○ | ○ | ○ | ○ | ○ | ◉ |

Please explain, provide further data and information on the costs and benefits associated with the implementation of the EED and specific EED articles.

* **1.9 Are there any parts / specific provisions of the EED that are obsolete or have proven inappropriate?**

- (●) Yes
- ( ) No
- ( ) No opinion

Please explain your answer:

Various EC impact assessments show that electrification is the most efficient way to reduce energy consumption overall and reduce climate emissions. Therefore, the EED must encourage switching to electricity. Within nine years the electricity system will be 75% renewable. Eurelectric calls for an electrification strategy that ensures the increased use of electricity in new sectors as well as current sectors. The EED needs to be revised to meet the climate ambition of the Green Deal, including the achievement of carbon neutraliy by 2050. In particular, it needs to promote decarbonisation by making sure that there is a link between energy savings and a reduction in GHG emissions, which has not always been automatic nor explicit, while ensuring policy coherence between existing policies. In this context, the potential for the EED to support energy savings by supporting electrification should also be enhanced.
To streamline the EED the issues addressed by the following Articles are more appropriately regulated in other existing regulations:

- Articles 4 and 5 should be moved to the Energy Performance of Buildings Directive
- Articles 9 – 11 should be integrated into the relevant market directive (e.g. Electricity Directive)
- Articles 14 and 15 concern energy networks and should be regulated accordingly

Eurelectric encourages a new approach to address energy efficiency in transmission and distribution. Indeed, going beyond network losses in terms of energy efficiency in transmission and distribution grids in the course of this revision is needed and could be done by focusing on what takes place through and beyond the grids. Accordingly, Eurelectric believes that this revision shall encompass the approach of an overall efficient energy system, mainly through the integration of the energy system at local/regional level and with smart grids as the most important tool for a higher energy efficiency.

Regarding article 15, Eurelectric suggests that references to network losses shall be deleted in the paragraph (2) to better focus on infrastructure investments, necessary for energy efficiency objectives. A network investment programme is required to best address energy efficiency, mainly to highlight cost efficient solutions from smart grids and RES integration into the overall energy system.

* **1.10 In your view, does the EED have positive synergies with the Effort Sharing Regulation and the Emission Trading System? If yes, what are those?**

- (●) Yes
- ( ) No
- ( ) No opinion

Please explain your answer:

Under the current legislation, EU Member States have binding annual greenhouse gas (GHG) emission targets for 2021-2030 for those sectors of the economy that fall outside the scope of the EU ETS. These sectors, including transport, buildings, agriculture, non-ETS industry and waste, account for almost 60% of total domestic EU emissions. The additional effort of reducing GHG emissions that comes with the increased EU 2030 and 2050 climate ambition should be fairly distributed between the EU ETS policy and the non-ETS sectors which are regulated by the EU Effort Sharing Regulation. Until today, the largest GHG emissions reduction effort has been borne by the EU ETS, and the power sector in particular. Looking ahead, it is crucial that the CO2 emissions abatement pace is increased also in the non-ETS sectors and that CO2 pricing is used to a greater extent across all sectors.
However there can also be difference in treatment between the three systems. The EED aims to limit final energy, so it does not take into account how energy is produced and how much energy use causes emissions. When looking at the heating market, different forms of heating are controlled by different methods, some by the ETS and some by the ESR - equal treatment is not achieved. Foremost, a solution has to be found for final consumers to avoid straining households' budgets further. Calibrating carbon prices via taxation could mean less administrative barriers and lower complexity. Including the entire heating sector to ETS could be considered, please see our reply to ETS consultation (at this link: https://cdn.eurelectric.org/media/5228/updating_the_eu_emissions_trading_system_final-2021-030-0050-01-e-h-1D93A9FC.pdf)

* **1.11 In your view, does the EED have positive synergies with the Renewable Energy Directive? If yes, what are those?**

- (●) Yes
- ( ) No
- ( ) No opinion

Please explain your answer:

EED have positive synergies with the Renewable Energy Directive. For example: a net zero-energy building (NZEB) is usually defined as a building in which energy demand is reduced through efficiency gains, and the remaining energy needs are satisfied using renewable energy. Therefore, the amount of renewable energy needed to satisfy a building's energy demand depends directly on its level of energy efficiency. The higher the efficiency of a building's systems, the lower its energy demand, and the less renewable energy is needed to achieve net zero-energy balance. This increases the cost- effectiveness of such buildings by reducing the size and capacity of the renewable energy systems required to satisfy energy needs, though a cost balance must be kept between the savings ambitions and the production of renewable energy.
Other example is the transport sector. The use of electricity as the main energy source for mobility increases the efficiency of transportation and lowers accompanying emissions, if the electricity is generated from renewable and low-carbon energy sources. In developed countries, sales of electric and hybrid vehicles are growing rapidly. In this case the focus on electric mobility conveys necessarily large progress in energy efficiency. At the same, battery costs are decreasing, making electric vehicles more competitive. Although the market penetration of electric vehicles remains relative small the vehicles present a good example of potential synergies between energy efficiency and renewable energy, provided that the electricity for charging the vehicles comes from decarbonised energy sources, which is a must for decarbonisation targets. The electricity distribution level is key to contribute to energy efficiency in the transport sector.
Existing measures of the EED can be adapted to follow a more climate relevant approach that focuses more on driving decarbonisation. Synergies between RES, primary and enery savings exist and should be finetuned to foster electrification.
With regard to the implementation of Article 7, some Member States have found it often unclear when a measure is to promote renewable energy and / or energy efficiency and which measures are acceptable. This creates unnecessary bureaucracy at every level.

### * 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:

EED have positive synergies with the Energy Performance of Buildings Directive (EPBD). In fact, there are several areas of potential interaction between the EED and the EPBD, namely, financial instruments, building renovation (allowing the installation of advanced heating & cooling electric pumps and EV recharging points), EEOs and ESCOs, that include energy certification/auditing, training and accreditation schemes, smart metering/building monitoring, information campaigns, and financial instruments. The requirements and the increasing standards to the new buildings, renovations, implementation of building passport is a crucial step to reduce energy consumption along with achievement of high comfort of living conditions.
An opportunity to assess would be to foresee mandatory RES integration and change of central heating installations whenever public funds are spent for retrofitting existing buildings.

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

*1000 character(s) maximum*

With the Green Deal, the EU is increasing its climate ambition. A successful and cost-effective transition relies on using decarbonised energy carriers in a more efficient way. EED contribute to a moderate extend of the optimisation of the overall energy system. To further decarbonize the EU energy system, EE must be prioritized. EE framework should reinforce the role of digitalization in the efficiency of energy systems including grid infrastructure, products and services. This is key in an energy system increasingly relying on intermittent sources of energy, in which demand flexibility is part of the solution.
Depending on the MS, the EED has contributed to reduce the dependence on energy imports and on using scarce energy resources, to limit the climate change and to overcome the economic crisis (incl. poverty).
Depending on the MS, switching to RES for district H&C can help to face growing urban energy needs, improve efficiency, reduce emissions and ensure temperature control.

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

*1000 character(s) maximum*

On one hand, EED has become a traditional EU tool for achieving policy goals for energy savings in primary and final energy consumption. There are also a number of good practices and achievements in energy efficiency when implementing the various options provided by the directive. The sharing of experience between Member States is also key to identify the areas where improvements are still needed.

On the other hand, depending on the Member State, the right of the MS to interpret and transpose provisions accordingly into national law and therefore choose mechanisms/approaches for implementing the directive, so sometimes is accompanied of misunderstanding of the right meaning and spirit of this legislation by the competent national authorities. Therefore additional support in the implementation of existing legislation might be needed.

### * 1.15 What is missing in the EED?

*1000 character(s) maximum*

The acknowledgment of the role that EE measures, when well designed, can have to address the negative distributional effects of the energy transition is unexplored.
The links with the EU ESI Strategy should be considered in particular: how to take into account the efficiency / optimization of the energy system and the role of energy networks as enablers of sector integration.
To be compatible with the new emission reduction ambition of the Green Deal - incl. the achievement of carbon neutraliy by 2050 - the revised EED could explore possible means to strenghten the link between energy efficency and the need to reduce GHG emissions; and provide cost-efficiency and technical feasibility, while ensuring policy coherence between existing policies. Existing measures of the EED can be adapted to follow a more climate relevant approach that focuses more on driving decarbonisation. For instance, an assessment on how to better balance primary and final energy savings could be explored.

## 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?

- (●) Agree
- ( ) Neutral
- ( ) Disagree
- ( ) No opinion

Please explain your answer:

Energy efficiency should play a key role in delivering a higher climate ambition and, therefore, establish a strategic priority for the Energy Union based on the principle of 'energy efficiency first' which is particularly relevant for Member States that have a high energy intensity mix.
The EED needs to be revised to meet the climate ambition of the Green Deal, including the achievement of carbon neutraliy by 2050. In particular, it needs to promote decarbonisation by making sure that there is a link between energy savings and a reduction in GHG emissions, which has not always been automatic nor explicit, while ensuring policy coherence between existing policies. In this context, the potential for the EED to support energy savings by supporting electrification should also be enhanced.

The European legislator should consider that the Climate targets will only be achieved if all sectors and instruments contribute to their achievement (i.e. eco-design lots, EPBD, measures in the transport and energy sectors, ETS).

* **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)

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

* 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.

* If you selected 'other', please specify here:

Eurelectric supports the ambition of net-zero GHG emissions in the European economy by 2050 and an at least 55% target of GHG emissions reduction by 2030 as proposed by the Commission. The revised CO2 target will go hand in hand with the upward revision of the EU’s 2030 RES and EE targets, as indicated in teh Commission’s communication on the new 2030 climate ambition.
An increased ambition in energy efficiency must be matched by additional support and mechanisms to deliver the increase, keeping in mind that Art. 7 is not the only instrument in the Directive to achieve efficiency targets and ensuring coherence between existing policies.
Burden sharing should be significantly improved away from the power sector and towards the recognition of efficient electrification.

Synergies between the Energy Efficiency Directive and demand side response services can be considered as well, in line with the Electricity Directive.

* **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?**

- (●) Yes
- ( ) No
- ( ) No opinion

Please explain your answer:

On one hand some aspects of the EED can indeed be enhanced: the possibility to gradually extend the energy efficiency audits mandatory scheme to SMEs, complemented with support mechanisms; a push for more stringent energy efficiency standards for energy labelling and eco-design compatible with a plan of gradual phase-out of fossil fuels in final energy uses (in particular heating and cooling); Reinforcing the eligibility of cost- effective and low-carbon solutions with a high return on investments and enabling both energy savings and CO2 emissions reductions; Reinforcement of the role of digitalization and data management through smart metering in the efficiency of energy systems including grid infrastructure, products and services.
On the other hand, a significant number of Member States are having difficulty achieving the current targets. An upward revision of the targets or a tightening of measures should go hand in hand with additional guide and support to Member States, including on financial instruments to implement energy efficiency measures. More detailed follow up by European institutions on national decisions and operational implementation steps should also be foreseen so that deviations from the meaning of the European legislation is detected in a timely manner.
Eurelectric supports the ambition of net-zero GHG emissions in the European economy by 2050 and an at least 55% target of GHG emissions reduction by 2030 as proposed by the Commission. The revised CO2 target will go hand in hand with the upward revision of the EU's 2030 RES and EE targets, as indicated in teh Commission's communication on the new 2030 climate ambition.
An increased ambition in energy efficiency must be matched by additional support and mechanisms to deliver the increase, keeping in mind that Art. 7 is not the only instrument in the Directive to achieve efficiency targets and ensuring coherence between existing policies.
Burden sharing should be significantly improved away from the power sector and towards the recognition of efficient electrification.

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

*1000 character(s) maximum*

The system to calculate energy savings is confusing for national authorities to understand and put in practice. The distinction between primary energy and final energy savings may be overcome by a simplified criteria that also includes an emission component.
Existing measures of the EED can be adapted to follow a more climate relevant approach that focuses more on driving decarbonisation. For instance, an assessment on how to better balance primary and final energy savings could be explored.

## * 2.5 With the suggested increase in ambition for energy efficiency for 2030, what should the nature of the EU targets be?

- [ ] Indicative
- [ ] Binding
- [ ] Not specified

- [x] Other (please specify)

If you selected 'other', please specify here:

Eurelectric supports the ambition of net-zero GHG emissions in the European economy by 2050 and an at least 55% target of GHG emissions reduction by 2030 as proposed by the Commission. The revised CO2 target will go hand in hand with the upward revision of the EU's 2030 RES and EE targets, as indicated in teh Commission's communication on the new 2030 climate ambition.
An increased ambition in energy efficiency must be matched by additional support and mechanisms to deliver the increase, keeping in mind that Art. 7 is not the only instrument in the Directive to achieve efficiency targets and ensuring coherence between existing policies.
Burden sharing should be significantly improved away from the power sector and towards the recognition of efficient electrification.

* **2.6 With the suggested increase in ambition for energy efficiency for 2030, what should the nature of the national targets be?**

- [x] Indicative national targets (to contribute to EU energy efficiency target for 2030)
- [ ] Binding national targets
- [ ] Not specified
- [x] Other (please specify)

If you selected 'other', please specify here:

Eurelectric supports the ambition of net-zero GHG emissions in the European economy by 2050 and an at least 55% target of GHG emissions reduction by 2030 as proposed by the Commission. The revised CO2 target will go hand in hand with the upward revision of the EU's 2030 RES and EE targets, as indicated in teh Commission's communication on the new 2030 climate ambition.
An increased ambition in energy efficiency must be matched by additional support and mechanisms to deliver the increase, keeping in mind that Art. 7 is not the only instrument in the Directive to achieve efficiency targets and ensuring coherence between existing policies.
Burden sharing should be significantly improved away from the power sector and towards the recognition of efficient electrification

* **2.7 In which sectors would additional energy efficiency efforts be most needed to achieve a higher energy efficiency ambition for 2030?** (multiple options possible)

- [x] Buildings
- [x] Heating and cooling
- [x] Industry
- [ ] Information and communication technologies (ICT)
- [x] Transport

- [ ] Agriculture
- [x] Services (i.e. commercial and public)
- [x] Other (please specify)

Please explain your answer:

Flexibility to implement measures should be maintained, considering local conditions, potential and cost-effectiveness.

## 2.8 Should the following measures be considered to achieve a higher ambition?

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

| | 1 | 2 | 3 | 4 | 5 | 6 | No opinion |
|---|---|---|---|---|---|---|---|
| * Strengthening the renovation obligations for public buildings | ○ | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Strengthening energy efficiency requirements for public procurement | ○ | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Requiring that local authorities (above a certain size) develop an energy efficiency action plan with measurable impact indicators | ○ | ○ | ○ | ○ | ◉ | ○ | ○ |
| * Requiring that large enterprises implement certain energy efficiency improvements identified in energy audits | ○ | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Requiring that small and medium-sized enterprises are offered free energy audits | ○ | ○ | ◉ | ○ | ○ | ○ | ○ |
| * Extending the requirement on frequent consumption information from electricity and thermal energy to also cover gas and roll-out remotely readable gas meters | ○ | ○ | ○ | ○ | ○ | ◉ | ○ |
| * Establishing sector specific goals or measures addressing sectors for which the energy efficiency potential is higher (e.g. services, data centres, energy-intensive industries) | ○ | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Strengthening the requirements for efficiency in energy transformation, transmission and distribution | ○ | ◉ | ○ | ○ | ○ | ○ | ○ |
| * Strengthening the requirements for using energy performance contracting in renovation of public buildings | ○ | ○ | ○ | ○ | ◉ | ○ | ○ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| * Introducing or extending fiscal measures and incentives, including carbon pricing and energy taxation | ○ | ○ | ○ | ○ | ◉ | ○ | ○ |
| * Other (please specify) | ○ | ○ | ○ | ○ | ○ | ○ | ◉ |

Please explain your answer:

Increasing the contribution of the public sector to the overall effort, reviewing and improving the quality of energy audits in all sectors and strengthening the training and qualification of auditors and energy advisors, as well as improving the transparency of the offer, is likely to have a major impact on their acceptance.

## 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 | ○ | ○ | ◉ | ○ | ○ | ○ | ○ |
| * 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 | ○ | ○ | ◉ | ○ | ○ | ○ | ○ |
| * Fossil fuel heating system should be banned for new buildings whenever technical feasible | ○ | ○ | ◉ | ○ | ○ | ○ | ○ |
| * Member States should unbundle the management of the generation and distribution heat network | ◉ | ○ | ○ | ○ | ○ | ○ | ○ |
| * Allow public support for heating systems only to non-fossil fuel technologies | ○ | ◉ | ○ | ○ | ○ | ○ | ○ |
| * The recovery of waste heat from heating and cooling (air-conditioning) systems in individual buildings should be promoted | ○ | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Specific requirements for utilization of waste heat and waste cold should be set for industry and services | ○ | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Requiring district heating and cooling operators to prepare long-term plans to improve their energy efficiency in terms of primary energy intensity energy | ○ | ◉ | ○ | ○ | ○ | ○ | ○ |
| * Member States should facilitate local and district approaches to policy and infrastructure planning and development in heating and cooling | ○ | ○ | ○ | ○ | ◉ | ○ | ○ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| * Other (please specify) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

Please 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. | ○ | ○ | ◉ | ○ | ○ | ○ | ○ |
| * Member States' progress towards decarbonisation targets should be the primary indicator to assess the renewables and energy efficiency policies and measures. | ○ | ○ | ○ | ○ | ◉ | ○ | ○ |
| * Member States need to progress on both energy efficiency and renewables to reach their decarbonisation targets. | ○ | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Non-binding nature of national renewable and energy efficiency targets allows Member States to choose cost-efficient decarbonisation paths. | ○ | ○ | ○ | ◉ | ○ | ○ | ○ |
| * Energy efficiency policies and measures should be prioritised where fossil-based energy solutions are currently used. | ○ | ○ | ○ | ○ | ◉ | ○ | ○ |

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

*1000 character(s) maximum*

RES surcharges should be distributed to all energy carriers, not just the electricity and financed via other means than the electricity bill, reducing its negative distributional effects and minimizing the increase of the energy expenditure for households.
If mandatory volumes of energy efficiency measures are maintained, then possibility to count RES installations on or in building as an efficiency measure would also be a good synergy.
Existing measures of the EED can be adapted to follow a more climate relevant approach that focuses more on driving decarbonisation. Synergies between RES, primary and enery savings exist and should be finetuned to foster electrification.

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

*1000 character(s) maximum*

Further coherence between the two could be ensured in the framework of the Renovation Wave. Building renovation needs to rapidly become much deeper, structurally incorporating electrification, e-mobility, electric heat pumps and district heating, DSR, data consumption from smart meters and dynamically interacting with the electricity sector. EED should leverage on the EU Renovation Wave initiative to help increasing the renovation rates of the EU building stock, set milestones and targets for decarbonizing EU buildings. Increasing building renovation rates requires administrative simplification for permitting, standardizing financing procedures to strengthening building standards, fiscal incentives and actions aimed at abating non-economic barriers.
Existing measures of the EED can be adapted to follow a more climate relevant approach that focuses more on driving decarbonisation. For instance, an assessment on how to better balance primary and final energy savings could be explored.

### * 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?

*1000 character(s) maximum*

If the Commission choses to expand the ETS, care must be taken to avoid double regulation. These arise at the latest when the ETS is extended to further sectors or a separate CO2 price signal is introduced for the heating sector. This can be achieved in particular by ensuring that EED measures primarily relate to end-use markets.

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

*1000 character(s) maximum*

/

### * 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*

Through educational activities, digitalization enhancing their capacity to interact with the system and financial /fiscal incentives.
The use of data and the active participation of the EU citizens in the monitoring of their own energy consumption should be promoted by the EU through subsidies for the production of smart technological tools, devices and infrastructures, based on digitalised interfaces.

### * 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)

- [x] 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
- [x] Developing guidelines on implementation in relevant policy, planning and investment decisions
- [x] Developing mechanisms to monitor implementation of the principle at national level
- [ ] Others (please specify)
- [ ] None

Please elaborate on your answer:

*1000 character(s) maximum*

The pursuit of energy efficiency must be a shared goal by society as a whole - citizens, businesses/industry and institutions, and there must be a full and comprehensive conviction of the need and benefits of consuming as little energy as possible. For this reason, the introduction of this principle is a great start, but it must be translated into the language of each social group so that it achieves the right message and incentive to be fully involved in the common effort.

* **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
- [x] 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)

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# This is the end of Part I.

If 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
- ( ) No

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

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# 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 distribution to its final consumption - and those are as follows:

- **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?

- [x] Energy policy
- [x] Energy efficiency
- [ ] Energy audit and management
- [ ] Energy performance of buildings
- [x] 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 | ○ | ◉ | ○ | ○ |
| For 2030 targets | ○ | ◉ | ○ | ○ |

## 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) | ○ | ◉ | ○ | ○ |
| Indicators used for defining the target: primary or final energy consumption | ○ | ◉ | ○ | ○ |
| Same level of ambition for both primary and final energy consumption | ○ | ◉ | ○ | ○ |
| Definition of the baseline (2007 Reference Scenario projections for 2020) | ○ | ◉ | ○ | ○ |
| Clarity of the target | ○ | ◉ | ○ | ○ |

Please explain your answer here (optional):

The target setting of the Directive is very complex and not very clear (Articles 1, 3 and 7). Also, the description of the baseline and target levels of energy efficiency presented at EU level and the underlying calculations are not sufficiently clear / understandable and / or transparent.
Existing measures of the EED can be adapted to follow a more climate relevant approach that focuses more on driving decarbonisation. For instance, an assessment on how to better balance primary and final energy savings could be explored.
The baseline of the European efficiency targets is formed by an outdated reference scenario. This makes the target formulations non-transparent and not comprehensible to a broad public. It would make more sense and be more transparent to use as a baseline the final and primary energy consumption in a reference year, for example 2014, the year the EED was introduced.

## 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) | ○ | ◉ | ○ | ○ |
| No reference values/formula at EU level for assessing the level of national ambition | ○ | ◉ | ○ | ○ |
| No need to set intermediate milestones/ trajectory to targets | ○ | ◉ | ○ | ○ |
| Possibility to revise the national targets | ◉ | ○ | ○ | ○ |

Please explain your answer here (optional):

### 3.4 Has the EED provided the right monitoring and enforcement mechanisms to achieve national energy efficiency targets?

- ○ Yes
- ◉ No
- ○ No opinion

Please explain your answer:

It varies based on the Member State. In general, the EED has not provided the right monitoring and enforcement mechanisms to achieve national energy efficiency targets; 2020 goals are likely to be missed. So far, the EED has therefore not fully delivered what it was created for. A recent report published by the European Climate Action Network (CAN Europe) 'Opportunities and Gaps in the final National Energy and Climate Plans', mentioned the low ambition for energy efficiency in Portugal, namely the methodology used for setting the energy efficiency contributions needs to be revisited and there should also be more clarity on the underlying assumptions for the scenarios.

In other countries, like Finland, the role of Energy Efficiency Agreements was a key policy measure, and significant new savings have been achieved through its implementation (Article 7) An excellent monitoring system has also been developed in the context of the Energy Efficiency Agreement, which can be used to transparently verify the savings effects of measures: https://energiatehokkuussopimukset2017-2025.fi/en

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**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)

If you selected 'other', please explain here:

No opinion

**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
- ☐ The 3% goal is at an adequate level to promote renovation of central government's buildings
- ☐ The 3% goal is too high
- ☑ Other (please specify)

If you selected 'other', please explain here:

No opinion

**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
- [x] Other (please specify)

If you selected 'other', please explain here:

No opinion

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**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

Please explain your answer:

/

**3.10 Given that additional energy efficiency efforts are needed, how could Article 6 be made more effective?** (multiple options possible)

- [ ] The energy efficiency requirement in public procurement should be extended to all levels of public administration (including to regional and local authorities)
- [ ] Requirements on reporting on energy used during the whole lifetime of procured goods and buildings should be gradually introduced
- [ ] A mandatory calculation of total cost of ownership shall be introduced for public procurement The references to limiting conditions (e.g. cost-effectiveness, economic feasibility, technical suitability) should be removed
- [x] Other (please specify)

If you selected 'other', please explain here:

No opinion

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**Article 7 – Energy Savings Obligation**

**3.11 Taking into consideration the required higher energy efficiency efforts for 2030, how do you assess the current level of ambition of Article 7(1) on energy savings obligation?**

(too high - adequate level - too low)

| | Too high | Adequate | Too low | No opinion |
|---|---|---|---|---|
| Please select your answer | ○ | ◉ | ○ | ○ |

**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 | ○ | ◉ | ○ | ○ | ○ | ○ | ○ |
| Strengthen the additionality criteria for existing tax measures | ○ | ◉ | ○ | ○ | ○ | ○ | ○ |

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

If you selected 'other', please explain here:

A significant number of Member States are having difficulty achieving the current targets. It is not expected that tightening measures and targets will help this. Instead of additional requirements, Member States should be provided / guided with support and financial instruments to implement energy efficiency measures.
In particular, the flexibility in Articles 7 has allowed for cost-effective implementation. Member States should be given the flexibility to choose the most appropriate and cost-effective policy measures to implement the measures. There must also be flexibility in acceptable measures. The requirements must also take into account the initial situation of the member states. It should be noted that tightening up binding targets will also lead to difficult and costly (and inefficient) measures in the Member States.
When EEOS are still foreseen obligated parties must have access to financial resources to supply EE measures especially in regulated markets and, if implemented, should get EE certificates for providing technical assistance in the deployment of EE measures.
Regarding measures alleviating energy poverty, Eurelectric has carried out a specific analysis on how to best design energy efficiency measures that are aimed at low income households (more information on the study can be found at this link: https://www.eurelectric.org/e-quality/ ). The responsibility of carrying out such measures should not fall only on obligated parties or utilities (several examples in the study underline how national agencies and central government coordination are key aspects for a successful implementation) and should be financed  specific and additional funds or via dedicated budgets.

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**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?

- ◉ Yes
- ○ No
- ○ No opinion

Please explain your answer:

Rules should also be changed, namely bearing in mind not only the size of the company but also the energy consumption. That independent audit should be accompanied by a report that include recommendations to implement certain measures identified in energy audits, resource efficiency and renewable energy use.

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

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**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

Please explain your answer:

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

### 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:

The starting points of Member States variate very much. In Finland, the review of Article 14 of the EED is not necessary, as efficient district heating already plays a significant role in the heating market, and no major growth is expected in the future, as we have already built district heating to the areas with cost-effective possibilities.
Detailed requirements do not promote good market-led progress. Perhaps one can consider a similar exemption as there is in RED for Member States who have already reached a good status.
In other countries it has been successful, like in the case of Portugal where the discipline of cogeneration activity was established following the paradigm assumed by the EED, coupled with sustainable remuneration schemes that maintain the incentive for renewable and high- efficiency cogeneration.

### 3.16 What was the impact in your country of the requirement to carry out a cost-benefit analysis under Article 14(5) in the following areas

(please rank: Very high – High – moderate – Low – Very low)

| | Very high | High | Moderate | Low | Very low | No opinion |
|---|---|---|---|---|---|---|
| It increased energy efficiency of energy supply | ○ | ○ | ◉ | ○ | ○ | ○ |
| It increased energy efficiency of heating and cooling networks | ○ | ○ | ◉ | ○ | ○ | ○ |
| High-efficiency cogeneration was more often deployed | ○ | ○ | ◉ | ○ | ○ | ○ |
| Efficient district heating and cooling was more often deployed | ○ | ○ | ◉ | ○ | ○ | ○ |

| | | | | | | |
|---|---|---|---|---|---|---|
| Increased reuse of waste heat from industry | ○ | ○ | ○ | ○ | ◉ | ○ |
| It increased reuse of waste heat from services (including ICT) | ○ | ○ | ○ | ○ | ○ | ◉ |

### 3.17 Given that additional energy efficiency efforts are needed, how could Article 14 and related Annexes and definitions (Article 2) be made more effective? To what extent do you agree that the following measures should be implemented

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

| | 1 | 2 | 3 | 4 | 5 | 6 | No opinion |
|---|---|---|---|---|---|---|---|
| Minimum requirements for efficient district heating and cooling should be strengthened; | ○ | ○ | ○ | ○ | ○ | ○ | ◉ |
| Minimum requirements for efficient district heating and cooling should be established separately for networks and generation units; | ○ | ○ | ○ | ○ | ○ | ○ | ◉ |
| Minimum requirements for high-efficiency cogeneration should be strengthened; | ○ | ○ | ○ | ○ | ○ | ○ | ◉ |
| Minimum requirements for high-efficiency cogeneration using fossil fuels should be stricter; | ○ | ○ | ○ | ○ | ○ | ○ | ◉ |
| The Comprehensive assessments in line with Article 14(1) should explicitly cover renewable energy potentials in heating and cooling; | ○ | ○ | ○ | ○ | ○ | ○ | ◉ |
| The requirement to address the potential identified in the Comprehensive assessments through policies and measures should be strengthened; | ○ | ○ | ○ | ○ | ○ | ○ | ◉ |
| The requirements for a cost-benefit analysis in line with Article 14(5) should be based on primary energy savings; | ○ | ○ | ○ | ○ | ○ | ○ | ◉ |
| 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; | ○ | ○ | ○ | ○ | ○ | ○ | ◉ |
| 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; | ○ | ○ | ○ | ○ | ○ | ○ | ◉ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 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; | ○ | ○ | ○ | ○ | ○ | ○ | ◉ |
| Other (please specify). | ○ | ○ | ○ | ○ | ○ | ○ | ◉ |

If you selected 'other', please explain here:

No opinion

### 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 | ○ | ○ | ○ | ◉ |
| the potential for waste heat reuse is assessed when new data centres apply for planning permissions | ○ | ○ | ○ | ◉ |
| existing provisions to exploit industrial waste heat potential are strengthened | ○ | ○ | ○ | ◉ |

Please explain your answer (optional):

No opinion

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**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?

- ◉ Yes
- ○ No
- ○ I don't know

Please explain your answer:

In addition DSOs are required by their NRAs to operate their networks in the more efficient way.

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

- [x] The regulatory authorities discouraged investments by not accepting the investment in the Regulatory Asset Base;
- [x] Financing for investments is not easily available;
- [x] 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;
- [x] Other (please specify)

If you selected 'other', please explain here:

Investments to achieve advanced digitalisation of grids and smart system integration require an adaptation across the EU of the networks' remuneration systems.

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**Article 16 – Availability of qualification, accreditation and certification schemes**

**3.21 Are you aware of the certification schemes, accreditation schemes and equivalent qualification schemes for providers of energy services, energy audits, energy managers and installers available in your country?**

- (•) Yes
- ( ) No
- ( ) No opinion

Please explain your answer:

**3.21.A What are the benefits of having the certification and/or accreditation schemes in your country?** (multiple options possible)

- (•) It allows ensuring the availability of skills (e.g. providers of energy services, energy auditors, energy managers and installers etc.);
- ( ) Allows ensuring quality of energy services offered by energy service providers including energy services companies (ESCOs);

- Increases confidence in the energy services sector;
- Facilitates the development of energy services markets;
- Other (please specify).

### 3.22 How you would assess the effectiveness of the existing certification and /or accreditation schemes in your country?

| | Effective | Effective to some extent | Not effective | I do not know/ no opinion |
|---|---|---|---|---|
| Please select your answer | ○ | ○ | ○ | ◉ |

Please explain your answer:

### 3.23 In your view, has the EED (Article 16) contributed to setting up the certification and/or accreditation schemes and/or equivalent qualification schemes, including training programmes?

- Yes
- No
- No opinion

Please explain your answer:

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**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:

In some Member States the rollout of smart meters played a big role in the increase of the energy services market. Adding smartness to the energy system provides a more efficient and sustainable solutions by optimizing energy systems, resulting in reduced CO2 emissions and reducing the use of fossil resources. Via smart grids, consumers and producers can interact swiftly with the network, contributing to tackle the increase or decrease of power. This thus allow customers, through energy services, to analyze their consumption or production with a bigger detail, bringing energy supply closer to demand and further increasing energy efficiency.

### 3.24.A Which were the most important factors that contributed to the development of the energy services market in your country?

*at most 3 choice(s)*

- [x] Information about energy services has been made available to SMEs and consumers;
- [ ] Model for energy performance contracts have been developed and deployed in practice (?);
- [ ] Certification and accreditation schemes for energy services providers ensures that the needed skills are available;
- [x] Financing and support mechanisms has been made available;
- [x] Regulatory framework has been properly set;
- [ ] Other (please specify).

### 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?

- [x] Introduction of reporting requirements for Member States on the certified energy services providers, number of energy performance contracts concluded in the public sector etc.;
- [x] Introduction of requirements for independent monitoring and verification of energy performance contracts;
- [x] 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)

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**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 | ◉ | ○ | ○ | ○ |
| Split incentives between owners in multi-owner properties | ◉ | ○ | ○ | ○ |
| Investments in energy efficiency by individual public bodies prevented due to national or regional rules on public purchasing annual budgeting or accounting | ◉ | ○ | ○ | ○ |

Please explain your answer:

Split incentives are common barriers between building owners and tenants that, in practice, hinder the uptake of energy efficiency investments in various segments in the building sector such as privately rented homes, multi-apartment buildings, social housing units and leased commercial or public premises. A successful approach could consist, per example, in align incentives, redistribution of costs and savings between involved parties (e.g., landlord can be entitled to amortize the capital expenses of an energy efficiency investment by passing a share of the costs to the tenant) or agreements between involved parties that should be structured in a way that the energy efficiency investment benefits all of them. Some Member States have implemented systems that work, i.e. Finland.

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**Article 20 – Energy Efficiency National Fund, financing and technical support**

### 3.27 Has Article 20 facilitated access to finance for energy efficiency projects 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 | ○ | ○ | ○ | ○ | ○ | ◉ |
| Setting up specific financing facilities for increasing energy efficiency in different sectors | ○ | ○ | ○ | ○ | ○ | ◉ |
| Setting up specific technical support schemes for increasing energy efficiency in different sectors | ○ | ○ | ○ | ○ | ○ | ◉ |
| Dissemination of best practice in the field of financing energy efficiency | ○ | ○ | ○ | ○ | ○ | ◉ |
| 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 | ○ | ○ | ○ | ○ | ○ | ◉ |

**Article 21 – Conversion factors and Annex IV**

### 3.29 Should Annex IV on “Energy content of selected fuels for end use” be revised? If so, how?

- ○ Yes
- ○ No
- ◉ No opinion

Please explain your answer:

### 3.30 In your view, how could the default Primary Energy Factor (the coefficient referred to in footnote (3) of Annex IV) facilitate decarbonisation?

*1000 character(s) maximum*

The Primary Energy Factor (PEF) coefficient should be reflective of the evolution of the energy mix. The current EED rules allow Member States to use another PEF than the revised 2.1. In reality, not many Member States have opted for reconsidering their national PEF since the adoption of the Clean Energy Package, resulting in many Member States still having a PEF of 2.5 or higher for electricity. Ideally, the PEF should be as low as possible to reflect equality between electricity and other energy sources as well as the adaptation of the energy mix during the energy transition. On one hand it is necessary to harmonise the calculation method to determine the PEF, on the other hand Member State should adapt their PEF to their energy mix and its evolution. The Commission should assess any PEF-related barriers to electrification, with a view to ensuring a level playing field between energy carriers.

This is the end of the survey. Thank you very much for your valuable contribution.

**References**


[1] The Roadmap and Inception Impact Assessment was published on 3 August and was made available for public feedback until 21 September 2020: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12552-EU-energy-efficiency-directive-EED-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

[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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