BRIEFING FOR COMMISSIONER KADRI SIMSON

MEETINGS: 1. WITH COALITION OF ENERGY SAVINGS AND 2. WITH THE GREEN 10 ON 'FIT FOR 55' PACKAGE

On 1 March and 2 March 2021, videoconferences

Contents

SCENE SETTER

The briefing is for two separate meetings:

1. Coalition of Energy Savings meeting on 1 March at 15:00-16:30
2. A meeting with the big environmental NGOs' umbrella organization Green 10 (on 2 March at 11.15) to discuss the energy aspects of the Fit for 55 package. Meeting initiated by the Cabinet Simson.

Notes:

A4 - State aid aspects could be discussed, in particular the Energy and Environmental Aid Guidelines (EEAG) review, and the line on support for renewables, noting that DE expressed concerns over auctions.

KEY MESSAGES

[Energy efficiency]

- **Energy efficiency** plays a key role in decarbonising Europe's economy by 2050. This was also highlighted in the European Green Deal communication, which asked to prioritise energy efficiency.
- The **Energy Efficiency Directive (EED)** is a central instrument towards the green transition.
- The **open public consultation for the EED – and I would like to thank you for taking part in it – confirmed this position**, as a strong majority of the respondents agreed that EED has attained its objectives and that these objectives not only remain relevant, but have to be strengthened in the context of a higher climate ambition for 2030.

  The Climate Target Plan estimates that energy efficiency efforts need to be increased (in the range of 36-37% for the final energy and 39-41% for primary energy) in view of achieving the 55% climate target by 2030. To this end, the Commission is currently revising the EED to ensure that the required energy efficiency efforts are achieved in a cost-effective way.
- As part of the revision process, the Commission has carried out the evaluation of the entire Directive. The findings indicate that the EED remains a key policy instrument in view of a higher climate target, but it needs to be adapted to reap the savings potential and multiple benefits, including ensuring synergies with the other Green Deal initiatives, such as the revised Renewable Energy Directive, the Renovation Wave and the Energy Sector Integration.

- We are therefore looking at various options on how the EED provisions could be strengthened. We have already advanced in the impact assessment and we would need to submit it to the Regulatory Scrutiny Board in a weeks' time.
- Nevertheless, this discussion is very important for us and we would like to hear your ideas and input that could be still included in the EED. It would also be welcomed and useful to better understand your expectations per topic and provisions that the Directive covers.
- Areas like Article 7 on energy efficiency obligation schemes, transport, heating and cooling and public buildings are particularly relevant because of the role they play or the possibilities they offer for energy efficiency and energy savings.
- For example, as regards public buildings, we are looking into the possibility to extend the obligation to other public administration levels (besides central government). A similar approach could be imagined for public procurement (which puts obligation only central government authorities at the moment).
- As regards Article 7, one option could be to increase the level of yearly energy savings above the existing 0.8%. Should the Commission also propose targets for some sectors, like transport or ICT?
- One concern I have – and which is for me really important and also, as you know, a priority of this Commission – is not to increase the administrative burden for the Member States and, if possible, even to reduce it. Do you see a danger that a strengthened EED could increase the administrative burden? And, if you do, how could this be counteracted? Are there reasons that would justify it in the eyes of the Member States?

- I am aware that monitoring and verification are very important to ensure solid data, but it would be important to make sure that this is crafted as effectively as possible.
- Last but not least, I would be interested to hear what you think about the energy efficiency target and its nature. As you are aware, it was a controversial issue when the EED was negotiated in the past. However, a majority of respondents in the Open Public Consultation thought that it would be important to have binding targets at national level. Moreover, in only a couple of years, the perception has substantially changed and the role of energy efficiency to tackle climate changed is essential. Do you see advantages in such an approach? How do you see Member States reacting to such a possible solution?
- Finally, the **Energy Efficiency First principle (EE1st)** will be a central element of EED and the Commission is preparing guidelines to help policy makers and market entities to apply the principle in energy related policy planning and investments. Here as well, your input on what EE1st should mean and how it could become operational is deemed as valuable.
- I will be listening carefully for your input and I will be glad to answer the questions you may have.

[Renewable energy sources]

- The main goal of the RED II revision is to **address new climate ambition of the CTP;**
- At the same time, the review will allow us to bring forward some of the key actions outlined in several **European Green Deal Strategies, including Energy System Integration and Hydrogen**. It will also take into account the Biodiversity 2030 Strategy;

- We are aiming at a **targeted revision of RED II** – in order to avoid putting off balance the overall political compromise achieved in 2018 which is being transposed by MS until June this year.
- In the Renewable Energy Directive, the EU set itself a target of at least 32% of energy from renewable sources in 2030. But this is no longer enough – **according to the Climate Target Plan it needs to reach 38-40% by 2030**, in order to contribute effectively to the GHG emissions reduction target of 55%.
- According to what has been already outlined in the CTP and the EGD strategies**, several elements of RED II might require strengthening**, ranging from heating to cooling, transport, industry, energy system integration.
- **Heating and cooling** accounts for half of the EU energy consumption and more than three quarters of this is currently supplied from fossils fuels. **In 2019 only 21%** of that was renewable energy. The CTP says this needs to go **up to 40% by 2030** to achieve our GHG reduction ambition.
- RED II set, for the first time, **a coherent and dedicated EU legal framework for heating and cooling, including an indicative renewable heating and cooling target and an indicative renewable district heating and cooling target**. These targets are indicative though and we will assess how further incentives can be established to actively increase the amount of renewable energy in heating and particularly cooling systems, which are increasing in use.
- **Various options are being analysed in the impact assessment, including targets, encouraging the replacement of fossil fuel heating systems and better use of waste heat**.

- The **decarbonisation of the buildings sector is vital to deliver on the updated 2030 climate target, given that buildings are responsible for 40%** of total energy consumption and 36% of energy-related greenhouse gas emissions in the EU. According to the impact assessment for the Climate Target Plan, to achieve the 55% emission reduction target by 2030, **the EU should reduce buildings' greenhouse gas emissions by 60%** compared to 2015 levels.
- The existing legislation does not suffice to reduce emissions from buildings at sufficient scale with a view to the updated 2030 climate target. **The upcoming revisions of the EED and RED as well as the planned revision of the EPBD are necessary to deliver on the ambition of the Renovation Wave and to contribute to the achievement of the EU's updated climate target for 2030 and the climate neutrality objective for 2050.**
- The **Energy System Integration Strategy** sets out ways to improve the integration of the energy system, and we aim to give this concrete form in the revision of Directive. Options being looked at include how to **improve the use of waste heat, how to promote renewables based electrification, especially in heating and cooling and in transport and improving the certification of renewable and low carbon fuels**.
- **Decarbonising the transport sector** is one of the key challenges. The transport sector has a very low share of renewable energy, **only 8.9% in 2019.** From the assessment underpinning the Climate Target Plan it is clear that the level of ambition and the measures in the transport sector would need to be stepped up considerably to reach **a renewable share of 24 % by 2030**.

- This will require a **gradual transformation of the entire transport system**. There is no single solution for the future of mobility. All main options must be pursued, with a focus on the needs of each transport mode. Loading infrastructure and secure access to batteries will be critical to rolling out electric vehicles in individual road transport, while clean hydrogen will be crucial for decarbonising heavy-duty transport and, through its derivatives, in the aviation and maritime sector.
- The 2018 Renewable Energy Directive set the **first targets and measures for the sector, but these would need to be re-visited in light of the higher 2030 ambition**. We will also look at how to promote and support renewable and low carbon fuels in the sector.
- **Industry uses around 26% of energy** in the EU. A large share of that energy is used for process heating. Energy use is quite concentrated in a few energy intensive sectors which are as follows with their share of industry energy use: Chemicals 22%; Iron and steel 20%; Refining 19%; Non-metallic minerals 14%; Pulp, paper and print 14%; Non-ferrous metals 4%. **Renewables are primarily used in the wood, pulp and paper industry, but are largely absent in other industry sectors.**
- Under RED II, industry is **not explicitly covered, and the pace of RES uptake is clearly insufficient** for industry to contribute adequately to an increased 2030 climate target in line with the CTP.
- **Introducing specific provisions covering the use of renewables in industry** could help accelerate the cost-efficient uptake of RES in industry, in line with the vision and actions outlined in the Energy System Integration and Hydrogen Strategies.

- And then there are **renewable fuels for the hard-to-decarbonise sectors, including transport, heating and cooling and industry**. While direct electrification presents the most cost-effective and energy-efficient decarbonisation option in many cases, there are a **number of end-use application where this is not possible or only at too high cost**. In such cases, renewable and low-carbon fuels could be used. This includes for example **renewable and low-carbon hydrogen use in industrial processes or the use of low carbon fuels in aviation or maritime**.
- The **priority for the EU is to develop hydrogen production from renewable electricity** as cleanest solution. In a transitional phase however, other forms of low-carbon hydrogen and fuels are needed to kick-start the process of transformation from fossil fuels. To this end, the Commission has announced **to work on a European certification system covering all renewable and low carbon fuels**. This should allow consumers and users to take more informed choices. The certification system should as well enable cross border trade with physical gasses as well as its renewable attributes.
- **Biomass is currently the main renewable energy source in the EU and is key for achieving the 2030 and 2050 targets**. Biomass accounts for over 10% of EU final energy consumption and almost 60% of renewable energy consumption. For several Member States, bioenergy is indispensable in their transition from fossil fuels and has largely replaced oil, gas, and coal in the heating, electricity and transport sectors.

- Moving forward, our analysis indicates that reaching carbon neutrality will require increasing amounts of sustainable bioenergy, being particularly important for hard-to-abate sectors in the context of an integrated energy system (e.g. heavy-duty transport, industry, cogeneration combined with Carbon Capture and Sequestration - CCS). Other international institutions (IRENA, IEA) point to the key role played by sustainable bioenergy for carbon neutrality.
- To mitigate possible climate and environmental risks of unsustainable bioenergy production, the revised Renewable Energy Directive already includes **enhanced sustainability criteria**, covering not only biofuels but also large scale use of biomass and biogas in heat and power. The Directive also promotes the shift from conventional to advanced biofuels.
- We are **aware of increased concerns on biodiversity in EU forests** as a consequence of unsustainable forest management practices. A recent JRC report has confirmed that the risks of negative impacts of forest bioenergy can be effectively minimised through **swift and correct implementation of the REDII enhanced sustainability criteria**.
- To this end, the Commission is currently working on a guidance (**Implementing Act) to ensure robust and harmonized implementation** of the forest biomass criteria by Member States.
- In addition, the upcoming review of the climate and energy legislation will also **include a targeted assessment of the EU bioenergy sustainability framework, not limited to REDII but also covering the LULUCF Regulation**.
- The overall objective is to ensure that the EU **regulatory framework on bioenergy** is in line with the increased biodiversity and climate ambition and other environmental goals set out in the European Green Deal.

[Energy poverty]

- Tackling energy poverty is undisputedly part of a **successful energy transition**, but more importantly part of a **just transition**.
- The Commission is evaluating ways to strengthen vulnerable consumer and energy poverty provisions in the upcoming amendments to the Energy Efficiency and Renewables Directives and the revisions of the Energy Performance of Buildings Directive and the third energy package for gas will contemplate a strengthening.
- As an example, the new Energy Efficiency Directive will have as an overarching objective to promote energy savings especially for more vulnerable consumers.
- Energy poverty alleviation can also be promoted through stricter targeting of underperforming residential buildings.
- To support Member States' efforts, the Commission has issued a **recommendation on energy poverty**. Its primary aim is to make it easier for Member States to define and monitor energy poverty through a combination of indicators and help spread best practices.
- The Commission also acknowledges the role of energy communities, social enterprises and the collaboration of the public sector with civil society organisations working at the grassroots level and private initiatives. Housing associations are also deemed relevant and should benefit from capacity. Finally, the private sector also has an important role to play as good examples show.

- Member States should seize the momentum of the Renovation Wave and use funds available under the Recovery and Resilience facility, together with the reinforced Cohesion Funds and the Just Transition Mechanism, to support public investment and also to use the EU funding as a catalyst to leverage and trigger private financing. We also have the new LIFE programme, Clean Energy Transition call where energy poverty is covered.
- The Commission is also supporting the launch of the second edition of the EU Energy Poverty Observatory.
- Finally, the Commission will be monitoring the uptake of just transition and energy poverty recommendations specifically through the progress reports of NECPs and the through the European Semester.

DEFENSIVES

[Energy efficiency]

Objectives and targets

How will the EED contribute to lower greenhouse gas emissions?

- Energy efficiency is part of the solution to reach the higher climate ambition of reaching 55% reduction of GHG in 2030. All modelling scenarios for the climate target plans, estimate that the efforts of Member States need to be substantially increased. Energy efficiency would also be a cost-effective way forward, even if it requires substantial upfront investments, and decarbonisation pathways without reduction of energy consumption would be much more expensive.
- But energy efficiency is also a goal on itself. The wider benefits of energy efficiency led to a reduction of energy poverty, create more local jobs, and contribute to health and environmental benefits. These benefits need to be considered in discussions on higher energy efficiency targets.

Will the targets in the EED be binding for Member States?

- The work is on-gong in the impact assessment and all options are being considered.
- We are aware that the right level of targets at national level is difficult to assess and there is a big opposition by many Member States.
- However, Sweden and Lithuania expressed support for the binding targets in the public consultation.
- Overall 2/3 of stakeholders support the binding national targets.

- Nonetheless, it is also clear that not all Member States were ambitious on energy efficiency in their NECPs. They did not ensure that energy efficiency potential and the optimal level of energy efficiency targets were well analysed.

Will the EU target be in both primary and final energy consumption?

- The work to analyse possible policy options is still on-going in the EED impact assessment and all options are being considered.
- It is worth noting that in the IA of the 2018 EED revision it was confirmed that having energy efficiency targets in final energy consumption and primary energy consumption was a desirable approach. Even if most of the EED related measures address final energy consumption, we should not lose out of sight the supply side.
- Besides, the level of ambition for EE target is based on the assessment that does take into consideration higher share of renewables, electrification, and possible uptake of new fuels, such as hydrogen. Thus, trade-offs with reduction of PEC are considered, while it is still important that power supply becomes more efficient.

What is the Commission reopening?

- Overall target to match the ambition of the Climate Law;
- The EED revision is looking at policy options for most Articles (1 & 3, 5, 6, 7, 8, 14, 15, 16, 18, 19, 20);
- The EED revision is looking at policy options to strengthen the provisions for exchange of information and the consumer information and empowerment (Articles 12 and 17).
- [The most significant Articles and important topics are dealt with separately respective defensives and background information]

What is the Commission not reopening?

- Despite the higher ambition, the overall structure of EED as a framework act and its approach remain essentially the same;
- Articles 9-11 (metering, billing and cost to access billing information) were just put in force (25 October 2020) and the Commission wants to give a signal of stability to the consumers, market operators and industry.

Will you revise Article 7 on energy savings obligation?

- It appears obvious that a more ambitious decarbonisation target could also require a more ambitious energy savings rate under Article 7 EED, since the energy savings obligation is one of the key measures in the EED and is responsible for the majority of energy savings coming from the EED re.
- The revision of the EED could also be a good opportunity to strengthen the requirements in relation to additionality and look for ways how to target better transport sector, and limit counting savings from fossil fuels).

Evaluation and public consultation

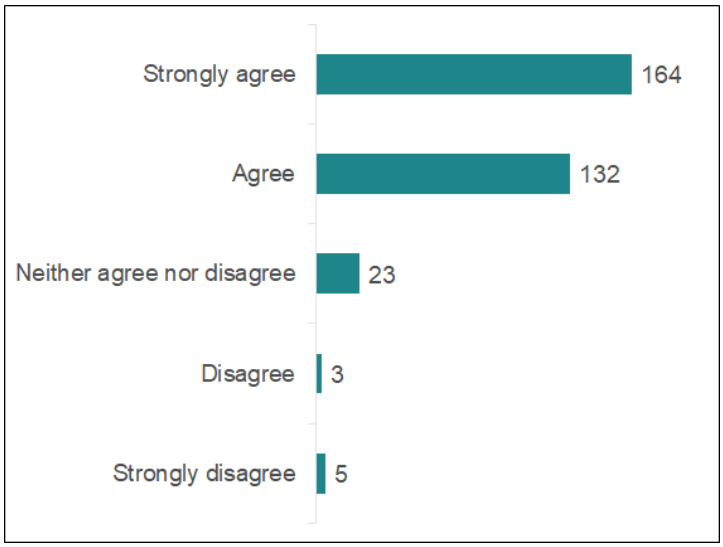
Is the EED effective? What are the findings of the evaluation?

- The preliminary findings of the evaluation show that the EED was key to energy efficiency improvements across the EU, mainly thanks to its binding measures such as Article 5 (exemplary role of public bodies' buildings) and Article 7 (energy savings obligations), Article 8 on energy audits and other measures.
- The evaluation also concludes that the EED remains relevant in the achievement of the EU 2020 and 2030 targets, in particular in view of the increased climate target of at least 55% by 2030.

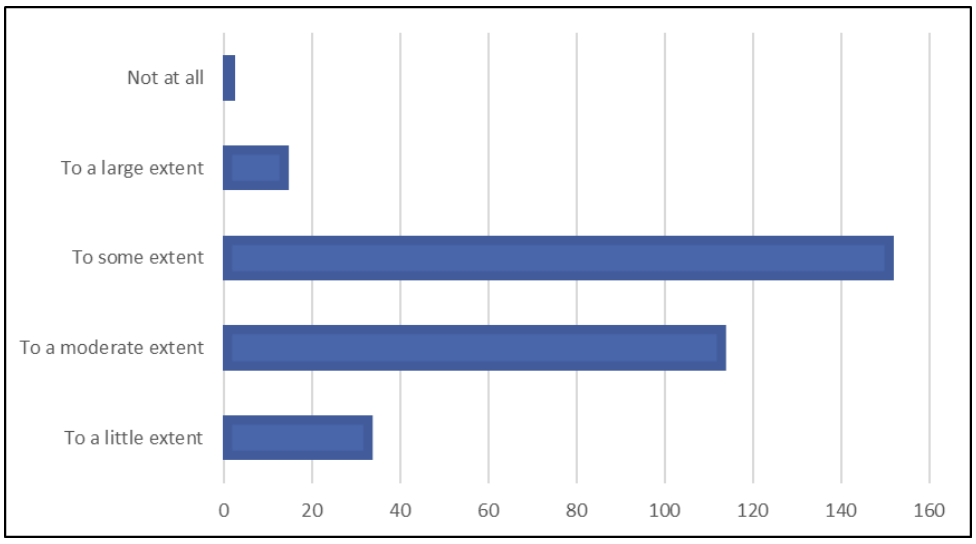
- There is scope for strengthening and streamlining some provisions to ensure that the EED delivers the required efforts in view of the higher climate target of 55% and bringing the EED in line with the other initiatives of the European Green Deal such as Renovation Wave and European Strategy for Sector Integration.
- The evaluation also shows that wider benefits and cost-effectiveness of energy savings are still not sufficiently recognised or prioritised. Therefore, specific energy efficiency measures are needed.
- We have already evidence of cost-effective energy efficiency measures in buildings, industry and transport, delivered through energy efficiency obligation schemes and alternative policies under Article 7 of the EED. This shows that there is potential to increase EE ambition substantially, especially in buildings.

What are the findings of the public consultation?

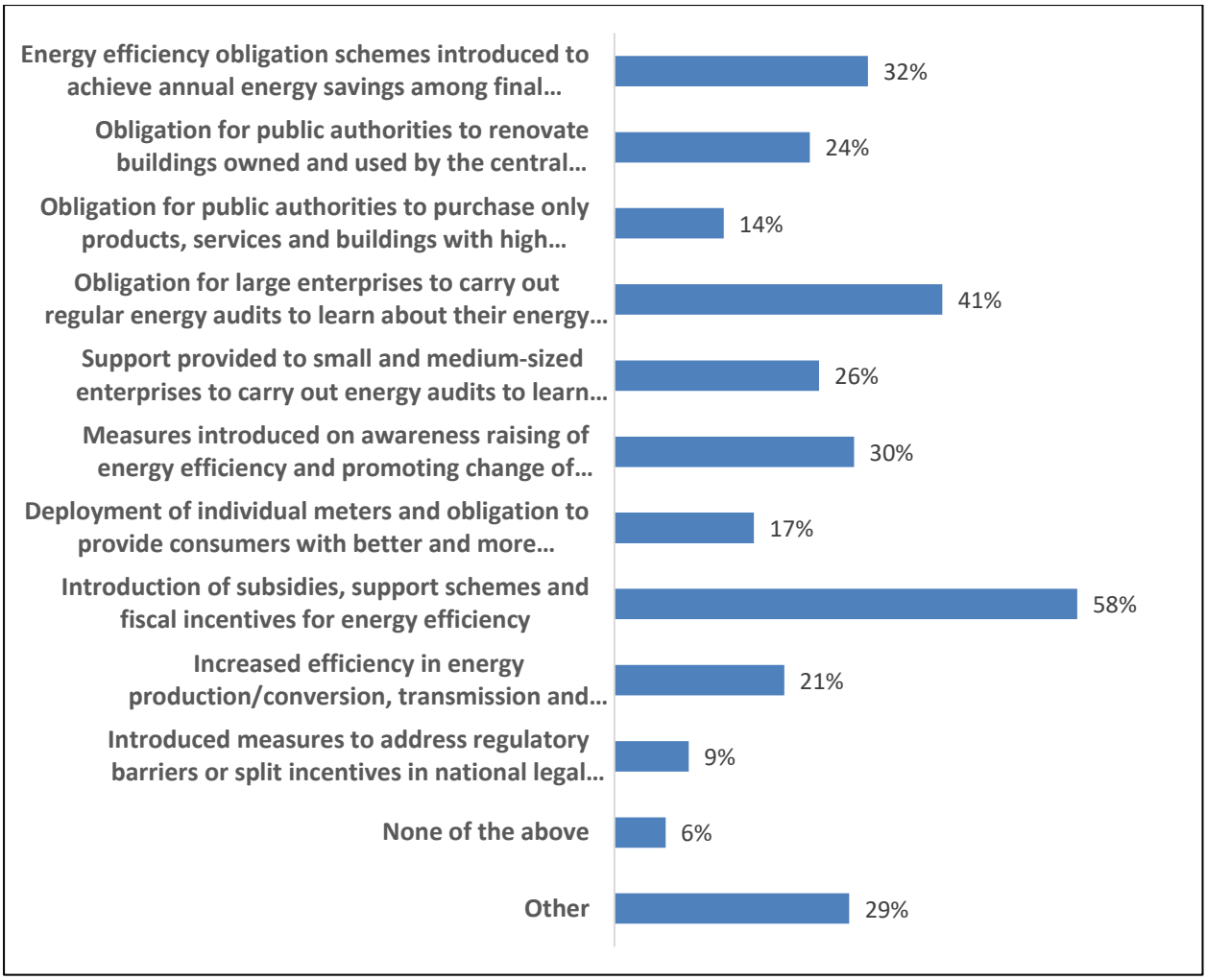
- The open public consultation for EED was open from 17 November 2020 to 9 February 2021. We received 344 replies from 26 MS (HR missing) plus 3 non-EU countries (CH, NO, UK).
- Feedback from national authorities (covering 11 countries) and business stakeholders (in sum 224 business associations and individual companies).
- Some key preliminary results of the consultation:
    - Stakeholders agreed with the 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 - <u>are still relevant</u>".



- Stakeholders replied positively in the question of whether 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;



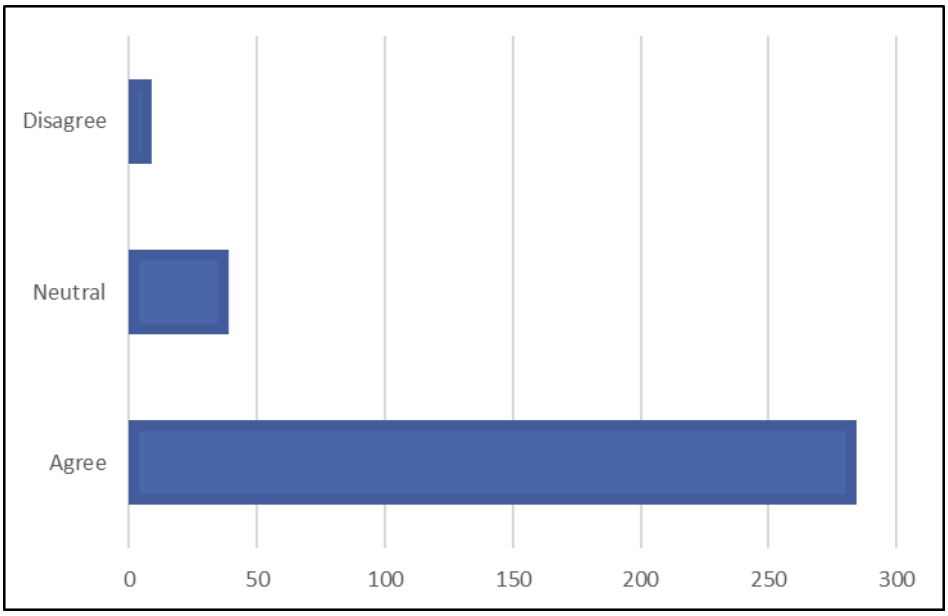
- Stakeholders assessed which EED measures have been the most successful (in their country) in terms of energy savings and other benefits:



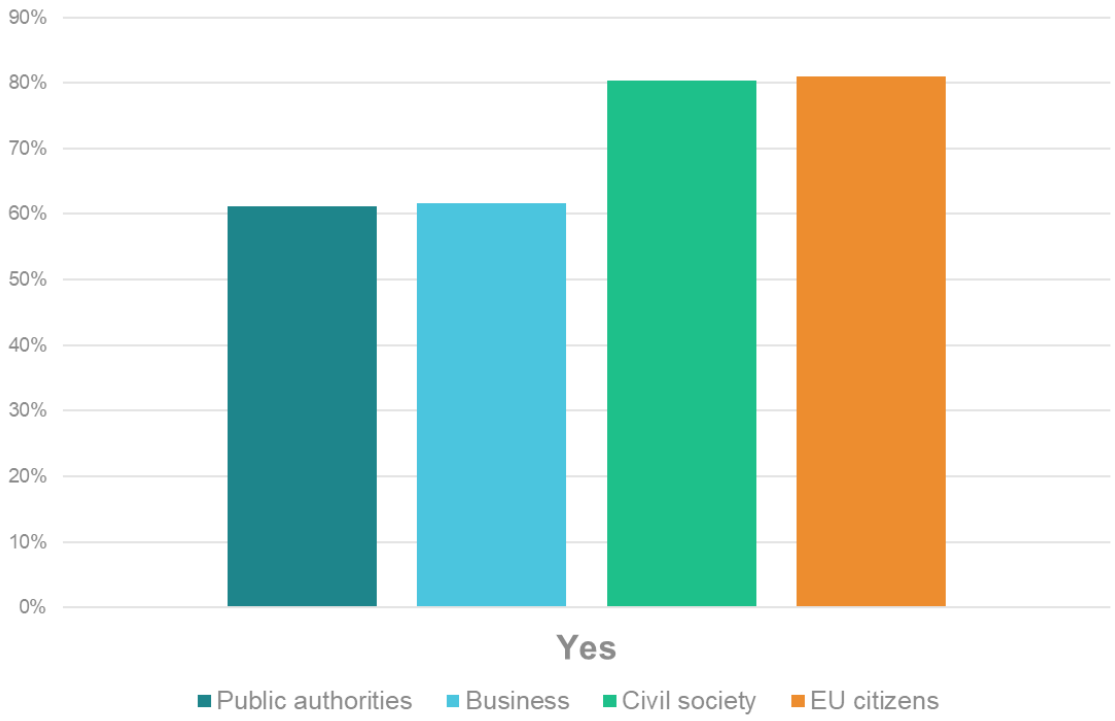
- Stakeholders reaffirmed that EED has positive synergies with the other acts of climate and energy law:

ESR & EU ETS	YES – 73%
REDII	YES – 74%
EPBD	YES – 88%

- Stakeholders 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;



- Stakeholders 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;



Energy Efficiency First

Will the Energy Efficiency First principle be part of the recast EED?

- The EE1st principle is an intrinsic part of the efforts needed to prioritise energy efficiency and should become a cornerstone of energy policy. Reaching more ambitious climate target requires tapping on all available energy saving potentials, also beyond the energy sector. Wide application of the principle will help identify and implement cost-effective energy efficient measures in various sectors of the economy.
- It is currently part of the impact assessment to see how the principle could be incorporated in the revised EED.
- In parallel, the Commission intends to publish a guideline that should help implementing the principle by policy makers at various levels (the guideline will be discussed with the stakeholders).

Energy Efficiency First (EE1st) Principle and the link with Energy System integration

- EE1st principle has been recognised as one of the key principles in the Energy System Integration Strategy.
- The Strategy underlines the need to prioritise energy efficiency solutions in the whole energy system. This includes giving priority to demand-side solutions whenever they are more cost effective than investments in energy supply infrastructure in achieving policy objectives.
- Therefore, energy efficiency should be also considered in policy and investment decisions on the energy supply side when assessing alternative infrastructure options.
- Last but not least, the EED revision has been identified as one of the key actions to deliver on the objectives of the Energy System Integration Strategy.

How will the EE1st principle affect other sectors than the energy sector?

- The starting point is to put energy efficiency under consideration for policy, planning or investment decisions if they affect energy consumption.
- It is clear that more attention should be paid to energy efficiency when setting sectoral objectives or initiatives, for instance when looking at expansion of transport or ICT infrastructure. The aim of EE1st principle is that whenever energy efficiency can be considered as an alternative solution, it should be treated as a viable option and well analysed in cost-benefit analysis and impact assessment.
- The EE1st principle appears also to be an important consideration to be taken into account the water sector. In particular municipalities and the local level could benefit from energy
- The upcoming guidelines on the application of the EE1st should help explain how this could be done in practice.

Links with other fit for 55 legislation

How will the ETS extension affect the EED?

- The ETS extension is looking at extending carbon pricing to buildings and transport.
- The Commission services will ensure that the extension of the ETS is coherent with and complements the existing policies that have already been successfully implemented.
- This concerns for example Article 7, the energy savings obligation. This provision is one of the key measures in the EED contributing to energy savings in the buildings and transport sector.

- We will work closely together with other commission services (DG CLIMA) to ensure this coherence, and will assess carefully, how these two instruments could even better mutually reinforce each other.

What are the links with the EPBD?

- The EED and EPBD act in concert. EPBD sets standards and requirements but does not create obligations for example about the number of renovations.
- The Long Term Renovation strategies though requires Member States to set national goals. The EED sets requirements about overall savings and energy efficiency obligations that need to be achieved which creates stimulus for Member States to carry out renovations.
- The Renovation Wave Strategy and its implementation plan indicate priority areas to be taken into account both in the review of the EED, RED and also EPBD; with the overall aim of doubling the renovation rate of buildings by 2030.
- We will also assess carefully how, for example the energy savings obligation, could even more boost energy efficiency in buildings in line with the Renovation Wave. Just as an example, in the case that the EPBD demands that minimum energy performance standards for buildings are introduced by Member States, policy measures under Article 7 EED that support building renovation could be allowed to be claimed as energy savings for actions undertaken to meet such standards prior to the dates at which the standards bite.
- One might also consider banning Member States´ flexibilities related to energy savings from the replacement of installation based fossil fuel burning technologies. This might encourage Member States to successfully shift towards e.g., the electrification of heat.

What are the links with the RED?

- The EED and the RED II revisions are crucial instruments contributing to the achievement of the increased climate ambition
- They are closely interlinked in their objectives and in practice one directive supports the other in terms of the overall objectives. Reduction in energy consumption de facto increases the total share of renewable energy and in turn penetration of renewables increase primary energy efficiency of the energy system.
- In practical terms, the two directives are interlinked in the area of EU targets, both contributing to the overall objective of decarbonisation.
- We will also carefully assess if and how Member States´ actions promoting renewable technologies could bring a greater contribution to the energy efficiency dimension. For example, the treatment of solar thermal technologies might be brought into line with the treatment of heat pumps under Article 7 EED.
- As an example, the two directives have important synergies in the heating & cooling area (RED II includes H&C targets, EED ensures comprehensive assessments and cost-benefits analysis in H&C)
- DG ENER is ensuring close coordination on developing policy options for the EED and RED II revision in order to ensure a coherent set of measures is proposed in the Fit for 55 package.

Energy Efficiency in other sectors

What about EE in transport?

- The main EU instruments to reduce greenhouse gas emissions and also to reduce energy **efficiency from road transport are vehicle CO2 emissions standards. Making these stricter will lead to lower energy use as the fleet is progressively replaced with electric vehicles that are overall more efficient.**

- Nevertheless, these can also be complemented with other measures that may further reduce road transport energy use and we have seen some Member States reporting such measures under the EED. **It is important that energy efficiency becomes a part of energy system planning at all levels and is put on par with other transport objectives.**
- We are currently assessing a wide range of potential policy options. Policy options on transport are part of this assessment.

What about EE in agriculture?

- Most of energy used in agriculture is consumed indirectly: energy used to pump water or energy used in manufacturing agrochemicals (fertilisers, pesticides, phytopharmaceuticals, etc.).
- Therefore, the most effective action is reducing the use of water and agrochemicals; the issue will be tackled by the new EU legislation on water and organic agriculture ("From farm to fork").

What about energy efficiency in ICT?

- The Commission is aware of the increasing footprint of ICT sector and networking technologies but also of their multiplying impact in meeting the Green Deal objectives.
- As most of the new ICT applications (e.g., cloud computing and services, AI, streaming) require data centres, JRC has published and is regularly updating its "EU Code of Conduct on Data Centre Energy efficiency"
- The Commission is assessing potential regulatory measures that would increase energy efficiency of servers and data centres, also in the context of the forthcoming reviews of the Ecodesign Regulation on servers and data storage products.

- In order to address energy efficiency in services – cloud services and reuse of waste heat from data centres, we are currently assessing a wide range of potential policy options for the revision of EED.

Financial support for Member States

How will we increase support for implementing energy efficiency measures?

- Significant funding support from the EU budget will be available to support EGD priorities including energy efficiency measures both from the MFF and the Recovery funds.
- Concerning specifically the funding support to MS authorities for policies on energy efficiency and renewable energy, the LIFE programme will include the new sub-programme on Clean Energy Transition with the total budget of almost 1bn€ for seven years.
- It will fund exchange and sharing of best practices within and across Member States, to build capacity and to provide tools for putting in place enabling policy and regulatory frameworks.
- This includes support for the contextualisation of requirements, for assessing implementation options and impacts (including non-energy impacts), and for the surveillance, enforcement, monitoring and evaluation of specific policy measures.

Process of review and revision

Where are you in the process of review and revision?

- The evaluation of the EED is about to be finalised.
- The Impact Assessment is under way.
- The targeted stakeholder consultation has come to an end; the OPC closed on the 9th of February; results are being processed.

- RSB is scheduled for 14 April 2021 (the impact assessment should be submitted by 10 March 2021).
- The adoption is scheduled for June 2021.

Were stakeholders involved in the process of reviewing and revising the EED?

- We took multiple actions to adequately involve stakeholders.
- We organised nine different online stakeholder workshops dedicated to different policy areas and specific articles of the EED. On average, around 40 stakeholders including business associations, NGOs, academia and the Member States experts took part in each workshop.
- In addition to these workshops, we organised an EED expert group with over 100 participants.
- Parallel these stakeholder event, feedback was collected via a dedicated questionnaires and interviews with broad range of experts.
- Last but not least, the Open Public Consultation of the EED is currently online. The OPC concludes on the 9 of February.

How will you take into account the results of the Open Public Consultation at this stage?

- We are now carefully analysing the results of the public consultation and reflect them in both the evaluation and the impact assessment reports.

Article 5: Exemplary role of public buildings

Will you extend the scope to other public authorities?

- We are currently assessing the different policy options to extend the scope to other level of public administration to reap energy savings in the public sector.
- The Renovation Wave clearly calls for extending the scope in the EED (Article 5).
- We are currently considering this in the impact assessment.
- It is important that the proposed changes are coherent with the forthcoming revision of the EPBD.

Article 14: Heating and Cooling

How will you increase the use of waste heat?

- The importance of waste heat reuse has been emphasized in the Energy System Integration Strategy.
- Waste heat has a lot of potential to increase energy efficiency. The preliminary evaluation of the EED shows that this potential is currently not exploited to the fullest by the Directive.
- However, there are many barriers for waste heat reuse. The realistic potential is dependent on the supply and demand of the right volume, temperature and distance.
- Therefore, we are currently assessing several different options for strengthening of existing and adding new requirements and incentives for waste heat reuse.

Will you tackle the energy efficiency of data centres?

- The Commission has committed in the EGD to increasing energy efficiency of the ICT sector and specifically data centres.
- In general terms, there are potentially two ways to increase their energy efficiency:
- First, is to increase the energy efficiency within the data centre itself, for example a more efficient cooling of the servers.

- Second, is using the waste heat produced by data centres, for example to feed a district heating and cooling network.
- We are currently assessing different policy options. We do this in consultation with the Commission services including the JRC.

[Renewable energy sources]

Bioenergy sustainability

In the revision of REDII, do you intend to re-open the EU bioenergy sustainability and GHG saving criteria for biofuels, bioliquids and biomass?

- The Commission announced already in the Green Deal and repeats in the Biodiversity Strategy that the EU will review in 2021, and if need be, revise the level of ambition of the EU climate and energy framework, including the Renewable Energy Directive along with the EU emission trading scheme and the LULUCF Regulation, and other policies under the EU 2030 Biodiversity Strategy.
- The overall objective is to ensure that the EU regulatory framework on bioenergy is in line with the increased biodiversity and climate ambition set out in the European Green Deal.
- The revised Renewable Energy Directive already includes enhanced strengthened sustainability criteria for all bioenergy used in the EU (i.e. biofuels for transport and biomass and biogas for heat and power).
- These new criteria will be implemented by Member States at the latest by June 2021, which will considerably strengthen the legislative framework in place to ensure the sustainable production and use of bioenergy.
- The Directive foresees a review of these criteria in 2026. This does not pre-judge the right of initiative of the Commission, if additional EU action is needed earlier.

The REDII criteria for forest biomass are ineffective and should be revised completely.

- A recent JRC report has confirmed that the risks of negative impacts of forest bioenergy can be effectively minimised through the swift and correct implementation of the REDII enhanced sustainability criteria.
- To this end, we are currently preparing a guidance for Member States on how to implement the new sustainability criteria on forest biomass (Implementing Act), to be adopted it in the first quarter of 2021. This implementing act will provide operational guidance on the evidence for demonstrating compliance with the forest biomass sustainability criteria.
- (If asked about timeline) Following the Inter-service consultation, the draft Implementing Act will be subject to a 4-week public consultation period (tentatively end of March) to gather views of all stakeholders, including Members of the Parliament. In addition the Parliament will be officially consulted through the Comitology procedure. The co-legislators have a right of scrutiny over draft implementing acts based on acts adopted under the ordinary legislative procedure.
- This means that, at any stage of the procedure until the adoption of the implementing acts, they can indicate to the Commission that the draft exceeds the implementing powers provided for in the basic act. In such cases, the Commission has to review the draft, taking account of the position expressed, and inform the Parliament and the Council whether it intends to maintain, amend or withdraw it (Article 11 of the Comitology Regulation).

Why EU energy policy incentivises the burning of high quality trees?

- This is not correct. Let me clarify that in Europe, forest bioenergy is mainly sourced from low quality stemwood and residues from European forest management, and by-products from the timber processing industries.
- More specifically, according to recent JRC analysis: 49% of wood-based bioenergy production is based on secondary woody biomass such as forest-based industry by-products (e.g. sawdust) and recovered post-consumer wood; 20% is from stemwood (half of which is coming from coppice forests); 17% is from logging residues such as treetops and branches; and 14% is of unknown origin.
- The JRC found also an important gap (20%) between reported use and reported sources of woody biomass. This can be almost entirely attributed to energy use, and it is most likely due to informal fuel wood harvesting in rural areas which are not accounted under national statistics. This does not mean that these removals are not subject to local or national sustainability safeguards.

The EU's top priority is climate action and reaching GHG emissions targets. How will the EU ensure emission reductions if it continues supporting biomass and not counting all related emissions?

- According to the analysis by the Commission and other international organizations, sustainable bioenergy will play a key role for the achievement of the EU climate and energy targets.
- This said it, it is not correct to say that bioenergy is assumed "carbon neutral" within the broader EU climate and energy framework, as referred in the scientist letter and in many media statements.

- Under EU law, bioenergy combustion emissions are not accounted for in the energy sector (under the 2018 Renewable energy Directive) because these emissions are already counted in the land use, land use change and forestry sector as a change in carbon stocks (under the 2018 LULUCF Regulation).
- The carbon impact of any change in management or wood use relative to a historical period is fully counted in the LULUCF sector through the LULUCF Regulation.

Have you taken into consideration that burned wood emit more carbon than fossil fuels?

- **Yes when combusted biomass emits CO2. However, CO2 from woody biomass combustion is part of the short-term carbon cycle compared to fossil fuels**; the emitted carbon was previously taken up from the atmosphere, and is taken up again by growing trees in the forest. Therefore, as long as harvests do not exceed carbon uptake in the forest, it does not increase atmospheric CO2 concentrations.
- In contrast, fossil fuel use causes a linear flow of carbon from geologic stores to the atmosphere. Just comparing CO2 emissions at the exhaust – as is sometimes done – misses this fundamental difference between biogenic and fossil carbon.
- What matters is whether increasing use of forest biomass for energy is part of a changing forest management paradigm that brings systematic decreases or increases in the amount of carbon stored in forests. If there is a decrease, this diminishes the climate benefits of forest bioenergy. If there is an increase the climate benefit is enhanced.
- The EU climate and energy framework, including the enhanced sustainability criteria for bioenergy, are aimed at ensuring positive climate benefits and minimize the risk of unintended impacts.

Why does REDII keeps promoting conventional biofuels?

- REDII achieved a comprehensive solution by shifting support from conventional biofuels to waste-based advanced biofuels (produced from wastes and residues) and other alternative renewable fuels (e-fuels).
- REDII addresses the issue of indirect land use change by limiting the contribution of conventional biofuels based on their share in 2020 to a maximum of 7%. The use of biofuels associated with deforestation so called “high ILUC-risk” such as biofuels produced from palm oil will be gradually phased out.
- A review of the implementing legislation setting out the criteria for determining high ILUC-risks is foreseen for mid-2021 and other crops than palm oil may qualify as high iLUC if the data justifies this.
- These REDII provisions on biofuels strike the right balance and were difficult to achieve. We should not reopen this matter, as it is unlikely we will get a better outcome.
- The Commission will regularly assess which feedstock are to be considered as having high ILUC risk. The next review is scheduled for June 2021. We have launched a study to update the scientific evidence.

General on hydrogen

Why doesn’t the Commission believe in an “all-electricity” energy system? Why so much emphasis on gas and hydrogen?

- We do believe that, together with energy efficiency, electrification of consumption is the absolute political priority in the coming years. Technologies such as heat pumps and electric vehicles are mature and cost-competitive – and we should work hard to deploy them as fast as possible.

- But we also know that, in some areas, electrification will not be technically feasible. This is the case of heavy-duty transport, or certain industrial processes where molecules are needed.
- In these sectors, we need to think already today on possible options. This is where we need to deploy renewable and low carbon fuels, such as advanced biofuels, biogas, and hydrogen.

The Commission shouldn't support hydrogen from natural gas, and indirectly support fossil fuel companies. Why is there such a strong role of hydrogen from natural gas with CCS?

- 96% of hydrogen in the EU is produced from natural gas today, contributing to 70-100 Mt of CO2 emissions per year. The Hydrogen strategy supports the replacement of existing hydrogen production with renewable hydrogen or by fitting existing hydrogen production facilities with carbon capture and storage.
- The largest electrolyser to date (10 MW) can only produce 0,002 Mt of hydrogen per year (compared to the 10 Mt of hydrogen produced from gas today). To immediately reduce GHG emissions of existing hydrogen production facilities, CCS can be used. The strategy thus recognises the role of low-carbon hydrogen, including fossil-based hydrogen production with carbon capture and storage, in a transitional period, whilst renewable hydrogen is scaling up.
- The strategy also clearly identifies the need for a significant GHG emission reductions for any low-carbon hydrogen production that would be supported.

The EU has previously invested greatly in CCUS. Those projects mostly failed. Why take this risk on another still largely unproven technology?

- Ten years ago, we were ready to invest significant amounts into CCS for the power sector, e.g. equipping coal power plants with CCS. This approach was not successful: One reason was that due to rapidly decreasing costs for renewables, cheaper options for decarbonising the power sector became available.
- The situation is different now: we need CCS to decarbonise hard-to-abate sectors, such as cement, chemicals and steel, so that they can have a place in a climate neutral European economy. In the long-term we may also need captured CO2 as a feedstock for some industrial processes or to produce synfuels for specific transport modes such as long haul aviation.
- In the longer run, we may also need CCS to help create negative emissions to reach carbon neutrality, making CCS an important tool for climate neutrality. This assessment is also shared by the IPCC.
- Several operating CCS facilities around the world have helped create knowledge about the technology.
- The climate benefit of carbon capture and use (CCU) needs to be clearly assessed on a case-by-case basis. This is why the ESI strategy is proposing to create a clear certification system for carbon removals.

The Commission used the studies prepared by the fossil fuel industry for the hydrogen strategy!

- The Commission has used an independent consortia of consultants[1] to check the latest publically available data for the investment costs, technology performance and benefits of different hydrogen production pathways.

[1] Asset study (2020) Hydrogen generation in Europe. Overview of costs and key benefits.

- It will come with a tool that will allow everyone to recalculate the figures. This study has been finalised, and will be published on the ENER website.
- The Commission's strategic objective of 40 GW of renewable hydrogen electrolysers is based on a 'green hydrogen initiative' by the European hydrogen industry. However, the Commission has conducted an independent study[2] to verify if this target is consistent and realistic in the context of the national energy and climate plans received so far.

Do you think low carbon fuels (i.e. non-renewable fuels which are decarbonised via CCS) should be promoted?

- The priority for the EU is to develop renewable fuels such as hydrogen produced from renewable electricity and hydrogen-based synthetic fuels. In a transitional phase however, other forms of low-carbon hydrogen and fuels are needed to kick-start the process of transformation from fossil fuels. To this end, the Commission has for instance announced to work on a European certification system covering all renewable and low carbon fuels. This should allow consumers and users to take more informed choices. We will also assess whether such fuels should be promoted by other means.

What is the Commission reopening? (specific question no.1)

See speaking points:

- overall target;
- specific targets for heating and cooling and for transport;
- possibly new targets for industry;
- bioenergy sustainability requirements;

[2] Trinomics & Ludwig Bolkow SystemTechnik (2020) Study on Opportunities arising from the inclusion of Hydrogen Energy Technologies in the National Energy & Climate Plans

- work on a European certification system covering all renewable and low carbon fuels.

What is the Commission not reopening? (specific question no. 2)

- Despite the higher ambition, the overall structure of RED II remains the same, with an overall targets, supported by sector-specific targets.
- The role of the EU and the MS remains the same. The EU sets a framework, but MS have a lot of freedom to decide how to best move forward.
- Bioenergy will continue to play an important role, but as mentioned, sustainability must remain ensured, also under a higher renewables target.

Certification for renewable gas and hydrogen – is the Commission proposing definitions? And an explanation of the issue with guarantees of origin. (specific question no. 3)

- As part of the revision of the RED II, the objective of the Commission is to put in place an EU-wide certification system for all energy carriers to support the deployment of an adequate energy mix able to deliver on the increased climate ambition of the EGD. In this context, the Commission considers changes to the RED II to ensure the adequate scope and content of the certification system. It might include also new definitions to enlarge the scope of RED II or other ways of achieving the objective.
- Regarding the existing system of guarantees of origin (GOs) our aim is to find a positive synergy between the GOs and the future system of certification. All this is now under consideration in the Impact Assessment accompanying the revision. The final preferred option will be selected based on the overall assessment and the selected final set of policy options.

Biofuels: have we not covered everything already with ILUC? Links with ETD? Are we going to propose more sustainable biofuels in transport or propose to end the use of conventional biofuels? (specific question no. 8)

- The Commission believes that biofuels based on food and feed crops (conventional biofuels), including biodiesel produced from oil crops have only a limited role in decarbonising the transport sector and that their use should be minimised. This is due to their indirect effects on land use change which may cause an increased level of deforestation.
- Against this background REDII focuses on the promotion of advanced biofuels based on residues and waste as well as on renewable hydrogen-based fuels.

Biomass – Commission's views on the JRC report (specific question no. 9):

- See general point on bioenergy above

Energy poverty

How does the Commission plan to address energy poverty as it seeks to increase energy targets?

- Tackling energy poverty is undisputedly part of a successful energy transition, but more importantly of one that is just.
- Addressing the structural causes of energy poverty and notably the energy inefficiency of homes, including in social housing and tenancy situations, can make a sizeable contribution to reaching the energy targets.
- At the same time, this should reduce the need for public interventions in the price of energy supplies that can distort competition.

- But in parallel, and in a way that is as complementary as possible, carefully targeted social policy should play its role where energy poverty is primarily driven by general poverty.

Will the Fit for 55 Package introduce more requirements for Member States to address Energy Poverty? What will it do to ensure that prices will not significantly increase?

- The Commission is evaluating ways to strengthen vulnerable consumer and energy poverty provisions in the upcoming amendments to the Energy Efficiency and Renewables Directives and the revisions of the Energy Performance of Buildings Directive and the third energy package for gas will contemplate a strengthening. As an example, the new Energy Efficiency Directive will have as an overarching objective to promote energy savings. Energy poverty alleviation can promoted through stricter targeting of underperforming residential buildings. With regard to the new rules for the gas sector, the impacts of aligning the vulnerable consumers and energy poverty provisions for gas and DHC with those of the 2019 Electricity Directive will be considered. This could include targeting support to those in need while allowing markets to operate otherwise.
- In any case, the EU electricity market is already designed in a way that the least cost electricity generation is always dispatched. This works by including the power production by the order of their price, starting from the lowest and going until the last plant is dispatched that is needed to reach consumers' demand. This also works across borders through a process known as market coupling which ensures that electricity flows from the cheapest areas to the more expensive – this keeps the cost down for consumers throughout the EU.

- With the new package, Europe will demonstrate that achieving higher targets will lead to a more prosperous, fair, resilient and healthy world. Economic impacts will be more positive if the regulatory tools allow for appropriate price signals and a tax shift, with carbon pricing revenues being used to reduce distorting taxes or to invest in innovation and modernisation towards a green economy. This will ultimately result in better prices for final consumers. The upcoming revisions of energy legislation will contribute to this.
- How has the Commission supported Member States' efforts to tackle energy poverty in recent months?
- The Commission has been trying to better understand the energy poverty levels across the EU and in delivering more actions to accelerate the fight against it as much as possible, picking up on the Green deal's momentum.
- To support Member States' efforts, the Commission has issued a recommendation on energy poverty. Its primary aim is to make it easier for Member States to define and monitor energy poverty through a combination of indicators and help spread best practices.
- Recommendations include the development of a systematic approach to the liberalisation of energy markets, where energy and social policy complement each other, the assessment of distributional effects of the energy transition and the full deployment of available Union funding programmes for energy poverty projects. Support for the role of energy service companies and energy performance contracts in providing renovation financing solutions for energy poor households that enable them to overcome high upfront costs is also recommended.

- The Commission also acknowledges the role of energy communities, social enterprises and the collaboration of the public sector with civil society organisations working at the grassroots level and private initiatives. Housing associations are also deemed relevant and should benefit from capacity. The private sector also has an important role to play as good examples show.

In the context of recovery?

- Member States should seize the momentum of the Renovation Wave and use funds available under the Recovery and Resilience facility, together with the reinforced Cohesion Funds and the Just Transition Mechanism, to support public investment and also to use the EU funding as a catalyst to leverage and trigger private financing. We also have the new LIFE programme, Clean Energy Transition call where energy poverty is covered.

Are any new initiatives in the pipeline?

- The Commission is supporting the launch of the second edition of the EU Energy Poverty Observatory. In its second edition, the Observatory will be more dedicated towards:
    - Practical, result oriented, technical assistance at regional/local/municipal level;
    - Operationalising the European Commission's recommendations in the energy poverty domain and those of the Renovation Wave Strategy;
    - Alignment with the Covenant of Mayors in developing concrete actions under its energy poverty pillar;
    - Supporting the national and local authorities to develop more robust and sustained indicator frameworks

- The Commission will be monitoring the uptake of just transition and energy poverty recommendations specifically through the progress reports of NECPs and the through the European Semester (i.e. setting up Council discussions and country specific recommendations in this context).

State aid rules

Commission is pushing for renewables but the State aid rules are quite restrictive, imposing auctions, and limiting the possibility of Member States to support renewables. Would the State aid rules be adapted, better aligned with the very ambitious, climate targets?

- Support for renewables is allowed under State aid rules – both under the Energy and Environmental Aid Guidelines (EEAG) and under the General Block Exemption Regulation (GBER). A recent assessment done by the Commission of the State aid modernisation and of the existing State aid rules showed that the rules for renewables were perceived as positive by most respondents. Auctions in particular seemed to have helped provide the necessary support for renewables without an excessive burden on the public funding, allowing the level of support to be adjusted in lie with the evolution of the costs for various technologies.
- The EEAG will be revised this year. A public consultation was open until the beginning of January, and currently the Commission is assessing the feedback received, and defining its proposal. Support for renewables will certainly remain possible, and the Commission is aware of the need for Member States to provide the necessary support to ensure the energy and climate targets are met.

TEN-E – gas, hydrogen and governance

Will smart gas grids mean support natural gas?

- No. Smart gas grid investments will only serve for "smartening" and decarbonising our gas network by allowing the injection of the renewable and low-carbon gases - such as biogas and biomethane. Their aim is to bring clean gases from the distribution level to the transmission level.
- For example, the vast majority of our 500 biomethane plants in the EU are connected only to the distribution grid, without the possibility to inject gas into the transmission level. We want to change that, so that we can decarbonise our gas system faster.
- The aim of these projects is
    - First, to implement digital solutions for gas system management to allow for upgrade of the networks to accommodate clean gas and/or
    - Second, to enable reverse flows from distribution system to transmission system level.
- We will support reverse flow from distribution network to transmission network. As said before, this is to support injection of locally produced clean gases to the system.

Will hydrogen projects support fossil gas sector?

- I want to be very clear, we do not support hydrogen-ready pipelines, but only dedicated hydrogen pipelines. So, this does not mean that we are extending the life of natural gas pipelines.

- However, our impact assessment shows that the conversion of existing natural gas infrastructure can cost up to 90% less than building new hydrogen pipelines. But, this option is not always available. The proposal therefore covers both new and converted assets dedicated to hydrogen.
- The future EU hydrogen backbone is expected to be based largely on natural gas assets repurposed for exclusively hydrogen transport. To be clear: the projects will only be eligible if the pipelines will be used for hydrogen only. But there is also a need to build new hydrogen infrastructure.

Why are you not support only green hydrogen?

- As set out in the Hydrogen Strategy, the priority for the EU is to develop renewable hydrogen, as it is the most compatible with our climate neutrality goal and has the highest added value.
- The strategy, however, recognizes, that in the short and medium term, also low-carbon hydrogen will play a role, in particular to rapidly reduce emissions from existing hydrogen production while renewable hydrogen scales-up.
- There is an important consideration of system efficiency to make: networks are natural monopolies and therefore need to be accessible for all market players and used efficiently.
- To take all these considerations into account, the selection criteria gives priority to projects planned to transport renewable hydrogen, without however excluding access to low-carbon hydrogen. So pipelines expected to transport renewable hydrogen will rank higher.

- Similarly, electrolysers that plan to use renewable electricity to produce renewably hydrogen will rank higher and in any case only electrolysers which deliver at least 70% greenhouse gas emission savings are eligible for PCI status.
- [***IF EXPLICIPTLY ASKED***: By low-carbon hydrogen we currently mean hydrogen produced with 70% less CO2 emission than current natural gas based hydrogen produced on the lifecycle basis. However, the ambition on emission reduction is expected to increase in the course of the revision of RED II].

Why do you support electrolysers?

- We have proposed to include electrolyers in the scope of the Regulation due to their potential role for the electricity grids and for sector integration.
- However, only electrolysers that can prove a significant contribution to security of supply and have a network-related function are to be included.
- We assess this through a 100 MW threshold, which has been proposed to make sure that only major electrolyers with significant cross-border impact are covered.
- The location of electrolysers with a cross-border relevance will be crucial for the planning of hydrogen grids.
- We however, have not proposed to finance electrolyers from CEF as their financing is already well covered in the framework of Horizon Europe and Innovation Fund.

The changes proposed for governance do not exclude the conflict of interest for ENTSOs.

- The new planning process and governance maintains the strengths of the current system, while it increases the transparency and accountability of ENTSOs.
- Transmission operators plan, develop and operate grids in all Member States and are responsible for ensuring that we can keep lights on and heat or cool our houses at all times.
- There is a specific data and expertise needed for the preparation of the ten-Year Network Development Plans. Preparing the scenarios, which will need to take into account the electricity flows with an hourly precision, cannot be done by an advisory body, academia or consultants.
- However, we recognized that it is important to balance and strengthen the planning and governance model. That's why we are introducing enhanced stakeholder involvement throughout the process, reinforcing the role of ACER and stronger oversight by the Commission.
- Under the revised provisions, ENTSOs will need to be very transparent on what they do with the input from all the relevant stakeholders.
- Also, the Commission is empowered to approve major steps in the planning process, notably regarding the development of the scenarios that define infrastructure needs and cost-benefit analysis methodologies.

BACKGROUND INFORMATION

Energy Efficiency

State of play on the Energy Efficiency Directive: what was achieved?

- According to the Eurostat data for 2018, energy consumption of Member States decreased between 2010 and 2014. After that, consumption started to climb again.
- The latest numbers show a decline of 0.6% in primary energy consumption in 2018 compared to 2017 (as presented in the Energy Efficiency Progress Report 2020).
- This pace of reduction is, however, insufficient to meet the EU target in 2020. This does not mean that there was no progress in saving energy. Between 2005 and 2017, the energy intensity in industry has improved by as much as 22%. We were more efficient, but our activities also increased.
- By today, under the **energy savings obligation** (Article 7 EED), Member States reported achieved energy savings for 2014-2018 as part of their commitments to deliver their national energy savings obligation for 2014-2020. Aggregated at EU-level, Member States achieved by the end of 2018 about 55% (126.44 Mtoe) of the sum of the cumulative end-use energy savings obligations for 2014-2020 (230.17 Mtoe).
- As part of the review process, the Commission services carried out the evaluation of the Energy Efficiency Directive (EED) for the period since its entry into force in 2012.
- The evaluation showed that the EED led to energy efficiency improvements across the EU, mainly due to the targets and binding measures such as Article 5 (exemplary role of public bodies' buildings) and Article 7 (energy savings obligations) and other measures.
- Despite the insufficient progress in relation to targets, according to the preliminary estimations the EU might have met the 2020 target due to the reduced energy demand caused by the COVID-19 pandemic and not by energy efficiency policies. Nevertheless, Europe will experience a quick increase in energy consumption as soon as the economy will pick up again so it is clear that more is needed to make the reduction structural.

Elements to be revised in the EED: what are we working on and why? And how does the review fit in the whole "Fit for 55" legislative package.

- We are currently carrying out an Impact Assessment for revising the Energy Efficiency Directive. This involves three steps: (1) identifying the problems the revision of the EED aims to tackle, (2) identifying possible solutions to these problems and (3) assessing their effects. The main problem is that the current level of efforts would not allow reaching the climate target of 55%.
- We are exploring a set of options how to achieve that.
- As part of the work, we have evaluated the Energy Efficiency Directive and will seek to address any weaknesses identified to improve the effectiveness of the EED framework. We also are looking for ways to simplify or reduce the administrative burden.

Buildings

- The EED contains already several provisions targeting buildings (e.g., renovation of central government buildings in Art. 5, energy savings obligation in Art. 7).
- The revision of the EED would aim to strengthening the provisions in order to contribute to implementation of the Renovation Wave action plan – aiming at accelerating the speed of renovations.
- The Renovation Wave contains clear references to the EED, notably when it comes to strengthening the role of public sector buildings and promoting more uptake of energy performance contracting for renovations.
- The EED also has certain provisions on financing mechanisms and technical support which could serve for promoting renovations across the EU.

Heating and cooling

- Heating and cooling in buildings and industry accounts for half of the EU's energy consumption. Therefore, there is a big potential for energy efficiency in heating and cooling.
- The EED lays down requirements for increasing energy efficiency in heating and cooling introduces definitions of efficient district heating and cooling and high efficiency cogeneration with important interlinkages with other EU and national policies, most notably the REDII and State aid requires that Member States assess the potentials for efficiency in heating and cooling, mainly by assessing the potentials of Efficient District Heating and Cooling systems, the use high efficiency cogeneration and the use of waste heat.
- Despite the existing provisions in place, a lot of efficiency potential in heating and cooling is currently not exploited. With the revision of the EED, we aim to remove existing loopholes and strengthen Article 14 in order to increase both final and primary energy efficiency in heating and cooling supply and ensure the potential in district heating and waste heat is utilized to a larger extent.
- In addition, the relevant heating and cooling definitions such as efficient district heating and cooling should be revised in order to reflect the decarbonisation objectives (e.g., to prevent state aid for coal-fired plants).

Transport

- Transport remains one of the main energy consuming sectors (30% of final energy consumption). Still, Member States do not make enough efforts to improve its energy efficiency. Large transformations are expected to happen in transport, because of the switch to alternative fuels.
- However, better reflection of impacts on energy consumption in transport planning and decisions is needed, in line with the energy efficiency first principle, to ensure the faster decarbonisation of transport sector.
- The recovery from the COVID crisis should, in particular for the aviation sector, increase the need to look at sustainability and better energy performance.

Industry

- Industry uses around 26% of energy in the EU. A large share of that energy is used for process heating. Energy use in industry is quite concentrated in a few energy intensive sectors which are as follows with their share of industry energy use: Chemicals 22%; Iron and steel 20%; Refining 19%; Non-metallic minerals 14%; Pulp, paper and print 14%; Non-ferrous metals 4%.
- In the EED, Article 8 specifically aims at improving energy efficiency in industry via energy audits and energy management systems.
- However, Article 8 does not require to follow up on energy audit recommendations nor implementing certain actions identified in the audit.

State Aid rules

- **The current Energy and Environmental Aid Guidelines (EEAG) were adopted in 2014**, with an initial duration of 6 years; however, the Commission has **prolonged** them by 1 year (as well as several other Guidelines), namely **until the end of 2021**.
- The EEAG revision has been mentioned in the European Green Deal Communication, the Hydrogen Strategy, the EU Strategy for Energy System Integration, the Renovation Wave. The Communication on European Green Deal Investment Plan contains references to revisions that the Commission considers necessary in the field of energy efficiency in buildings, district heating, aid for phasing out coal, and aid for circular economy.
- The EEAG revision provides the opportunity to align the State aid rules with the energy policy, better reflect the increased energy and climate ambition, the European Green Deal, and ensure that the Member States can provide support for the investments needed for the green transition. Having in mind the COVID crisis and the Recovery package, simplification of the rules will be an essential part of the revision.
- The public consultation on EEAG revision was published on 12 November 2020, and the consultation was open until 7 January 2021.
- **The General Block Exemption Regulation (GBER)** also has a section on energy and environmental protection. The Commission has decided to prolong GBER for 3 years, until 2023. To allow a better implementation of the current MFF, the Commission is currently proposing a narrow revision of the GBER, to facilitate the aid for co-financing projects supported by InvestEU. A final ISC on it is expected in March. The general revision of GBER will likely start next year.
- The current State aid rules were subject to a comprehensive **evaluation** (a **Fitness Check on the State aid modernisation package**), which was published on 30 October 2020.
- The assessment suggests that the EEAG (and corresponding GBER rules) have generally delivered on their objectives, supporting the Union's environmental and sustainable energy policy objectives while at the same time ensuring an effective and efficient State aid control, providing a common legal framework for EU Member States' efforts to reach their 2020 climate targets with a set of tools compatible with the internal market.
- State aid for energy and environment represents a very large share of the total aid granted by Member States. For example, in 2017, Member States spent EUR 116.2 billion on State aid, and about 53% of total spending was attributed to State aid to environmental and energy savings, largely due to the approval and implementation of numerous renewable energy initiatives in many Member States.

- The EEAG external study shows that following the introduction of the tendering requirement for renewables support schemes in the EEAG, the number of auctions/competitive processes has increased and that the amount of aid per kilowatt hour ("kWh"), resulting from the different auctions for the different technologies, has significantly decreased over the period. However, the prices paid per unit of renewable energy vary significantly depending on the different types of technology.
- Inter-service work: Already during the summer, ENER discussed bilaterally with COMP on the focus areas that would need to be covered by the revision. A first meeting of the ISSG for EEAG revision took place in October 2020. Now that the public consultation is closed, the work on the substance of the changes proposed for the EEAG will intensify. Based on the timeline indicated by COMP, a first draft of the revised text should be ready for spring 2021. The IA should be finalised before the summer, to be submitted to the RSB in September. ENER will continue to engage in the inter-service discussions as well as in bilateral contacts with COMP.
- While the current EEAG remains valid until the end of 2021, COMP might revise the above-mentioned schedule and advance the EEAG review so that the new rules are in place around September 2021. However, this decision has not been taken yet.