

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



Introduction

This consultation is launched to collect views and suggestions from different stakeholders and citizens in view of the review of Directive 2012/27/EU on energy efficiency (Energy Efficiency Directive or EED), foreseen for the second half of 2016.

This review plays a prominent role as the Commission called on Member States to treat energy efficiency as an energy source in its own right in its Energy Union Strategy of 25 February 2015.¹

The European Council of October 2014 agreed on an EU objective of saving at least 27% of energy by 2030 compared to projections and requested the Commission to review the target by 2020 “*having in mind an EU level of 30%*”. The existing policy framework should therefore be updated to reflect the new EU energy efficiency target for 2030 and to align it with the overall 2030 Framework for Climate and Energy.

Energy efficiency policies have been put in place by the EU for some time now and they have delivered tangible results. The Energy Efficiency Directive, Energy Performance of Buildings Directive², Energy Labelling Directive³ and EcoDesign Directive⁴ 3R332 are the key building blocks of the current energy efficiency framework. Many climate policies, such as the CO₂ performance standards for passenger cars and light commercial vehicles, also make a major contribution to improving energy efficiency. Thanks to these instruments, significant progress has been achieved by Member States in terms of energy savings over the past (five) years, contributing to the overall 2020 energy and climate policy objectives.

Public funding has played an important role by supporting the implementation of energy efficiency policies at national and regional level. There has been an increase in financing over the last years due to greater importance of these policies in the context of the overall EU decarbonisation agenda. The European Structural and Investments Funds (ESIF) and the European Fund for Strategic Investments (EFSI) are key to unlocking the needed private

¹ COM(2015) 80 final

² Directive(2010) 31

³ Directive(2010) 30

⁴ Directive(2009) 125

investments for energy efficiency. On the other hand, the effectiveness and impact of energy efficiency investment funding strongly depends (*inter alia*) on the implementation of the energy efficiency legislation, including the Energy Efficiency Directive.

Many measures taken by Member States today will, in fact, continue contributing to the energy efficiency targets and to the broader energy and climate policy framework beyond 2020. Since the Energy Efficiency Action Plan⁵ was adopted in 2011, the situation has greatly improved: primary energy consumption has continued to fall across the Union, with steady economic growth, and many Member States have successfully strengthened their national energy efficiency programmes.⁶

In line with the requirement of the EED (Article 3(2)), an assessment was carried out by the Commission in 2014 to review progress towards the EU 20% energy efficiency target for 2020, the findings of which were presented in the Energy Efficiency Communication, adopted on 23 July 2014.⁷ An updated analysis of how Member States are achieving the 20% 2020 target on energy efficiency will be published as part of the State of the Energy Union package in November 2015.

Given the recent implementation date of the EED, this consultation focuses on examining the following elements of Directive:

- **Article 1 (subject matter and scope) and Article 3 (energy efficiency target):** As required by the European Council of October 2014, which agreed the EU objective of saving at least 27% of energy by 2030 compared to projections and requested the Commission to review the target by 2020 *“having in mind [a level of savings of] 30%”*.
- **Article 6 (purchasing by public bodies of energy efficient buildings, goods and services):** As required by the reporting obligation under Article 24(8) to review the effectiveness of implementation of Article 6.
- **Article 7 (energy efficiency obligation schemes):** As required by the reporting obligation under Article 24(9) on the implementation of Article 7 and the need to address the obligation period that will expire after 2020.
- **Articles 9 – 11 (metering, billing information and cost of access to metering and billing information):** Consumer related aspects touched upon in these Articles are also addressed in the Internal Market Design/Delivering a New Deal for Energy Consumers initiative launched in parallel.
- **Article 20 (energy efficiency national fund, financing and technical support):** The European Fund for Strategic Investments (Junker Plan) raises the importance to address the market gaps for energy efficiency investments.

⁵ COM(2011) 109 final

⁶ SWD(2014) 0255 final

⁷ COM(2014) 520 final

- **Article 24 (reporting and monitoring and review of implementation):** Given the new governance system to be introduced under the Energy Union in view of 2030 framework, currently being prepared in parallel to this exercise.

The questions of this consultation on the above articles are formulated so as to respect the requirements of the recently adopted Better Regulation Package⁸ and to ensure that the results of this consultation are fed into two parallel processes: first, to assess whether relevant measures are efficient, effective, and coherent with the broader EU legislative framework, and second, to identify the most appropriate policy options to be considered for reviewing specific aspects of the EED as part of the impact assessment.

Against this background, questions of a general nature for the general public are included in Part I. A set of questions of a technical nature for a more expert public is included in Part II. Respondents are invited to reply within the two parts to all the questions they consider relevant.

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⁸ Better Regulation Package (2015)

Information about the respondent

***Are you answering on behalf of an organisation or institution?**

- Yes, I am answering on behalf of an organisation or institution
- No, I am answering as an individual

***If you are answering as an individual, please enter your full name.**

[Free choice: max. 100 characters]

***If you are answering on behalf of an organisation or institution, please enter the full name of your organisation or institution:**

[Free choice: max. 100 characters]

***If you are answering on behalf of an organisation or institution, please enter your full name and position title:**

national government of the Netherlands

***Please enter your email address:**

[Free choice]

***If you are answering on behalf of an organisation or institution, please specify which category best describes your organisation or institution from the list below.**

- Central public authority
- Local public authority
- Private company
- Utility
- International organisation
- Workers organisation/association/trade union
- Non-governmental organisation (NGO)
- Industry/business association
- Other interest group organisation/association
- Consultancy
- University
- Think Tank/research institute
- Political party/organization
- Other (please specify)

***Does your organisation or institution primarily deal with energy issues?**

- Yes
 No

***Please indicate your principal country or countries of residence or activity:**

- | | | |
|--------------------------------------|---|--------------------------------------|
| <input type="radio"/> Austria | <input type="radio"/> Belgium | <input type="radio"/> Bulgaria |
| <input type="radio"/> Croatia | <input type="radio"/> Cyprus | <input type="radio"/> Czech Republic |
| <input type="radio"/> Denmark | <input type="radio"/> Estonia | <input type="radio"/> Finland |
| <input type="radio"/> France | <input type="radio"/> Germany | <input type="radio"/> Greece |
| <input type="radio"/> Hungary | <input type="radio"/> Ireland | <input type="radio"/> Italy |
| <input type="radio"/> Latvia | <input type="radio"/> Lithuania | <input type="radio"/> Luxembourg |
| <input type="radio"/> Malta | <input checked="" type="radio"/> Netherlands | <input type="radio"/> Poland |
| <input type="radio"/> Portugal | <input type="radio"/> Romania | <input type="radio"/> Slovakia |
| <input type="radio"/> Slovenia | <input type="radio"/> Spain | <input type="radio"/> Sweden |
| <input type="radio"/> United Kingdom | <input checked="" type="radio"/> Other (please specify) | |

***How would you prefer your contribution to be published on the Commission website, if at all?**

- Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)
- Anonymously (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)
- Not at all – keep it confidential (my contribution will not be published, but it will be used internally within the Commission)

Part I – General questions

1. Article 1: Subject matter and scope and Article 3: Energy efficiency target

Article 1 provides the general framework for the promotion of energy efficiency within the Union in order to ensure the achievement of the EU 20% energy efficiency headline target by 2020. In addition and more specifically, **Article 3** requires that each Member State sets an indicative national energy efficiency target based on either primary or final energy consumption, primary or final energy savings or energy intensity. In setting the targets, Member States should take into account a number of provisions set out in Article 3(1).

As regards the EU energy efficiency target for 2030, the European Council agreed in October 2014 on an indicative target at the EU level of at least 27% (compared to projections) to be reviewed by 2020 having in mind an EU level of 30%. Therefore, the existing policy framework should be updated to reflect the new EU energy efficiency target for 2030 and to align it with the overall 2030 Climate and Energy framework.

1.1. What is the key contribution of the EED to the achievement of the 2020 energy efficiency target?

General remark to this consultation:

Recently, the Dutch Cabinet has released their long term vision on the national energy system⁹. In that vision, the long term ambition is to realize a low carbon energy system that is affordable, secure, reliable and safe, within the European context. Later on in 2016, a broad dialogue will start with all segments of society, on both the national and the regional/local level, to discuss how this ambition can be materialized. This should result in a concrete policy agenda by the end of 2016. Therefore, the opinion of the national government expressed in this consultation represents the current state of thinking.

The Netherlands considers energy efficiency key in the transition towards a low-carbon economy that is affordable, safe and secure. There is still much potential for improving energy efficiency, but due to market failures and barriers this potential is still to be unlocked. The key benefit of EED is that it gives a European harmonized framework for energy savings policies. This contributes to a more level playing field in the EU by requiring efforts with regard to (for example) renovation of public buildings and public procurement. The EED also contributes to harmonized market conditions through the regulation of, for example, individual (smart) metering and billing information, and the level of expertise on energy-efficiency. The EED also contributes to a level playing field as large enterprises throughout Europe are required to perform energy-audits that meet uniform criteria.

⁹ <https://www.rijksoverheid.nl/documenten/rapporten/2016/01/18/energie-rapport-transitie-naar-duurzaam>

1.2. How has the EED worked together with the Effort Sharing Decision, other energy efficiency legislation (on buildings, products and transport) and ETS? Could you describe positive synergies or overlaps?

The Netherlands considers European energy efficiency legislation for buildings, products and transport as effective instruments that contribute to cost-effective energy savings in the Netherlands and Europe. European efficiency and norms such as Ecodesign, Energy labelling and CO₂-norms for vehicles are a clear example of this.

While the benefits of the EED are obvious, there is an overlap of targets and policies that lowers the overall effectiveness of the climate- and energy framework. ETS, ESD and EED all lead to CO₂-reductions via energy savings, but the EED makes no distinction between ETS and non-ETS. This overlap influences the effectiveness of policies. For example, CO₂-emissions in the ETS sector that are reduced by energy saving policies, can be compensated with higher CO₂-emissions by others as the amount of CO₂-allowances is fixed.

1.3. How has the EED worked together with existing national legislation? Could you describe any positive synergies or overlaps?

The Netherlands has a long tradition in energy saving policies. The Netherlands has implemented a comprehensive set of national policies on energy efficiency. In the Netherlands, the National Energy Agreement¹⁰ was agreed upon in 2013 by more than 40 key stakeholders. In this agreement an ambitious energy savings target was set for the period up to 2020, including many measures that should stimulate energy efficiency and –savings (such as an energy savings revolving fund). Although the EED contributes to a more level playing field for stakeholders in the EU, the co-existence of both European and national energy savings policies has led in some instances to overlaps. For instance, the energy covenants for companies that date back before the 2000s, include modalities for the implementation of energy management systems for a large group of enterprises with high energy consumption profiles. The requirement of article 8 to implement energy-audits for non-KMOs resulted in several difficulties such as with the misalignment of definitions and the increased administrative requirements for companies and authorities.

1.4. What are the main lessons learned from the implementation of the EED?

- *The Netherlands regards the attainment of a low-carbon economy that is secure, reliable and affordable, as a key societal challenge that needs to be addressed. The main focus should therefore be on the reduction of greenhousegas emissions in a cost-effective manner. Energy efficiency (but also renewable energy, CCS and nuclear energy) are considered as instruments to reduce greenhousegas emissions.*
- *Consider more carefully the overlaps with other targets for greenhouse gas emission reductions and renewable energy. There seems to be some inconsistency, as*

¹⁰ <http://www.energieakkoordser.nl/~media/files/energieakkoord/publiciteit/agreement-on-energy-policy-in-practice.ashx>

progress to attain targets for greenhouse gases and renewable energy is on track at the European level, while more effort seems to be needed for energy efficiency¹¹.

- *Take national circumstances better into account for the period 2021-2030t.*
 - o *With regard to targets on MS_level: Targets for greenhouse gas emission reductions (under the ESD) and renewable energy have taken into account considerations such as welfare and potential for cost-efficient measures. In the current EED, the 1,5% target was set uniformly for all MS. As the energy efficiency target for 2030 is more ambitious, it becomes increasingly important to take into account national circumstances.*
 - o *Take national policies and circumstances that are already in place more into account (such as energy audit and sustainable public procurement). MS should have more room to stimulate energy efficiency in a creative and optimal way. This should improve the overall effectiveness of energy saving policies.*
- *The scope of the EED could be more optimal considering the overlap and/or relationship with other European energy savings legislation for buildings, products and transport. The Netherlands favours a broader scope (i.e. primary energy use; both national and European policies are eligible). This avoids complicated monitoring methods to prove additionality and avoids discussions on eligibility. It also avoids a perverse stimulus for MS to implement costly national measures, where European policies might be more cost efficient (such as norms for buildings, products and transport). Such a broader scope would make it also more easy to define the relationship with other energy efficiency legislation on buildings, products and transport.*
- *Limit and streamline reporting and monitoring requirements. For EED, many national reports had to be made, without clear benefits, while raising the administrative burden (for instance national reports for article 14 and 15).*
- *Take into account sufficient time and possibilities to discuss proposals for revisions of the EED. In the discussions on the current EED, much attention was paid to certain articles (article 3 and 7), while the implementation of other articles could have benefited from more discussion and time to consider proposals (such as article 8 and 14)*

1.5. Which factors should the Commission have in mind in reviewing the EU energy efficiency target for 2030?

- *The EED could play an important role in the realization of a low carbon economy by providing a European framework for the instrumentation of energy saving policies.*
- *The European Council decided in October 2014 that the European targets on energy savings and renewable energy for 2030 are not translated to binding national targets. Therefore, it is no longer required to include energy savings targets for Member States in the EED for the period up to 2030. Instead, the added value of the EED should be to provide a (framework of) instruments to reduce CO₂-emissions via energy savings. In order to track the progress on energy efficiency on EU level, the*

¹¹ See for example the State of the Energy Union 2015

monitoring on MS level should include relevant indicators on energy use and efficiency (see also below).

- *The review of the EED should focus on the period after 2020. The current efficiency targets for the period 2014-2020 should not be in the scope of the review in order to avoid further complex discussions on the implementation of the current EED.*
- *A simpler (framework) EED could also be more effective to stimulate energy efficiency. The current EED is considered as complex \pm , both in setting the target as in the implementation. Much flexibility was given to MS in defining the 1,5% target and the way the EED may be implemented (i.e. alternative measures). Also concepts such as materiality, additionality and eligibility were introduced, that leave room for discussion. These issues add to the complexity of the EED.*
- *Instruments in the (future) EED (such as energy audits) should be considered with more care with regard to national circumstances and the consequences for companies (such as with respect to administrative burden). For example, the energy audit should also take European and international aspects of companies more carefully into consideration. Cross-border companies may now face different regimes within the EU.*

1.6. What should the role of the EU be in view of achieving the new EU energy efficiency target for 2030?

- *Monitoring progress of (sectoral) energy use, -efficiency and -savings and associated CO₂-reductions in Member States according to harmonised monitoring and reporting guidelines through the Energy Union governance system.*
- *Periodically taking stock of EU progress in attaining EU climate and energy targets in the state of the Energy Union Report and country fact sheets. Provide analysis with distance-to-target and possible ways to close the gap. Facilitate a dialogue between MS on options and the way forward.*
- *Facilitate the sharing of best practices among Member States, such as with Concerted Action EED.*
- *Stock taking, facilitating and financing innovation programmes that could improve energy efficiency. Many of the much needed innovations will need to be market-ready in the period 2030 to 2050 in order to realize a low carbon economy in a smart and cost-efficient way.*
- *Overseeing the proper implementation of European legislation in Member States, thus ensuring a level playing field for companies and citizens and contributing to integrated energy markets.*

1.7. What is the best way of expressing the new EU energy efficiency target for 2030:

- Expressed as energy intensity
- Expressed in an absolute amount of final energy savings
- Expressed in both primary and final energy consumption in 2030
- Expressed only in primary energy consumption in 2030
- Expressed only in final energy consumption in 2030

X Other (please specify)

The Netherlands considers a target on the EU level that maximises the possibilities to reduce greenhousegas emissions in cost-efficient way to be the most optimal. An EU-target expressed in terms of primary energy consumption would therefore be more favourable than a target expressed in final energy consumption. Consideration should however be given to the potential overlap with the target for renewable energy and the reduction of greenhousegas emissions. Also, the EU target should be clear on whether this concerns energy efficiency or energy savings.

1.8. For the purposes of the target, should energy consumption be:

- Expressed as energy, regardless of its source (as now)
- Expressed as avoided non-renewable energy
- Expressed as avoided fuel-use (but including biomass)
- x Other (please specify)

Avoided fossil energy consumption (excluding fossil energy consumption combined with CCS). This would link energy savings most directly to the reduction of greenhouse gas emissions. It has also a broader scope than “avoided non-renewable energy” so that non-renewable measures that reduce CO2-emissions are also rewarded (like nucleair and CCS).

2. Article 7: Energy efficiency obligation schemes

Article 7 together with Annex V requires that Member States set up an energy efficiency obligation scheme to ensure that obligated parties (energy distributors and/or retail energy sales companies that are designated by each Member State) achieve a given amount of energy savings (1.5% annually) from annual energy sales to final customers over the period 2014 to 2020. As an alternative to setting up an energy efficiency obligation scheme, Member States may opt to take other policy measures to achieve energy savings among final customers to reach the same amount of savings.

The Commission is required to assess the implementation of this Article and submit a report by 30 June 2016 to the European Parliament and the Council, and, if appropriate, to supplement the report with a legislative proposal for amendments.

In line with the EED, Member States had to notify the measures and methodologies on implementation of Article 7 by 5 December 2013. Further information from Member States was received in the notified National Energy Efficiency Action Plans (due by April 2014).

According to the latest available information from the notifications received from Member States¹², 16 Member States notified an energy efficiency obligation scheme by putting an

¹² <http://ec.europa.eu/energy/en/topics/energy-efficiency-directive/obligation-schemes-and-alternative-measures>

obligation on utilities to reach the required cumulative energy savings by 2020 under Article 7. Four Member States out of these (Bulgaria, Denmark, Luxembourg and Poland) will use it as the only instrument to achieve the required energy savings. 12 Member States (Austria, Croatia, Estonia, France, Ireland, Italy, Latvia, Lithuania, Malta, Slovenia, Spain and United Kingdom) will use the obligation scheme in combination with alternative measures. On the other hand, 12 Member States (Belgium, Cyprus, Czech Republic, Germany, Greece, Finland, Hungary, Netherlands, Portugal, Romania, Slovakia and Sweden) have opted to only use the alternative measures to reach the required savings instead of putting obligations on utilities.

3.1. Are you aware of any energy efficiency measures that have been carried out or are planned in your country, by the utilities or third parties in response to an energy efficiency obligation scheme?

Not applicable; no energy-efficiency obligation scheme (EEOS) in NL.

3.2. In your view, is Article 7 (energy efficiency obligation scheme or alternative measures) an effective instrument to achieve final energy savings?

Considering the Netherlands already had a comprehensive set of policies in place to save energy, article 7 provides limited added value. The national policies were notified as alternative measures. The monitoring requirements for the alternative measures however, lead to additional administrative burden.

If yes, please explain your answer:

The Netherlands is considering implementing an energy efficiency obligation scheme in order to meet its ambitious energy savings target for 2020 agreed in the National Energy Agreement. Such a system might also be useful in the period up to 2030. The experience of other countries will potentially help us in designing and implementing the scheme.

3.3. What are, in your view, the main challenges or barriers to implementing Article 7 effectively and efficiently in your country? Please select up to 5 options from the list.

- To select or introduce the right set of measures for achieving 1.5% energy savings (annually)
- Too great flexibility to use wide range of measures: energy efficiency obligation scheme and alternative measures
- Strong opposition from energy suppliers and distributors to set up an energy efficiency obligation scheme
- Lack of effective enforcement
- Lack of sufficient knowledge and skills of involved parties
- Lack of awareness (by the end-users) of the energy efficiency obligation schemes or alternative measures

- X Developing the calculation methodology in line with the requirements of Annex V
- Ensuring sound and independent monitoring and verification of energy savings
- Avoiding double counting
- X High administrative burden
- X Ensuring consistent application of the requirements with other energy efficiency legislation (e.g. building codes)
- Limited timeframe (2014-2020) that makes it hard to attract investment for long term measures
- Other (please specify)

3.4. Do you believe that the current 1.5% level of energy savings per year from final energy sales is adequate?

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- X No opinion

The Netherlands considers goals in terms of CO2-reduction to be more adequate for the period 2021-2030 than goals in terms of (final) energy use.

3.5. Should energy efficiency obligation schemes have specific rules about energy savings amongst vulnerable consumers?

No, this would interfere with national income policies. The Netherlands views the EED as not the adequate instrument for such intervention.

3. Articles 9-11: Metering, billing information and cost of access to metering and billing information

Articles 9-11 deal with consumer empowerment, by asking Member States to put in place requirements about metering, access to billing information and cost of access to metering and billing information, allowing consumers to make decisions about their energy consumption. These issues are also currently being looked at within the Electricity Market Design/Delivering a New Deal for Energy Consumers initiative. It may be relevant to consider certain aspects of these Articles in the EED review. The same is true for the subject of "demand response" (as set out in paragraph 8 of Article 15, but on this topic explicit

questions were already included in the Market Design consultative communication published in July 2015).

4.1. Overall adequacy: Do you think the EED provisions on metering and billing (Articles 9-11) are sufficient to guarantee all consumers easily accessible, sufficiently frequent, detailed and understandable information on their own consumption of energy (electricity, gas, heating, cooling, hot water)?

Yes, the EED requires Member States (under certain conditions) to provide final customers with individual meters that accurately reflect customers' actual energy consumption, that billing information is accurate and based on actual consumption (when technically possible and economically justified), a clear and understandable explanation of how their bill was derived (on request).

Additional information on the implementation of articles 9-11 in the Netherlands:

Easily accessible:

- a) *energy suppliers (i.e. electricity, gas, heating, cooling) have to provide the final customer an invoice regarding their own consumption of energy at least once a year.*
- b) *Additionally to the annual bill, customers with a smart meter receive bi-monthly reports for interim cost- and consumption monitoring and analysis (free of charge).**

** For an optimal effect of the bi-monthly usage and cost overview an active communication approach from the energy company is required. Currently, many energy companies do send a bi-monthly overview by email, but do not support this email with accompanying communication. As a result, many consumers do not know they receive this overview or wrongly consider it to be spam¹³.*

Sufficiently frequent: *bi-monthly overviews for households with a smart meter is seen as economically justified and sufficiently frequent for a final customer to control their energy consumption.*

Details and understandable information on their own consumption:

The Dutch organisation for home owners states that many bills as well as cost and consumption overviews are difficult to understand for the consumer.¹⁴ Therefore it is recommendable to spend more attention to the design of the overview. We endorse the viewpoint of consumer empowerment by providing the consumer with the right information. We emphasize that too much information will lead to less consumer empowerment, the information should be correct, clear and comprehensible. I.e.

¹³ <https://www.rijksoverheid.nl/binaries/rijksoverheid/documenten/rapporten/2014/03/10/monitor-energiebesparing-slimme-meters/monitor-energiebesparing-slimme-meters.pdf>

¹⁴ <https://www.perssupport.nl/persbericht/84637/veh-dwingende-regels-voor-de-energieafrekening-zijn-hard-nodig>

harmonisation terminology in or with the bills of different energy suppliers (for better comparison), offers of different energy suppliers are based on the same assumptions, reduction of cost components on energy bill for a clear and comprehensible overview.

Indirect feedback on energy use (as well as bi-monthly reports of energy use) seems to result in energy reduction of less than 1%, whereas direct feedback (such as inhome displays that provide customized and visually engaging feedback) appears to reduce it to around 3-5%, initially through quick-wins. On the other hand indirect feedback is expected to have a greater impact on long-term investments on energy reduction (e.g. isolation).

4.2. Do you think it appropriate that the requirement to provide individual metering and frequent billing (Articles 9(1), 9(3) and 10(1)) is subject to it being technically feasible and/or cost effective?

Yes, e.g. for households without a smart meter it is not cost-effective to receive data on the energy consumption every two months. To obtain this information bi-monthly, metering data is needed (measured at customers home), which is not considered cost-efficient in the Netherlands..

For grid bound energy supply (like gas and electricity) it is possible to provide the final customer with information on their energy use once a year (final customers without smart meters). This is not the case with off-grid energy supply i.e. gasoline for a car.

The cost-benefit analysis¹⁵ for the smart meter introduction in the Netherlands gave a small positive result. However, this net result is highly dependent on the estimated savings from consumer feedback (see answer on question 4.1). If the expected savings based on consumer feedback will not be or will only partly be realised, the business case could become negative.

4.3. Should such conditions of being technically feasible and/or cost effective be harmonised across the EU?

No, because the conditions will be different for each country. I.e. the outcome of a cost-benefit analysis is affected by the specific market situation, the organisation responsible for the metering and billing, the estimation of possible energy savings. Due to the liberalisation of the energymarket in the Netherlands in 2004 administrative problems have arisen on Dutch households' electricity billing. Smart meters could diminish these problems and empower consumers in their engagement with electricity suppliers in the household market.

4.4. How would these conditions of being technically feasible and/or cost effective affect the potential for energy savings and consumer empowerment?

¹⁵ <https://www.rijksoverheid.nl/onderwerpen/slimme-meter/documenten/rapporten/2010/09/03/intelligente-meters-in-nederland-herziene-financiele-analyse-en-adviezen-voor-beleid>

With the roll-out of smart meters (electricity and gas) all Dutch households will be offered a smart meter by the end of 2020. The smart meters make it possible to receive frequent feedback on actual energy consumption. Without a smart meter there is little feedback on energy consumption. This could affect the potential for energy savings and consumer empowerment.

The Dutch cost-benefit analysis shows a structural energy savings potential for a smart meter in combination with bi-monthly energy consumption feedback with an average of 3,2% on electricity and 3,7% on gas. Real-time feedback shows an energy savings potential of an average of 6,4% on electricity and 5,5% on gas. Furthermore, it shows that a smart meter itself does not result in energy savings.

4.5. Smart meters: Do you think that A) the EED requirements regarding smart metering systems for electricity and natural gas and consumption feedback and B) the common minimum functionalities, for example to provide readings directly to the customer or to update readings frequently, recommended by the Commission¹⁶ together provide a sufficient level of harmonisation at EU level?

Yes, especially regarding consumer feedback. However more harmonisation on privacy and security would be welcome.

If no, do you think the common minimum functionalities should be the basis for further harmonisation?

4.6. What obstacles have national authorities/actors faced in introducing on a large scale individual meters that accurately reflect the final customer's actual energy consumption? Do you have any good experiences to share on how to overcome these obstacles?

In 2008 the Netherlands was on track for a high-tech and mandated rollout of smart meters. However, intense opposition from consumers' organizations and privacy watchdog groups slowed down this process of regulation and innovation and urged the government to switch to a more collaborative approach with stakeholders and consumers' organizations. In 2011 a compromise legal framework was accepted, based on a voluntary acceptance of smart meters by consumers. Smart meters are now considered more likely to contribute to increasing energy efficiency, compared to the initial proposed mandated rollout. These learnings could inspire other MS to anticipate and avoid similar setbacks which could eventually endanger the EU-target of at least 80% of consumers equipped with a smart meter by 2020. Smart meter deployment needs the involvement of all actors affected by the policy: from households, to electricity suppliers, DSOs and the responsible public agents. The understanding of the needs and concerns of consumers is necessary for both acceptance and meaningful impact: information campaigns or public discussions can be a good opportunity to receive their feedback.

¹⁶ C(2012)1342

4. Article 20: Energy efficiency national fund, financing and technical support

The analysis of the July 2014 Energy Efficiency Communication and the recent EEFIG Report¹⁷ showed that the energy efficiency investment market is still relatively small scale compared to its potential or the volumes needed to meet the EU's 2030 objectives. The European Structural and Investments Funds address the market gaps related to investment projects including those in energy efficiency, and the European Fund for Strategic Investments provides EU guarantee for investment projects – including those for energy efficiency. The European Energy Efficiency Fund carries relevant lessons.

Moreover, significant funding for energy efficiency comes from national public sources and the private sector. The effectiveness and impact of energy efficiency investments funding strongly depends (*inter alia*) on the implementation of the energy efficiency legislation, including the EED.

5.1. What should be the most appropriate financing mechanisms to significantly increase energy efficiency investments in view of the 2030 target?

An energy efficiency obligation scheme (EEOS) can lead to financing mechanisms for investments in energy efficiency by obliged parties. We consider finance provided by parties who are highly incentivized to make the most cost-effective investments to be the best.

5.2. Should there be specific provisions aimed at facilitating investment in specific areas of energy efficiency?

No, the most cost-effective areas of investment will differ between Member States and are therefore best not to be decided upon by the EC. For sectors that fall within the scope of ETS, CO₂-reductions (via energy savings or other means) are made cost-effectively within the EU.

If yes, specify your answer from the below list:

- Building renovation
- Efficient appliances and equipment in households
- District heating and cooling network development
- Energy use by industries
- SMEs
- Companies

¹⁷ EEFIG - Energy Efficiency Financial Institutions Group Report: Energy Efficiency – First fuel for the EU economy, 2015, www.eefig.eu

- City and community infrastructures in relation to transport, waste heat recovery, waste-to-energy
- Other (please specify)

5.3. Do you agree that one way to increase the impact of energy efficiency investments could be through making the energy performance/savings monitoring mandatory under Article 20 whenever public funds/subsidies are used for EE investments? Such monitoring could be done, for example, via on-line platforms, by users in the regular intervals.

- Strongly agree
- Agree
- Disagree
- X No opinion

5. Article 24: Reporting and monitoring and review of implementation

The Energy Union Strategy foresees an integrated governance framework for EU energy and climate policies to ensure that agreed climate and energy targets are reached and to enable Member States to better coordinate their policies at a regional level.

6.1. Do you think that the existing reporting and monitoring system under the EED is a useful tool to track developments with regard to energy efficiency in Member States?

No/ Not for all Member States, especially for those Member States that use alternative measures in combination with well developed energy efficiency policies, such as in the Netherlands.

If no, how do you think it could be improved in the future?

On a MS level, the primary focus should be on the reduction of greenhouse gas emissions (in the non-ETS) since no EU targets are set on energy use on MS-level. General indicators on national and sectoral (both ETS and non-ETS) energy use, energy efficiency and energy savings could be relevant to track the MS contribution to meet the goals of the Energy Union on an EU-level. Energy use could also be specified into fossil, renewable and nuclear energy use, in order to establish a more direct coupling with the emission of greenhouse gas emissions.

6.2. Do you think that the reporting of national indicators (for example, value added/ energy consumption, disposable income, GDP etc. for year (n-2)¹⁸ under Annex XIV (1)(a)) of the EED should be simplified?

Yes, for most of the indicators this type of information is available at EuroStat, and additional information is published by the Odyssee project; so it is not needed for the MS to report.

6.3. Do you think additional indicators (in addition to those referred to in Annex XIV (1)(a) – (e)) are needed to improve monitoring to assess Member States' progress towards their energy efficiency targets?

No, although it should be in line with the EU Energy Union targets.

¹⁸ In the year before last [year X(1) – 2], where "X" is the current year.

Part II – Technical questions (on Articles 6 and 7)

6. Article 7: Energy efficiency obligation schemes

8.1. Emerging evidence suggests that most of the measures introduced under Article 7 have long lifetimes (20-30 years) and will continue have an impact beyond 2020. Do you share this view?

Yes. All measures relating to buildings have such long lifetimes. In general, appliances do not have such long lifetimes, since their lifetimes are on average around 10-15 years. But as all have/will be implemented in this decade, the impacts will continue after 2020.

8.2. What is your view on the potential benefits (listed) of energy efficiency obligation schemes?

The Netherlands is currently considering implementation of an Energy Efficiency Obligation Scheme (EEOS). We do not have any evidence of the benefits of an EEOS within the Netherlands. We regard the following potential benefits possible, however this strongly depends on the precise modalities of such a system.

	Strongly agree	Agree	Disagree	Strongly disagree	No opinion
Lower energy bills for consumers		X (long term)	X (short term)		
Better awareness of energy efficiency potential by consumers		X			
Better relationship between energy suppliers, distributors and customers		X			
Lower energy generation (and transmission) costs for the utilities	X				
Improved business and administrative environment for up-coming innovative energy services	X				

Aggregation of small-scale investments (pooling/bundling)					X
Development of new financing models – e.g. energy performance contracting		X			
Stimulation of energy efficient renovation of buildings	X				
Increased competitiveness in the energy markets			X		
Other					

8.3. Are you aware of any developments in the energy services markets that have benefited particular actors (e.g. service providers, suppliers, distributors, etc.) in Member States having an obligation to define the obligated parties under the energy efficiency obligation scheme?

Not applicable, no EEOS in NL

8.4. If you think that some requirements of Annex V need more precise guidance please list those requirements and specify briefly what further information you think would be useful.

The energy savings from European legislation referred to in para 2a of Annex V could be given in energy saving per unit. These savings should then be deducted from the estimated savings per unit a MS calculates (savings in line with para 1). At the moment, a MS has to calculate these savings for EU standards as only the 'additional' savings are accounted for. So instead of general wording, including a table with values (that also might be updated due to new EU regulations) would reduce the efforts in the monitoring.

One or more tables with default values that can be used for scaled savings (para 2 c) would give MS the opportunity to save a lot of time in the monitoring and make the monitoring more efficient.

8.5. As you might know, the current framework of Article 7 is set until 2020, linked to the energy efficiency target for 2020, which will expire at the end of 2020. In your view, should the Article 7 obligations continue beyond 2020 in view of the new energy efficiency target for 2030?

No. see answer 1.5 above

If yes, what factors should be considered for the future Article 7 (please select up to 5 options from the list, and explain your reply if possible):

- The amount of savings to be achieved should be set at a more ambitious level for post 2020 (exceeding the existing 1.5%)
- The energy efficiency obligations scheme should be kept as the only possible instrument to achieve the required savings
- The possibility to choose between the energy efficiency obligations scheme and/or alternative measures should be retained
- The possibility to exclude sales in transport from the baseline should be removed
- The possibility to exclude sales in transport from the baseline should be kept but restricted to the fixed amount to ensure the level playing field
- The exemptions under paragraph 2 – applying a lower calculation rate (for the first years), and excluding sales in ETS industries, as well as allowing savings from measures targeting energy generation and supply – should be removed altogether
- The exemptions under paragraph 2 should be retained but the level and number of exemptions should be reviewed
- The possibility for 'banking and borrowing' energy savings from different years should be removed (paragraph 7(c))
- The possibility for 'banking and borrowing' energy savings should be kept with a possibility to count savings towards the next obligation period (paragraph 7(c))
- Other (please specify)

8.6. Do you think that the scope of eligible measures allowed under Article 7 should be clarified?

Yes

If yes, please explain your answer further:

- The scope of eligible measures should only be end-use energy savings (as it is at the moment)
- X The scope of eligible measures should be expanded
- Other (Please specify)

There is discussion about the eligibility of certain national measures (such as energy performance standards for buildings) in relation to the EPBD. More clarity should be given and the scope expanded.

If the scope should be expanded, please specify which of the following possibilities would be appropriate:

- Measures to switch fossil fuel heating and cooling fully or partially to renewable energy (e.g. through individual appliances, district heating and cooling, centralised distributed units supplying larger building complexes or groups of buildings)
- Measures to increase efficiency of district network infrastructure and generation, including through thermal storage facilities
- Measures to make energy generation from small scale generation more efficient, below the ETS threshold
- Switch to self-consumption, auto-generation and energy positive buildings
- Participation in demand response, including from providing storage capacities
- Primary energy savings from the utilisation and recovery of waste heat (e.g. in district networks)
- Savings from energy management systems
- Energy savings from better organisation of activities
- X Other (please specify)

The scope should be such that all measures, including European legislation on buildings, products and transport, may be eligible, thus improving the possibilities to implement cost-efficient measures (including European measures) and avoiding complex discussions and monitoring methods on additionality and eligibility..

8.7. Would there be benefits in greater harmonisation of some of the requirements of Article 7 to allow more consistent implementation across Member States?

Provision of Article 7/Annex V	Strongly agree	Agree	Disagree	Strongly disagree	No opinion
Calculation methods	X				
Materiality				X	
Additionality				X	
Lifetimes	X				

Price demand elasticities ¹⁹ for taxation measures in real terms				X	
Indicative list of eligible energy saving measures	X				
Monitoring and verification procedures	X				
Reporting	X				
Other					

Calculation methods, lifetimes, monitoring and verification procedures, and reporting need to be harmonized to create a “level playing field”. Materiality and Additionality are theoretical concepts that in practice only complicate calculation, monitoring and verification procedures, and should not be used and therefore do not need harmonisation. Price demand elasticities for taxation are specific to MS as taxation is not harmonized.

8.8. What role should the EU play in assisting the Member States in the implementation of Article 7?

Concerted Action EED; streamlining and simplifying rules to access EU funding.

8.9. Please state which best practice examples could be promoted across the EU and how?

The National Energy Agreement on Sustainable Growth, Voluntary Agreements, e.g. MJA (Long Term Agreements with industry), Energy Investment Tax Deduction (EIA) and Blok voor Blok (large scale renovation approach).

8.10. Would it be appropriate and useful to design a system where some types of energy savings achieved in one Member State would count towards obligations carried out either by governments or by economic operators in another country, just as the option to cooperate on greenhouse gas emissions reductions already exists?

Yes, but preferably in terms of avoided CO₂-emissions in the context of the ESD and ETS in order to prevent overlap.

¹⁹ Price demand elasticity is a measure used in economics to show the responsiveness, or elasticity, of the quantity demanded of a good or service.

8.11. Would it be appropriate and useful to design a system where energy efficiency obligations would also include elements aiming at gradually increasing the minimum share of renewable energy applicable to energy suppliers and distributors?

No, we do not consider the EED to be the appropriate instrument for stimulating renewable energy.

8.12. Could the option of establishing an EU wide 'white certificate' trading scheme be considered for post 2020?

- Strongly agree
- X Agree
- Disagree
- Strongly disagree
- No opinion

As many member states have already implemented or are planning implementation of an EEOS, an EU-wide system might lead to a more cost-effective realization of the same goals.