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## 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-feedback), 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\_RED\_DEF.PDF

[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-feedback), will inform the impact assessment for REDII.

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[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:
O Individual
<ul> <li>Organisation</li> </ul>
Company
Public Authority
Other
* Name
of the company/organisation
Presidence of Conference of the Presidents of Outermost Regions
* Please describe briefly the activities of your
company/organisation and the interests you
represent
Promote political and technical cooperation between the Outermost Regions

Please enter your email address @ draece.srape@gov-madeira.pt \* 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
- 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.

#### 3,600 character(s) maximum

The initial goals have been affected by the general economic, affecting specially the southern European countries, and their capacity to maintain the incentives frameworks for supporting RES development. Other aspects that have negatively affected the implementation of the RED in some regions, is the lack of a proper territorial planning compatible with RES development, and bureaucratic issues that introduces delays and adds u

nnecessary cost to RES projects.

As positive impact, the boost on RES market due to RED contributed to reduce energy de pendence from abroad in Outermost regions, to reduce CO2 emissions and to increase loc al businesses, employment and added value.

#### 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		•			
Best practice is derived from the implementation of the existing Renewable Energy Directive	ā		•		
Regional consultations on renewable energy policy and measures are required		•		1-	- W-
Member States consult on and adopt renewable energy strategies that serve as the agreed reference for national renewable energy policies and projects	D.		•		
The Commission provides guidance on national renewable energy strategies		•	,		13.

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

#### 3,600 character(s) maximum

That without a proper retribution framework, the uncertainty created has an important negative effect in the development of RES projects.

#### 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	14.		•		
			•	σ,	v.5

In relation to national/regional natural resources, specific technology relevant trajectories for renewable energy up to 2030					
Overview of policies and measures in place and planned new ones	u.	•		*	-21
Overview of renewable energy trajectories and policies to 2050 to ensure that 2030 policies lie on the path to 2050 objectives	•	è			
Qualitative analysis		J	•		
Trajectories for electricity demand including both installed capacity (GW) and produced energy (TWh)	•	a		L.	-6 -
Measures to be taken for increasing the flexibility of the energy system with regard to renewable energy production	•		**		
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	•	.,	-3		

#### Please explain.

#### 3,600 character(s) maximum

Non dispatchable RES like wind and PV need investment in complementary technologies su ch as energy storage. Also of interested, given synergies, is the deployment of manage able loads such as electric vehicles.

#### 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.

#### 3,600 character(s) maximum

In the case of European non interconnected zones, and moreover in the case of the Oute rmost Regions, the general conditions differ from continental ones, in terms of cost, technical restrictions and other barriers to RES penetration. They should be addressed at the local/regional level.

#### 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?

#### 3,600 character(s) maximum

Who would finance them? - The sustainable long term financing of the support schemes i s a critical aspect to consider, in order not to create uncertainties regarding the re tribution framework for RES.

#### 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.

3,600 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	1.	•	Kiji.	1.7	
Administrative complexities		•	G.	-	
Lack of cost-effectiveness / uncertain benefit for individual Member States	,	•	4	6	
Government driven process, not market driven	164		•		
Member States reluctant to see their taxpayers/ consumers' money used for investments outside their country	h.,		•	*	

#### Other? Please explain.

#### 3,600 character(s) maximum

Regarding barriers for the implementation at the level of European non interconnected zones, and moreover at the level of the Outermost Regions, the lack of submarine inter connections is a key issue.

#### 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.

3,600 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	•				
EU-level requirements on market players to include a certain share of renewables in production, supply or consumption	2	•			
EU-level financial support (e.g. a guarantee fund in support of renewable projects)		•			
EU-level support to research, innovation and industrialisation of novel renewable energy technologies		,	•		3.*
Enhanced EU level regulatory measures	14	-	•		- 4

Any other ideas or comments, please explain.

#### 3,600 character(s) maximum

In non interconnected zones systems, a more levelled playing field is needed. The curr ent situation, with high subsidies to fossil fuels, makes it difficult for RES to comp ete.

Furthermore, energy prices are sometimes supported through national equalization schem es based on national cohesion, which causes a distortion on the competitiveness of RES for energy consumers (local production or self-consumption).

#### 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?

#### 3,600 character(s) maximum

Create a reliable long term retribution framework to reduce uncertainty. Promote neede d complementary technologies such as energy storage and electric vehicles.

## 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
- [2] 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	•				
Surplus electricity that is not self-consumed onsite cannot be sold to the grid	•				*
	3.	•		6	19

Surplus electricity that is not self- consumed onsite is not valued fairly				
Appliances or enabler for thermal and electrical storage onsite are too expensive	•	6		
Complex and/or lengthy administrative procedures, particularly penalising small self-consumption systems	•	49		iv
Lack of smart grids and smart metering systems at the consumer's premises	3.	•		-0
The design of local network tariffs		•		
The design of electricity tariffs	•		49	5

Other? Please explain.

3,600 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?

3,600 character(s) maximum

In the case of the Canary Islands, the effectiveness has been reduced due to existing technical restrictions that have not been properly addressed. Also existing bureaucrat ic barriers and restriction regarding territorial planning has had a negative effect on the objectives of the RED.

In Madeira there are limitations on the electric grid to receive RES surplus and price s to sell to the electric grid are based on Continental market prices that are very low compared with local costs in the region and are not attractive to stimulate private investment in RES namely in residential and services sector where the potential is huge for solar PV (solar PV is adequate for services, namely for tourism, because the peak of production is compatible with the peak of need for air conditioning in summer).

#### 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	Not very	Not	Not	No
important	barrier	important	important	important	opinion
barrier		barrier	barrier	barrier	

Lack of support from Member State authorities	2	•	7			Ç
Lack of administrative capacity and/or expertise/ knowledge/information at the local level		•				l le
Lack of energy strategy and planning at local level				9	The state of the s	3
Lack of eligible land for projects and private property conflicts	•	The state of the s		K.	Y	
Difficulties in clustering projects to reach a critical mass at local level	i,	pi pi	•			120
Lack of targeted financial resources (including support schemes)	•	<b>B</b>	5			
Negative public perception	A	- J	•			

#### Other? Please explain.

#### 3,600 character(s) maximum

Also the lack of energy storage infrastructure could be mentioned as a barrier for max imum penetration of RES, especially in European non interconnected zones and Outermost Regions.

#### 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	•		10-	r.	6
Supporting local authorities in preparing strategies and plans for the promotion of renewable energy	<b>6</b>	•			
Facilitating cooperation between relevant actors at the local or municipal level			•	o	
Facilitating access to targeted financing	•	٥	ž	al.	
EU-wide right to generate, self- consume and store renewable electricity	•		,		
		•			0

Measures to ensure that surplus self-generated electricity is fairly valued					
Harmonized principles for network tariffs that promote consumers' flexibility and minimise system costs	L.	•	v	,	3

#### Other? Please explain.

#### 3,600 character(s) maximum

To avoid uncertainty for RES projects, it is important that once the financial support mechanisms for RES have been implemented, to have the financial resources to guarantee the long term public commitment to these support mechanisms.

Retribution to local production of electricity from RES in non interconnected zones and Outermost regions should be based on actual local costs of conventional energy production, rather than on the Continental market prices, which are too low to make investment on RES feasible.

#### 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?
3,600 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)	1,41		4	•	
Lack of administrative capacity and/or expertise/ knowledge/information at the national and local level		4.9	•	42	
Lack of energy strategy and planning at the national and local level		=	•		č.
Lack of physical space to develop renewable heating and cooling solutions	1997			•	=,
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		× )ří	•	(2)	
Heating and cooling equipment installers lack sufficient knowledge or information to offer renewable energy alternatives when asked to replace fossil fuel heating and cooling equipment		~	•	3	1,50
Lack of targeted financial resources and financing instruments	£*	•	Ť.	Ġ	(8)
Lack of definition and recognition of renewable cooling	0	3	•	Э	69
		•	, iàt	9	- 3

Lack of electricity market design supporting demand response, decentralised energy and self- consumption and thermal storage in buildings and district systems			
Lack of mapping tools to identify the resources potential at regional scale with local renewable energy			•
Lack of tools and information to compare the lifecycle costs of the various alternative heating and cooling alternatives	- 2		•
Negative public perception		10	•

Other? Please specify and explain.

3,600 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	•	**		.77	
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	•	- 0	82	2	4.0
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	•	1.0	40	59	
Measures supporting best practices in urban planning, heat planning, energy master planning, and project development	3			4	A A
Criteria and benchmarks for promoting district heating and cooling taking into consideration the local and regional conditions	7			- 7	ē.
Nearly zero-energy building (NZEB) standards to include a mandatory minimum use of renewable energy	1	•	4	3	G <sub>g</sub>
Including systematically renewable energy production in buildings' energy performance certificates	3		43	6,4	(i.i.

The promotion of green public procurement requirements for renewable heating & cooling in public buildings	ě.		# 7 # 2	**************************************	3
Heating and cooling equipment installers should present renewable energy alternatives when asked to replace fossil fuel heating and cooling equipment	NS.		**	19.	3
Develop best practices for enterprises, including SMEs, to integrate renewable heating and cooling into their supply chains and operations	Į.	Э	•	1,0	
Requirement to consider renewable energy alternatives in subnational, national, regional or EU security of supply risk preparedness plans and emergency procedures	æ	Ď.			27
Targeted financial measures	-	•	15	6	

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

3,600 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	54	•			
Shorter trading intervals (e.g. 15 min)	- 6	•	i,	3	153
Lower thresholds for bid sizes	ψ.	***	Ç.	9	•
Risk hedging products to hedge renewable energy volatility	•		t <sub>a</sub> .	2	*
Cross border capacity allocation for short- term markets (i.e., some capacity being reserved for intraday and balancing)	ಷಿ				***
Introduction of longer-term transmission rights ( > 3 years)	- 22	5	16	(T)	•
Regulatory measures to enable thermal, electrical and chemical storage	- 3	•	- 0		***
Introduction of time-of-use retail prices	1-		\$		•
Enshrine the right of consumers to participate in the market through demand response	3	•	3		2.0

Any other view or ideas? Please specify.

3,600 character(s) maximum

Retribution to local production of electricity from RES (surplus of self-consumption) in non interconnected zones and Outermost regions should be based on actual local cost s and not on the Continental market prices, which are too low to make investment on RE S feasible.

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)?

#### 3,600 character(s) maximum

Exemptions remain necessary in isolated markets as Outermost regions where costs are h igher and RES are not fully competitive in a market where conventional energy systems based on fossil fuels were supported. In some remote non interconnected zones, energy prices to the consumer is based in equalised tariffs but costs of RES technologies for self-consumption is 20-40% more expensive. Furthermore, the retribution price for surp lus RES is based on Continental market prices that are much lower than actual local co sts.

#### 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	•	-3	7	P	
Transparent and foreseeable grid development, taking into account renewable development and integrating both TSO and DSO level and smart technologies	÷	•	3	<i>k</i> -	
Predictable transparent and non- discriminatory connection procedure	- 19		•		784.
Obligation/priority of connection for renewables	•	1,-	2	77	3 11
Cost of grid access, including cost structure	15	•			4
Legal position of renewable energy developers to challenge grid access decisions by TSOs	S. S.	•	-,-	9.	9
Transparency on local grid congestion and/or market-based incentives to invest in uncongested areas	S.	5	Ţ.		•

#### 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.

#### 3,600 character(s) maximum

In isolated electric grids, the prices for RES should be based on actual local costs on electricity production and RES technologies and take into consideration the need for  $\frac{1}{2}$ 

support to face the additional costs on energy storage, namely in combined productionstorage projects.

#### 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?

#### 3,600 character(s) maximum

Exemptions might be needed in Outermost regions where electric systems are isolated to ensure the reliability for RES investments. The investment in RES is usually long term (20 years or more) and it is necessary to ensure long term conditions to minimise risk s to acceptable levels.

#### 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	170	ż	± 1		•
Online application for permits	- 3	•			**
A defined maximum time-limit for permitting procedures, and effective consequences if deadline is missed	ž.	4,3	Ð	- 1	•
Harmonisation of national permitting procedures	- 6	•	D 72	4.	9
Special rules for facilitating small-scale project permitting, including simple notification	ì	•	-	*	187
Pre-identified geographical areas for renewable energy projects or other measures to integrate renewable energy in spatial and environmental planning	•			3	14.

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.

3,600 character(s) maximum

#### 23. Please identify

precise challenges with regard to grid regulation and infrastructure barriers in EU Member States that you are aware

#### 3,600 character(s) maximum

Isolated electric grids in outermost regions have technical challenges and quality requirements of stability to guarantee the energy supply that limit the penetration of RES. Those technical constraints should be reflected to the grid regulation and on the need of infrastructures to increase storage and improve grid stability.

#### 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	N	•	Sei.	Ü	الأدو
Cost of compliance	•	3.	64	49	10

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

3,600 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	ů.	72	•		
Increased control and quality assurance from public authorities	•	.,	ø	5	-d·
Understanding of the benefits and potential of renewable technologies by installers	9	•	0		į,
Mutual recognition of certificates between different Member States		£	73.	4.	1

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

3,600 character(s) maximum

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

3,600 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	2.7	o <sup>5</sup>	•	76.	t, *
Reduce dependency on oil imports	Lo	6	.7	•	3)
Increase diversification of transport fuels	3	1,11	24	•	,
Increase energy recovery from wastes	9	r <sup>2</sup> )	14.	•	47
Reduce air pollution, particularly in urban areas	- 3	9	7.1	•	W.
Strengthen the EU industry and economy competitiveness	7	~	•	9	6.
Stimulate development and growth of innovative technologies	t.	4,5	•	22	69
Reduce production costs of renewable fuels by lowering the level of investment risk	»,		•	£	(50
Facilitate fuel cost reduction by integration of the EU market for renewable fuels		9	•	5	Œ

Any other view or ideas? Please specify 3,600 character(s) maximum

# 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

#### 3,600 character(s) maximum

possible.

The extra purchase costs, compared with similar conventional vehicles. The lack of a r echarging infrastructure that gives coverage in all the territory. The perceived techn ical uncertainty (user's distrust of the new technology, compared with the reliability of the conventional vehicle).

## 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	0	•			
More harmonised promotion measures at Member States level	0	6	•	3	5
The introduction of certain market players' obligations at the EU level	0	•	9	C	
Targeted financial support for deployment of innovative low-carbon technologies (in particular to the heavy duty transport and aviation industry)	- 69	©	•	6	
Increased access to energy system services (such as balancing and voltage and frequency support when using electric vehicles)	O		•	6)	
Increased access to alternative fuel infrastructure (such as electric vehicle charging points)	•	وا		Ž.	à

Any other view or ideas? Please specify.

#### 3,600 character(s) maximum

All the benefits of the electric vehicle, specially its value as a manageable load that should allow for increasing penetration of non-dispatchable RES (wind. PV) in weak electrical systems (islands and Outermost regions), have to be correctly assessed. This should justify public subsidies for the EV in non interconnected zones and Outermost regions as an instrument to increase RES participation in the electricity mix.

#### Contact

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