

# Preparation of a new Renewable Energy Directive for the period after 2020

Fields marked with \* are mandatory.

## Introduction

---

In its Energy Union Framework Strategy, the Commission announced a new renewable energy package for the period after 2020,[1] to include a new renewable energy directive (REDII) for the period 2020-2030 and an updated EU bioenergy sustainability policy. This consultation covers the REDII aspects. The bioenergy sustainability policy will be covered by a separate public consultation.

The results of this consultation, together with the results of the separate public consultation launched by the Commission in July 2015 concerning market design (available at <https://ec.europa.eu/energy/en/news/redesigning-europes-electricity-market-%E2%80%93-give-your-fee>) will inform the impact assessment for REDII.

Please, submit your response to this public consultation by 10 February 2016 at the latest. You are invited to reply to the questions in the questionnaire by using the link to the survey on DG ENER's consultation webpage or via EU Survey. Always use this questionnaire even if also other documents are submitted. In order to facilitate the Commission's processing of responses, please respond in English as far as possible.

Received contributions will be published on the Internet, unless a confidentiality claim has been made on reasonable grounds. Responses from non-registered organisations will be published separately. The Commission also intends to publish a document summarizing the main outcomes of this consultation.

[1] Commission Communication: A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy (COM/2015/080 final) of 25 February 2015

## Evaluation of current policies

---

As part of the Commission's better regulation agenda, the current renewable energy directive[1] (RED) was included in the Commission's 2013 REFIT programme and a comprehensive evaluation study of the RED was carried out in 2014 for the purpose of assessing its effectiveness, efficiency, relevance, coherence and EU added value and to obtain stakeholders' views on the impacts and benefits of the Directive.[2] The main findings were included in the 2015 Renewable Energy Progress

Report.[3] This public consultation builds on the REFIT evaluation and aims at obtaining additional information on impacts and benefits of the RED. Where appropriate, some of the questions in this questionnaire therefore also address evaluation of current policies.

[1] Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC

[2] REFIT Evaluation of the Renewable Energy Directive (CE DELFT, 2014) available on:

[https://ec.europa.eu/energy/sites/ener/files/documents/CE\\_Delft\\_3D59\\_Mid\\_term\\_evaluation\\_of\\_The\\_R](https://ec.europa.eu/energy/sites/ener/files/documents/CE_Delft_3D59_Mid_term_evaluation_of_The_R)

[3] COM (2015) 293, available at:

<https://ec.europa.eu/energy/en/topics/renewable-energy/progress-reports>

## Context and challenges

---

In its Energy Union Framework Strategy, the Commission announced a new renewable energy package for the period after 2020,[1] to include a new renewable energy directive (REDII) for the period 2020-2030 and an updated EU bioenergy sustainability policy. This consultation covers the REDII aspects. The bioenergy sustainability policy will be covered by a separate public consultation.

The results of this consultation, together with the results of the separate public consultation launched by the Commission in July 2015 concerning market design (available at <https://ec.europa.eu/energy/en/news/redesigning-europes-electricity-market-%E2%80%93-give-your-fee-will-inform-the-impact-assessment-for-REDII>).

Please, submit your response to this public consultation by 10 February 2016 at the latest. You are invited to reply to the questions in the questionnaire by using the link to the survey on DG ENER's consultation webpage or via EU Survey. Always use this questionnaire even if also other documents are submitted. In order to facilitate the Commission's processing of responses, please respond in English as far as possible.

Received contributions will be published on the Internet, unless a confidentiality claim has been made on reasonable grounds. Responses from non-registered organisations will be published separately. The Commission also intends to publish a document summarizing the main outcomes of this consultation.

[1] Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC

The core objectives of the EU Energy Union Framework Strategy[1] are to develop a long-term, secure, sustainable and competitive energy system in the EU. Europe should also be a leader in renewable energy. For this, it is important to continue to increase the share of renewable energy sources in the EU.[2] The RED ensures that all Member States will contribute to reaching 20%

renewables at EU-level by 2020. In October 2014, the European Council agreed that **at least** 27% share of renewables by 2030 would reflect a cost-optimal way of building a secure, sustainable and competitive energy system (alongside an at least 40% domestic GHG emissions reduction target and the at least 27% energy efficiency target, which is to be reviewed by 2020, having in mind an EU level of 30%).

As the current legislation will not be sufficient for this purpose[3], there is a need to modify the legislative framework to ensure a timely and cost effective achievement of the EU level binding target on renewables by 2030. A combination of different factors will need to be addressed, including:

- **General approach:** The existing policy framework does not address uncertainties with regard to national policies, governance and regional cooperation to ensure a timely and cost effective target achievement for the period after 2020.
- **Empowering consumers:** A lack of consumer empowerment and incomplete information on renewable energy solutions can hinder cost-optimal deployment of renewable energy at city and community level.
- **Decarbonising the heating and cooling sector:** In the heating and cooling sector, which represents almost half of the EU energy consumption, the current regulatory environment in combination with a lack of information does not incentivise cost-optimal deployment of renewables in heating, cooling and hot water use. The sector remains dominated by fossil fuels and therefore dependent on imports.
- **Adapting the market design and removing barriers:** The current regulatory environment does not properly reflect externalities of energy production in market prices, including environmental, social, innovation and economic externalities. Together with persistent and distortive fossil fuel subsidies,[4] this is one of the reasons leading to high capital costs that hinder cost-optimal renewable energy deployment. In addition, a lack of market integration, infrastructures (storage, interconnections) and smart solutions, including demand-response, also hinder cost-optimal deployment of renewable energy. Finally, complex administrative procedures for renewable energy deployment at national and local level have not yet been eliminated. This covers, inter alia, permitting and grid connection procedures[5].
- **Enhancing renewable energy use in the transport sector:** A policy fostering the use of sustainable alternative renewable fuels would contribute to decarbonising the transport sector and reducing risks related its fossil fuel dependency and could remove current market distortions and fragmentations observed in particular in the internal market for biofuels. Despite the progress made with regard to the development of alternative renewable fuels such as advanced biofuels and renewable fuels of non-organic origin, commercial deployment of such products in the EU is lagging behind. The main reason is the perceived uncertainty about the policy framework after 2020. Only a few Member States have adopted dedicated support measures for advanced biofuels, while most have focussed on more traditional biofuels. The potential for electric transport using renewable electricity deployment is still untapped, due to still high technology costs of deployment and lack of necessary infrastructure.

[1] Commission Communication: A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy (COM/2015/080 final) of 25 February 2015

[2] As highlighted in the 2030 climate and energy framework (COM(2014) 15 final)

[3] As highlighted in the baseline scenario of the 2030 climate and energy framework (COM(2014) 15 final)

[4] Estimated by IMF to be 330 Billion Euro in 2015, source:  
<http://www.imf.org/external/pubs/ft/survey/so/2015/new070215a.htm>

[5] Without prejudice to international and Union law, including provisions to protect environment and human health.

## Part 1: Information about the respondent

---

\* Are you responding to this questionnaire on behalf of/as:

- Individual
- Organisation
- Company
- Public Authority
- Other

\* Name of the company/organisation

Brazilian Sugarcane Industry Association - UNICA

\* Please describe briefly the activities of your company/organisation and the interests you represent

UNICA is the leading trade association for the sugarcane industry in Brazil, representing approximately 60% of all sugarcane production and processing in the country. Our member companies are the top producers of sugar, ethanol, renewable electricity and other sugarcane-derived products the heart of the sugarcane industry.

Thanks to the innovative use of ethanol in transportation and biomass for cogeneration of electricity, sugarcane is now the number one source of renewable energy in Brazil, representing 16% of total energy needs according to official government data (BEN, 2015). Our industry expands its sugarcane production in a way that preserves Brazil's natural resources and produces not only fuel, but also food, bioelectricity, raw material for bioplastics and next generation biofuels.

\* Please enter your email address

brussels@unica.com.br

\* Are you registered with the EC transparency register?

- Yes
- No

\* Which countries are you most active in?

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- United Kingdom
- Other

\* Can we publish your answers on the Commission website?

- YES - under my name (I consent to all of my answers/personal data being published under my name and I declare that none of the information I have provided is subject to copyright restrictions).
- YES - anonymously (I consent to all of my answers/personal data being published anonymously and I declare that none of the information I have provided is subject to copyright restrictions).
- NO - please keep my answers confidential (my answers/personal data will not be published, but will be used internally within the Commission)

## Part 2: General approach

---

The RED sets an EU target for renewable energy in gross final energy consumption of 20% by 2020 and 10% of the final energy consumption in transport. In order to achieve the overall 20% target, mandatory national targets for 2020 are fixed for each Member State. The RED also obliges Member States to prepare National Renewable Energy Action Plans (NREAPs) and biannual progress reports to create transparency and predictability for investors and facilitate monitoring of progress towards target achievement. The European Council has reiterated several times that the 2020 targets need to be fully met[1].

For the period after 2020, binding national targets are replaced by a binding EU-level target of at least 27% renewable energy in final energy consumption by 2030 without sectorial targets or binding targets at national level. A new approach to target achievement therefore needs to be developed, building on the Energy Union Governance and Member States' national energy and climate plans for the period up to 2030, which are expected to include national contributions towards the EU-level renewable energy target.

Without putting into question Member States' flexibility with regard to meeting their greenhouse gas reduction targets in the most cost-effective manner in accordance with their specific national circumstances, energy mixes and capacities to produce renewable energy, the new Energy Union Governance will need to provide sufficient transparency and reliability, predictability and stability to spur renewable energy investments and allow access to low-cost capital. It will also need to enable the EU to compare and monitor progress towards the renewables target. Within the broader context of the development of the Energy Union Governance, it will need to be considered what type of governance system will be able to deliver on these renewable energy objectives.

Given that the renewable energy target for 2030 is binding on the EU as a whole, the European Commission will need to have means to ensure that this target is met in a sustainable and cost-effective way. For this purpose, EU measures could be put in place and be designed to deliver on a number of objectives of the Energy Union:

1. create a market-based environment in which renewables can attract the required investments cost-efficiently;
2. foster regional cooperation and regional projects;
3. empower consumers to deploy cost-optimal renewable energy solutions;
4. incentivise the roll-out of new and innovative technologies; and
5. ensure that any potential gap arising in reaching the at least 27% renewable energy target, in terms of either ambition or delivery, is filled.

A number of questions would arise in this respect, including under what circumstances EU measures could be used or activated, how to share potential costs in a fair and equitable way and how to ensure participation by all Member States.

The experience gained with support schemes so far has allowed developing more cost-effective and market-based support schemes. Some Member State support schemes did not respond sufficiently rapidly to falling technology cost development, which resulted in some cases in unnecessary increasing costs for consumers. The EU Energy and Environment State Aid Guidelines build on this experience and puts down conditions for the approval of State Aid. In this context an improved functioning energy market, with improved price signals, as well as a strengthened EU ETS shall improve the investment signal. At the same time it is reasonable to expect that support schemes and other incentives (financial and regulatory) will still be the main policy tools that Member States will use to implement their renewable energy objectives with respect to renewable technologies that are not yet able to be fully financed by the internal energy market.

For new and innovative technologies, it can be important to ensure that regulatory and market risks are reduced to allow that project promoters can bring down costs through technology learning and industrialisation of manufacturing and installation, in particular if the EU is to become a world leader in renewable energy. However, where possible, some degree of market integration should remain if this goes beyond mere initial technology deployment of innovative technologies, to ensure their development takes into account market needs, does not lead to overcompensation and prepares these technologies for further market integration.

Finally, in line with the broader objectives of the Energy Union, a new regional approach to renewable energy policy cooperation and incentives should be considered.

In this context, it is important to examine the optimal geographical scope and design of any support schemes in order to drive the achievement of the 2030 target in a cost-effective way, which does not lead to fragmentation and distortion of the internal energy market.

It also needs to be assessed how regional cooperation agreements similar to those developed under RED can be improved and could play a role and to what extent support at EU-level could become relevant.

[1] The latest Renewable Energy Progress Report issued in June 2015 concluded that the majority of Member States are currently on track to meeting their 2020 renewables target. In 2013, the combined EU share of renewable energy reached 15% and the estimate for 2014 indicates a 15.3% share, which is above the trajectory for the EU as a whole. 26 Member States met their first 2011/2012 interim target and 25 Member States are expected to meet their 2013/2014 target. Some Member States have already reached their 2020 targets. However, as the trajectory towards the 2020 target becomes steeper over the coming years up to 2020, some Member States may need to intensify their efforts to keep on track (COM(2015)293 final and SWD(2015)117 final). Available here: <https://ec.europa.eu/energy/en/topics/renewable-energy/progress-reports>).

1. To what extent has the RED been successful in helping to achieve the EU energy and climate change objectives?

- Very successful
- Successful
- Not very successful
- Not successful
- No opinion

To what extent did implementation measures for the RED as well as external factors (technological development, financial crisis, security of supply concerns and related market interventions) affect the effectiveness and efficiency of achieving the objectives?

Please identify and ideally also quantify the direct and indirect costs and benefits such as macroeconomic effects, competitiveness effects, innovation, cost and cost reductions, environmental and health effects of the Renewable Energy Directive.

*3600 character(s) maximum*

Our comments will focus on transport and more specifically on biofuels. The lengthy discussion on ILUC paralyzed the biofuels sector as a whole. The Member States froze their legislation and the industry stopped investing. As a result, the contribution of biofuels toward the 10% mandatory target is low

(5.4% according to the RED 2009 methodology) compared to the situation that would have prevailed if the legislation had been clear and stable. The absence of stability in legislation really hampered this sector and makes any assessment of the RED difficult.

What is clear is that the double-counting mechanism was not effective in promoting new and innovative clean fuels. It only promotes existing non-food based biofuels such as used cooking oil and animal fat biodiesel. But it was ineffective in supporting the deployment of cellulosic ethanol or other types of second/third generation biofuels at the commercial scale. Funds available under FP7 or other R&D programme were more effective.

In addition, the absence of harmonisation of double-counted materials among member states is also a barrier to the development of these new fuels.

Finally, the energy taxation system is an external factor that played against biofuels and especially ethanol. According to DG TAXUD, the minimum effective rate per energy content (€/GJ) is 17 for ethanol but only 11 for petrol, making ethanol, a clean fuel, less competitive compared to its fossil alternative.

2. How should stability, transparency and predictability for investors be ensured with a view to achieving the at least 27% renewable energy target at EU level? Please indicate the importance of the following elements:

	Very important	Important	Not very important	Not important	No opinion
Forward looking strategic planning of RES development is required by EU legislation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Best practice is derived from the implementation of the existing Renewable Energy Directive	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regional consultations on renewable energy policy and measures are required	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Member States consult on and adopt renewable energy strategies that serve as the agreed reference for national renewable energy policies and projects	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



The Commission provides guidance on national renewable energy strategies	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
--	----------------------------------	-----------------------	-----------------------	-----------------------	-----------------------

Any other view or ideas? Please specify. What are the lessons from the RED (mandatory national targets, national plans, progress reports etc.)?

*3600 character(s) maximum*

Mandatory targets are the best way to provide transparency, stability and predictability for investors. As such, it would be fundamental to include targets in order to promote the use of clean fuels and to decarbonize transport. Liquid fuels fully depend on traditional fuels suppliers to distribute their products, which are blended with conventional fuels. The market power of these operators is too large for biofuels to compete. A mandatory target, or an obligation on fuels suppliers, is the only way to force them to place clean liquid fuels on the market.

3. Please rate the importance of the following elements being included in Member States' national energy and climate plans with respect to renewable energy in ensuring that the plans contribute to reaching the objectives of at least 27% in 2030.

	Very important	Important	Not very important	Not important	No opinion
Long term priorities and visions for decarbonisation and renewable energy up to 2050	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In relation to national/regional natural resources, specific technology relevant trajectories for renewable energy up to 2030	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Overview of policies and measures in place and planned new ones	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overview of renewable energy trajectories and policies to 2050 to ensure that 2030 policies lie on the path to 2050 objectives	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Qualitative analysis	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trajectories for electricity demand including both					

installed capacity (GW) and produced energy (TWh)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Measures to be taken for increasing the flexibility of the energy system with regard to renewable energy production	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Plans for achieving electricity market coupling and integration, regional measures for balancing and reserves and how system adequacy is calculated in the context of renewable energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Please explain.

*3600 character(s) maximum*

4. What should be the geographical scope of support schemes, if and when needed, in order to drive the achievement of the 2030 target in a cost-effective way?

- Harmonised EU-wide level support schemes
- Regional level support schemes (group of Member States with joint support scheme)
- National support schemes fully or partially open to renewable energy producers in other Member States
- Gradual alignment of national support schemes through common EU rules
- National level support schemes that are only open to national renewable energy producers

Please explain.

*3600 character(s) maximum*

5. If EU-level harmonised /regional support schemes or other types of financial support to renewable energy projects would be introduced:

- What hinders the introduction at the EU wide and/or regional scale?
- How could such mechanism be activated and implemented? What would be their scope (what type of projects/technologies/support mechanisms could be covered?)
- Who would finance them?

- How could the costs of such measures be shared in a fair and equitable way?

*3600 character(s) maximum*

6. The current Renewable Energy Directive gives Member States the possibility to enter into various cooperation mechanisms (statistical transfers, joint projects and/or joint support schemes). Please expand on the possible new legislative and non-legislative measures that could be introduced to foster the development of cooperation mechanisms in the period beyond 2020.

*3600 character(s) maximum*

7. The use of cooperation mechanisms has been limited to date. Which of the below factors do you consider important in explaining the limited recourse by Member States to cooperation mechanisms so far?

	Very important	Important	Not very important	Not important	No opinion
Unclear legal provisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Administrative complexities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of cost-effectiveness / uncertain benefit for individual Member States	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Government driven process, not market driven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Member States reluctant to see their taxpayers/ consumers' money used for investments outside their country	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Other? Please explain.

*3600 character(s) maximum*

8. How could renewable electricity producers be fully or partially eligible for support in another Member State? Which elements would you include in a possible concrete framework for cross-border participation in support schemes? Any other consideration? Please explain.

*3600 character(s) maximum*

9. Please assess what kind of complementary EU measures would be most important to ensure that the EU and its Member States collectively achieve the binding at least 27% EU renewable energy target by 2030:

	Very important	Important	Not very important	Not important	No opinion
EU-level incentives such as EU-level or regional auctioning of renewable energy capacities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
EU-level requirements on market players to include a certain share of renewables in production, supply or consumption	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
EU-level financial support (e.g. a guarantee fund in support of renewable projects)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
EU-level support to research, innovation and industrialisation of novel renewable energy technologies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Enhanced EU level regulatory measures	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Any other ideas or comments, please explain.

*3600 character(s) maximum*

If the European Union wants to be the number one in the use of energy from renewable sources, it would have to improve its regulatory framework in order to promote renewable energy in the transport sector. For instance, multiple counting mechanisms should be avoided as they are accounting tricks rather than real incentives to increase the share of renewables.

10. The Energy Union Framework Strategy sets the ambition of making the European Union the global "number one in renewables". What legislative and non-legislative measures could be introduced to make/strengthen the EU as the number one in renewables? Has the RED been effective and efficient in improving renewable energy industrial development and EU competitiveness in this sector?

*3600 character(s) maximum*

### Part 3: Empowering consumers

---

The European Commission's Energy Union Strategy put the consumer at the centre stage. Consumers have a key role to play in energy markets and in driving the transition to a more sustainable energy system in the EU. On 15 July 2015, the Commission issued a Communication on delivering a new deal for energy consumers (COM/2015/339)[1] as well as a guidance document on best practices on renewable energy self-consumption (SWD/2015/ 141).[2] In this context, REDII provides opportunities to develop more targeted measures for empowering consumers, including communities and cooperatives[3].

As active participants in the energy market, consumers should be able to self-consume and store renewable energy in the EU.

Provisions on simplified and streamlined procedures on permitting and grid connection in case of projects for self-consumption of renewable energy could be further enhanced.

The wide-spread development of self-consumption may also require gradual adjustment of retail tariffs to promote consumers' flexibility, while supporting energy efficiency and the renewable energy objectives and at the same time minimise total system costs. The establishment of common principles at EU-level for network tariff design will thus need to be considered.

Renewable energy deployments need also to observe certain rights granted to the public, by international and EU law, such as, for instance, the right to access to information, public participation and consultation, as well as access to justice on environmental matters[4]. Thus, contributing to accountability, transparency and public awareness.

The REDII also offers opportunities to foster local ownership of renewable energy (e.g. community and citizen participation in renewable energy cooperatives). It seems particularly important to support local authorities in preparing strategies for the promotion of renewable energy, enable cooperation between relevant actors at the local or municipal level and facilitate access to finance.

Under the RED, a Guarantees of Origin (GO) system provides an EU wide mechanism to inform electricity consumers as to the renewable nature of the electricity that they use, enabling green tariffs to develop but also being criticised for not sufficiently linking these tariffs to real incentives for additional new green energy deployment. It should be assessed to what extent the current rules for electricity disclosure (incl. GO) can be improved to reflect best practice in Member States' implementation and help consumers choose a more sustainable energy consumption pattern.

[1] [https://ec.europa.eu/energy/sites/ener/files/documents/1\\_EN\\_ACT\\_part1\\_v8.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/1_EN_ACT_part1_v8.pdf)

[2]

[http://ec.europa.eu/energy/sites/ener/files/documents/1\\_EN\\_autre\\_document\\_travail\\_service\\_part1\\_v6.pdf](http://ec.europa.eu/energy/sites/ener/files/documents/1_EN_autre_document_travail_service_part1_v6.pdf)

[3] Without prejudice to the EU and international law on the right to access to information, public participation and consultation, as well as access to justice on environmental matters.

[4] UNECE Convention on access to information, public participation in decision-making and access to justice in environmental matters (Aarhus Convention), Directive 2011/92/EU, as amended by Directive 2014/52/EU (EIA Directive), Directive 2001/42/EC (SEA Directive).

11. How would you rate the importance of the following barriers for consumers to produce and self-consume their own renewable energy?

--	--	--	--	--	--

	Very important barrier	Important barrier	Not very important barrier	Not important barrier	No opinion
Self-consumption or storage of renewable electricity produced onsite is forbidden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Surplus electricity that is not self-consumed onsite cannot be sold to the grid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Surplus electricity that is not self-consumed onsite is not valued fairly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Appliances or enabler for thermal and electrical storage onsite are too expensive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Complex and/or lengthy administrative procedures, particularly penalising small self-consumption systems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of smart grids and smart metering systems at the consumer's premises	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
The design of local network tariffs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
The design of electricity tariffs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Other? Please explain.

*3600 character(s) maximum*

12. In general, do you think that renewable energy potential at local level is:

- Highly under-exploited
- Under-exploited
- Efficiently / fully exploited
- Over-exploited (i.e. beyond cost-effectiveness)
- No opinion

Other? Please explain. Has the RED been effective and efficient in helping exploiting the renewable energy potential at local level?

*3600 character(s) maximum*

13. How would you rate the importance of the following barriers that may be specifically hampering the further deployment of renewable energy projects at the local level (municipalities and energy cooperatives):

	Very important barrier	Important barrier	Not very important barrier	Not important barrier	Not important barrier	No opinion
Lack of support from Member State authorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of administrative capacity and/or expertise/ knowledge/information at the local level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of energy strategy and planning at local level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of eligible land for projects and private property conflicts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Difficulties in clustering projects to reach a critical mass at local level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of targeted financial resources (including support schemes)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>



Negative public perception	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
----------------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	----------------------------------

Other? Please explain.

3600 character(s) maximum

14. Please rate the appropriateness of stronger EU rules in the following areas to remove barriers that may be specifically hampering the further deployment of renewable energy projects at the local level:

	Very appropriate	Appropriate	Not very appropriate	Not appropriate	No opinion
Promoting the integration of renewable energy in local infrastructure and public services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Supporting local authorities in preparing strategies and plans for the promotion of renewable energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Facilitating cooperation between relevant actors at the local or municipal level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Facilitating access to targeted financing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
EU-wide right to generate, self-consume and store renewable electricity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Measures to ensure that surplus self-generated electricity is fairly valued	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Harmonized principles for network tariffs that promote consumers' flexibility and	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

minimise system costs					
-----------------------	--	--	--	--	--

Other? Please explain.

*3600 character(s) maximum*

15. Should the current system for providing consumers with information on the sources of electricity that they consume be further developed and improved?

If not, why? If yes, how?

Should the current Guarantees of Origin (GO) system be made the mandatory form of information disclosure to consumers?

Should other information, such as e.g. CO2 emissions be included?

Should it be extended to the whole energy system and include also non-renewable sources? Other ideas?

To what extent has the current GO system been successful in providing consumers with information on the sources of electricity that they consume?

*3600 character(s) maximum*

## Part 4: Decarbonising the heating and cooling sector

---

Renewable heating and cooling can make a real difference for the decarbonisation of the EU economy and enhance EU security of supply. While cost-effective renewable energy equipment is available, 80-90% of the EU heat and hot water production is still using largely imported gas and oil. The RED includes limited provisions for the promotion of renewable heating and cooling. In REDII, more targeted measures could be considered to further increase renewables deployment in the heating and cooling sector, building on and interacting with energy efficiency and security of energy supply legislation. A comprehensive approach could be developed targeting buildings, individual energy use for heating and cooling, and the share of renewable energy in district heating and CHP units.

Efficient ways need to be found to stimulate switching from fossil fuels to renewable heating and cooling and hot water generation in the large number of EU homes with individual heating equipment. The existing nearly-zero energy building (NZEB) standards (mandatory from 2021 for all new building) include obligations for minimum use of renewable energy. It appears however that this is insufficient to further encourage the use of renewables at the building level. It could therefore be considered whether the NZEB rules should be made more ambitious to also include an obligation to use renewable energy heating (including water heating) and cooling in the existing building stock, effective if and when the building is subject to major renovation or the heating system is replaced. Measures will also need to encourage a shift in consumer behaviour, perhaps through better information about renewable energy alternatives from heating equipment suppliers and installers, and encourage investment in energy storage and demand-shifting capacity.

Although district heating systems only cover 13% of the European heat market, in Nordic, Central and Eastern European Member States 50-80% of the heating is produced by district heating. Most of this heating is produced from imported natural gas, followed by coal, and renewables. In these Member

States, measures to increase the share of renewable energy in heating and cooling supply could bring significant gains. For example, it could be assessed whether, based on comprehensive assessments of national heating and cooling potentials, energy suppliers could potentially be required to progressively increase the share of renewable energy in the overall energy that is placed on the market for heating and cooling purposes, taken into account the market incentives already available for this sector. It could also be assessed whether all new and significantly upgraded heating and cooling infrastructure should enable at least a certain share of all heating, cooling and hot water needs to be sourced from renewable energy sources produced on site or nearby (through local networks).

The potential for renewable energy in decarbonising the heating and cooling sector will also be addressed within the forthcoming Heating and Cooling Strategy and Security of Energy Supply proposals, while sustainability aspects will be addressed through the post-2020 EU bioenergy sustainability policy.

16. Please rate the importance of the following barriers in hampering the deployment of renewable heating and cooling in the EU:

	Very important barrier	Important barrier	Not very important barrier	Not important barrier	No opinion
Real or perceived incoherence in existing EU policies (such as RED, EED and EPBD)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of administrative capacity and/or expertise/knowledge/information at the national and local level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of energy strategy and planning at the national and local level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of physical space to develop renewable heating and cooling solutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of requirements in building codes and other national or local legislation and regulation to increase the share of energy from renewable sources in the building sector	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Heating and cooling equipment installers lack sufficient knowledge or information to offer renewable energy alternatives when asked to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

replace fossil fuel heating and cooling equipment					
Lack of targeted financial resources and financing instruments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of definition and recognition of renewable cooling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of electricity market design supporting demand response, decentralised energy and self-consumption and thermal storage in buildings and district systems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of mapping tools to identify the resources potential at regional scale with local renewable energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lack of tools and information to compare the lifecycle costs of the various alternative heating and cooling alternatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Negative public perception	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Other? Please specify and explain.

*3600 character(s) maximum*

17. Please rate the most effective means of addressing these barriers and advancing the decarbonisation of EU heating and cooling supply:

	Very effective	Effective	Not very effective	Not effective	No opinion
Renewable heating and cooling obligation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Requirement for energy suppliers and/or distributors to inform consumers of the costs of heating and cooling and to offer renewable heating and cooling solutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Requirement that all urban and municipal infrastructure upgrades (energy infrastructures, and other relevant infrastructure, such as sewage water, water and waste chains) make it possible and promote the distribution and use of renewable energy for heating and cooling and hot water generation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Measures supporting best practices in urban planning, heat planning, energy master planning, and project development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Criteria and benchmarks for promoting district heating and cooling taking into consideration the local and regional conditions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Nearly zero-energy building (NZEB) standards to include a mandatory minimum use of renewable energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Including systematically renewable energy production in buildings' energy performance certificates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
The promotion of green public procurement requirements for renewable heating & cooling in public buildings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Heating and cooling equipment installers should present renewable energy alternatives when asked to replace fossil fuel heating and cooling equipment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Develop best practices for enterprises, including SMEs, to integrate renewable heating and cooling into their supply chains and operations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Requirement to consider renewable energy alternatives in subnational, national, regional or EU security of supply risk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

preparedness plans and emergency procedures					
Targeted financial measures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Other? Please specify and explain. How could such measures be designed? How could they build on existing EU rules?

*3600 character(s) maximum*

## Part 5: Adapting the market design and removing barriers

---

A separate public consultation, which was open during the period 15 July – 8 October 2015, gathered extensive input on a wide range of issues aimed inter alia at making the market design fit for renewables. This section includes complementary questions. Both public consultations will inform policy makers during the development of REDII.

Changes in the market provisions are of utmost importance in order to build a market which is fully fit for renewables. For example, the establishment of liquid and better integrated short-term intraday and balancing markets will help to increase flexibility and help renewable energy producers to integrate in the market and compete on an equal footing with conventional energy producers, while the strengthening of the EU ETS can contribute to reinforce the long term investment environment.

The RED includes obligations to ensure transparent and foreseeable grid development for renewable energy as well as predictable, transparent and non-discriminatory grid connection and access procedures and costs. REDII as well as the Commission's market design initiative offers opportunities to update and improve these rules to take account of market developments and experience gained. Consideration also needs to be given to dispatch provisions in close connection with the development of the market design initiative.

The on-going evaluation of the Renewable Energy Directive (REFIT) shows that overall progress in removing non-financial barriers to renewable energy deployment in EU Member States is still limited and slow across the EU despite the specific provisions on administrative procedures, regulations and codes for renewable energy projects, requirements to share information and ensure quality of renewable energy training enshrined in the RED. Other studies point towards the same conclusion. It is reasonable to assume that there is therefore a need for more harmonized EU rules in a number of areas, including permitting procedures, spatial and environmental planning and vocational and professional training.

Note should be taken of already existing legal provisions and practice for streamlining and improving permit granting processes, in particular the provisions laid down in Regulation 347/2013 (TEN-E Regulation) and Directive 2011/92/EU (EIA Directive). Given the existing internal energy market, it is important to ensure that streamlining and improving the permitting granting processes is performed in accordance with existing internal EU legislation, as well as with due regard to the principle of subsidiarity and the national competences and procedures enabling renewable energy deployment. More effective and efficient administrative procedures should not compromise the high standards for protection of the environment and public participation. The establishment of a competent authority or authorities integrating or coordinating all permit granting processes ('one-stop-shop') should reduce

complexity, increase efficiency and transparency and help enhance coordination among Member States.

18. In your view, which specific evolutions of the market rules would facilitate the integration of renewables into the market and allow for the creation of a level playing field across generation technologies? Please indicate the importance of the following elements to facilitate renewable integration:

	Very important	Important	Not very important	Not important	No opinion
A fully harmonised gate closure time for intraday throughout the EU	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Shorter trading intervals (e.g. 15 min)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lower thresholds for bid sizes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Risk hedging products to hedge renewable energy volatility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Cross border capacity allocation for short-term markets (i.e., some capacity being reserved for intraday and balancing)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Introduction of longer-term transmission rights (> 3 years)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Regulatory measures to enable thermal, electrical and chemical storage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Introduction of time-of-use retail prices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Enshrine the right of consumers to participate in the market through demand response	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Any other view or ideas? Please specify.

*3600 character(s) maximum*



19. Currently, some exceptions from the standard balancing responsibilities of generators exist for energy from renewable sources. In view of increasingly mature renewable generation technologies and a growing role of short-term markets, is time ready to in principle make all generation technologies subject to full balancing responsibilities?

- Yes, in principle everyone should have full balancing responsibilities
- No, we still need exemptions

Please specify: If exemptions remain necessary, please specify if and in which case and why exemptions would still remain necessary (e.g. small renewable producers, non-mature technologies)?

*3600 character(s) maximum*

20. Please assess the importance of stronger EU rules in the following areas to remove grid regulation and infrastructure barriers for renewable electricity deployment:

	Very important	Important	Not very important	Not important	No opinion
Treatment of curtailment, including compensation for curtailment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Transparent and foreseeable grid development, taking into account renewable development and integrating both TSO and DSO level and smart technologies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Predictable transparent and non-discriminatory connection procedure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Obligation/priority of connection for renewables	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Cost of grid access, including cost structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Legal position of renewable energy developers to challenge grid access decisions by TSOs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Transparency on local grid congestion and/or market-based incentives to invest in uncongested areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Comments and other ideas, including whether there are any consideration concerning gas from renewable energy sources, for instance expansion of gas infrastructure, publication of technical rules, please explain.

*3600 character(s) maximum*

21. Which obstacles, if any, would you see for the dispatching of energy from all generation sources including renewables on the basis of merit order principles? Should there be any exemptions in some specific cases?

- Yes, exemptions are necessary
- No, merit order is sufficient

Please specify: If yes, in which case and why? What are the lessons from the implementation of RED?

*3600 character(s) maximum*

22. Please assess the importance of stronger EU rules in the following areas to remove administrative barriers to renewable energy deployment:

	Very important	Important	Not very important	Not important	No opinion
Creation of a one stop shop at national level to allow for more streamlined permitting procedures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Online application for permits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
A defined maximum time-limit for permitting procedures, and effective consequences if deadline is missed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Harmonisation of national permitting procedures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Special rules for facilitating small-scale project permitting, including simple notification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Pre-identified geographical areas for renewable energy projects or other measures to integrate renewable energy in	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

spatial and environmental planning					
------------------------------------	--	--	--	--	--

Any other views or ideas? To what extent has the RED been successful in reducing unnecessary administrative barriers for renewable energy projects in the Member States? Please specify.

*3600 character(s) maximum*

23. Please identify precise challenges with regard to grid regulation and infrastructure barriers in EU Member States that you are aware of.

*3600 character(s) maximum*

24. How would you rate the administrative burden and cost of compliance with the RED for national, regional and local authorities?

	Very important	Important	Not very important	Not important	No opinion
Administrative burden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Cost of compliance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Please explain. How could the administrative burden and cost of compliance be reduced in the period after 2020?

*3600 character(s) maximum*

25. Please rate the importance of stronger EU rules in the following areas to remove barriers relating to renewable energy training and certification:

	Very important	Important	Not very important	Not important	No opinion
Incentives for installers to participate in certification/qualification schemes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Increased control and quality assurance from public authorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Understanding of the benefits and potential of renewable technologies by installers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Mutual recognition of certificates between different Member States	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Comments, other ideas, please explain. To what extent has the RED been successful in reducing unnecessary training and certification barriers in the Member States?

*3600 character(s) maximum*

26. How can public acceptance towards renewable energy projects and related grid development be improved?

*3600 character(s) maximum*

## Part 6: Increase the renewable energy use in the transport sector

Decarbonisation and the replacement of fossil fuels is particularly challenging in the transport sector. 94% percent of EU transport relies on oil products, of which 90% is imported and represents a growing share of carbon emissions. Against this background, the October 2014 European Council invited the European Commission to further examine instruments and measures for the transport sector, including the promotion of energy from renewable energy sources.

According to European Commission estimates, a significant contribution from renewable transport fuels will be required to meet the overall EU 2030 decarbonisation targets . To achieve this, measures will need to be put in place to require an increased market up-take and deployment of sustainable low-carbon biofuels and alternative renewable fuels as well as renewable electricity in battery electric vehicles and hydrogen in fuel cell vehicles.

For example, further use could be made of incorporation obligations, dedicated financing (in particular in the heavy duty transport and aviation industry) and measures to increase access to smart energy services and infrastructure and promote the development of advanced renewable fuels which are not based on food crops. Special care needs to be taken to remove current market distortions and fragmentations of the EU internal market.

28. To what extent has the RED been successful in addressing the following EU transport policy objectives?

	Very successful	Successful	Not very successful	Not successful	No opinion
Contribute towards the EU's					

decarbonisation objectives	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce dependency on oil imports	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase diversification of transport fuels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Increase energy recovery from wastes	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce air pollution, particularly in urban areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Strengthen the EU industry and economy competitiveness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Stimulate development and growth of innovative technologies	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce production costs of renewable fuels by lowering the level of investment risk	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facilitate fuel cost reduction by integration of the EU market for renewable fuels	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Any other view or ideas? Please specify

*3600 character(s) maximum*

The lengthy discussion on ILUC paralyzed the biofuels sector as a whole. The Member States froze their legislation and the industry stopped investing. As a result, the contribution of biofuels toward the 10% mandatory target is low compared to the situation that would have prevailed if the legislation had been clear and stable from the beginning. The absence of stability in legislation really hampered this sector and makes any assessment of the effectiveness of the directive difficult.

29. Please name the most important barriers hampering the development of sustainable renewable fuels and renewable electricity use in transport?

Please explain, and quantify your replies to the extent possible.

3600 character(s) maximum

- Lack of stable legislation. The ILUC file paralyzed any development in the biofuels industry, but also the lack of predictability on the post-2020 period. It also widened the gap between member states in implementing the 10% RES target in transport.
- The lengthy debate on ILUC polarized opinions on biofuels. The black and white approach that was promoted, where all first generation biofuels are considered bad and all advanced are good, distorted the reality. More nuances are needed, as there are good sustainable first generation biofuels, such as sugarcane ethanol.
- No access to one of the best-performing ethanol, the Brazilian sugarcane ethanol, because of the high import tariff in place.
- Unfair energy taxation system that penalizes ethanol compared to petrol (minimum effective rate per energy content (€/GJ) is 17 for ethanol but only 11 for petrol)
- Lack of consumer's option. For example, very few countries offer E85 and flex-fuel cars.
- Lack of standard for high ethanol blend or lack of implementation. Today only 3 EU countries have implemented E10 and there is no standard for E20.
- Multiple counting played against the development of advanced biofuels such as cellulosic ethanol as it benefited almost exclusively existing technologies such as used cooking oil and animal fat.

30. Please rate the most effective means of promoting the consumption of sustainable renewable fuels in the EU transport sector and increasing the uptake of electric vehicles:

	Very effective	Effective	Not very effective	Not effective	No opinion
Increased use of certain market players' obligations at Member State level	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More harmonised promotion measures at Member States level	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
The introduction of certain market players' obligations at the EU level	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Targeted financial support for deployment of innovative low-carbon technologies (in particular to the heavy duty transport and aviation industry)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Increased access to energy system services (such as	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

balancing and voltage and frequency support when using electric vehicles)					
Increased access to alternative fuel infrastructure (such as electric vehicle charging points)					

Any other view or ideas? Please specify.

*3600 character(s) maximum*

By 2030, the share of liquid fuels in the European Union is expected to account for 93% of all energy in transport. Therefore, the Commission need to promote the decarbonisation of liquid fuels. Technologies already exist and should not be disregarded because we cannot afford to seat and wait for a potential silver bullet until 2030. Sustainable biofuels is one of these technologies. They can reduce GHG emissions by 90%, they are scalable, they don't need any additional infrastructure and they are less costly than other solutions.

The best and most effective policy instrument to promote the use of renewables in transport is a mandatory target. The first best will be a target at the Member States level, and the second best a target at the EU level as it is the case for renewable energy as a whole. The target should be technologically neutral and be based on greenhouse gas savings. This will promote the best performing biofuels but also other technologies.

Multiple counting should be avoided, as it is only an accounting trick that, actually, promotes the use of more fossil fuels and does not help climate change mitigation.

Standard for E20 should be developed quickly, as the automotive industry already produces cars compatible with this blend.

Ethanol high blends, such as E85 and ED 95 for heavy transportation, should be promoted, as alternative fuels and the corresponding infrastructure should be developed. This technology, developed by European companies, already exists and has proven track record in Brazil.

Both E20 and E85/ED95 would have a positive impact on GHG savings and local pollutants compared to diesel.

**Contact**

Sara.DEMEERSMAN-JAGANJACOVA@ec.europa.eu