



Friends of the Supergrid Official Reply to the European Commission Consultation on the Preparation of a new Renewable Energy Directive for the Period after 2020

<u>Questions:</u>					
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	
[Box: Comments. 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 RED. Max 500 words]					
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
<i>Forward looking strategic planning of RES development is required by EU legislation</i>	<i>x</i>				
<i>Best practice is derived from the implementation of the existing Renewable Energy Directive</i>		<i>x</i>			
<i>Regional consultations on renewable energy policy and measures are required</i>	<i>x</i>				
<i>Member States consult on and adopt renewable energy strategies that serve as the agreed reference for national renewable energy policies and projects</i>		<i>x</i>			
<i>The Commission provides guidance on national renewable energy strategies</i>			<i>x</i>		
[Box: Any other view or ideas? Please specify. What are the lessons from the RED (mandatory national targets, national plans, progress reports etc.)? Max 500 words]					

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.

	<i>Very important</i>	<i>Important</i>	<i>Not very important</i>	<i>Not important</i>	<i>No opinion</i>
<i>Long term priorities and visions for decarbonisation and renewable energy up to 2050</i>	<i>x</i>				
<i>In relation to national/regional natural resources, specific technology relevant trajectories for renewable energy up to 2030</i>			<i>x</i>		
<i>Overview of policies and measures in place and planned new ones</i>	<i>x</i>				
<i>Overview of renewable energy trajectories and policies to 2050 to ensure that 2030 policies lie on the path to 2050 objectives</i>			<i>x</i>		
<i>Qualitative analysis</i>					<i>x</i>
<i>Trajectories for electricity demand including both installed capacity (GW) and produced energy (TWh)</i>			<i>x</i>		
<i>Measures to be taken for increasing the flexibility of the energy system with regard to renewable energy production</i>		<i>x</i>			
<i>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</i>		<i>x</i>			

[Box: Please explain. Max 500 words]

The national energy and climate plans developed by the Member States will have a double function. First of all, they will allow the EC to make a global analysis in order to estimate if the EU will be able to reach its agreed global targets for 2030. Secondly, they can serve as a guide to ensure a long-term vision for the development of RES across the EU.

FOSG considers that in order to achieve the 2030 targets at the lowest cost, the EU needs to put in place a predictable and stable long-term regulatory framework. This requires that the Members States develop long-term visions to promote the deployment of renewables and its integration in the power system. These long-term visions should include not only a time frame for 2030, they should go beyond to the 2050 time horizon. A transparent overview of the targets for 2030 and 2050 at national and regional level, and an outline of the upcoming policies that different countries plan to put in place, are essential to ensure a stable regulatory framework that attracts investments.

At the same time, one must not forget that the huge deployment of renewables needed to reach the 2030 EU targets will only be successful if it goes hand-in-hand with the reinforcement and expansion of grids across Europe. A pan-European grid development is instrumental to ensure a reliable, flexible and cost-efficient power system. Europe needs to urgently build a strong grid as a backbone for a power market dominated by renewables. National plans must therefore take into account the need for anticipatory grid planning, including cost-efficient expansion and upgrades of the existing grid and interconnections between the different Member States.

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?*

X 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*

[Box: Please explain. Max 500 words]

The achievement of the EU 2030 energy and climate targets in a cost-effective way requires a coordinated approach towards the development of renewable energy sources across Europe. Regional level support schemes are necessary as a first step towards a harmonisation of RES support schemes in the EU. This will deliver substantial gains by ensuring well-located and least-cost deployment of RES.

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?*

[Box: Max 500 words]

FOSG strongly supports the promotion of harmonised and compatible renewable support schemes at EU level, including common grid access rules and common price setting mechanisms.

The development of renewable capacity should be optimised across the EU so that the best sites are exploited first. A European Supergrid would facilitate this through a pan-European grid that integrates energy sources where they are prevalent and transports power to areas of high demand. A Supergrid would therefore help the EU achieve climate and clean energy ambitions targets in a cost-effective way.

The lack of compatible regulatory practices across the different EU Member States is inefficient, makes renewable development more expensive and creates an important barrier for the development of a pan-European grid. An example of this can be found in the North Sea. It is estimated that the benefits of increasing cooperation in the North Sea to jointly plan and develop the offshore wind and transmission infrastructure could translate into annual savings of € 1,5 - 4,5 billion by 2030 (see: http://ec.europa.eu/energy/infrastructure/studies/doc/2014_nsog_report.pdf). A coordinated grid design is more cost-efficient than building individual connection lines for the wind parks and separated interconnections next to these lines. Development of RES should go hand-in-hand-with grid development. However the national RES support schemes implemented by the countries of the North

Sea region are still incompatible and represent a barrier to cooperation (see: http://www.northseagrid.info/sites/default/files/NorthSeaGrid_SynthesisOfFindings.pdf). FOSG would like to see concrete examples of regional cooperation for the development of RES and would strongly support a proposal from the EC to develop a concrete framework that establishes the rules for cross-border participation in support schemes.

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.*

[Box: Max 500 words]

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?*

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

[Box: Other? Please explain.]

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.*

[Box: Max 500 words]

9. *Please assess what kind of complementary EU measures¹ 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:*

	<i>Very important</i>	<i>Important</i>	<i>Not very important</i>	<i>Not important</i>	<i>No opinion</i>
<i>EU-level incentives such as EU-</i>					

¹ Without prejudice of the actual funding mechanism, where required, of the complementary EU measures

<i>level or regional auctioning of renewable energy capacities</i>					
<i>EU-level requirements on market players to include a certain share of renewables in production, supply or consumption</i>					
<i>EU-level financial support (e.g. a guarantee fund in support of renewable projects)</i>					
<i>EU-level support to research, innovation and industrialisation of novel renewable energy technologies</i>					
<i>Enhanced EU level regulatory measures</i>					
<i>[Box: Any other ideas or comments, please explain. Max 500 words]</i>					
<p>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?</p>					
<i>[Box: Please explain. Max 500 words]</i>					

2. Empowering consumers

<u>Questions:</u>					
11. How would you rate the importance of the following barriers for consumers to produce and self-consume their own renewable energy?					
	<i>Very important barrier</i>	<i>Important barrier</i>	<i>Not very important barrier</i>	<i>Not important barrier</i>	<i>No opinion</i>
<i>Self-consumption or storage of renewable electricity produced onsite is forbidden</i>					
<i>Surplus electricity that is not self-consumed onsite cannot be sold to the grid</i>					
<i>Surplus electricity that is not self-consumed onsite is not valued fairly</i>					
<i>Appliances or enabler for thermal and electrical storage onsite are too expensive</i>					
<i>Complex and/or lengthy administrative procedures, particularly penalising small self-consumption systems</i>					
<i>Lack of smart grids and smart metering systems at the consumer's premises</i>					
<i>The design of local network</i>					

tariffs					
<i>The design of electricity tariffs</i>					
[Box: Other? Please explain. Max 500 words]					
12. In general, do you think that renewable energy potential at local level is:					
<input type="checkbox"/> Highly under-exploited <input type="checkbox"/> Under-exploited <input type="checkbox"/> Efficiently / fully exploited <input type="checkbox"/> Over-exploited (i.e. beyond cost-effectiveness) <input type="checkbox"/> No opinion					
[Box: Other? Please explain. Has the RED been effective and efficient in helping exploiting the renewable energy potential at local level? Max 500 words]					
<p>Renewable deployment at local level will be essential to reach the EU 2030 targets. This means that further measures should be implemented to ensure that the local RES potential is fully exploited. However, it is important to acknowledge that although local RES development is key, it will not be sufficient to reach the EU targets in a cost-effective way. The EU needs to exploit its full RES potential by developing large RES projects where it is most suitable, combined with decentralised RES generation. The future European smart cities will need a Supergrid to improve balance surpluses and deficits of RES.</p>					
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):					
	<i>Very important barrier</i>	<i>Important barrier</i>	<i>Not very important barrier</i>	<i>Not important barrier</i>	<i>No opinion</i>
<i>Lack of support from Member State authorities</i>					
<i>Lack of administrative capacity and/or expertise/ knowledge/information at the local level</i>					
<i>Lack of energy strategy and planning at local level</i>					
<i>Lack of eligible land for projects and private property conflicts</i>					
<i>Difficulties in clustering projects to reach a critical mass at local level</i>					
<i>Lack of targeted financial resources (including support schemes)</i>					
<i>Negative public perception</i>					
[Box: Other? Please explain. Max 500 words]					

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					
Supporting local authorities in preparing strategies and plans for the promotion of renewable energy					
Facilitating cooperation between relevant actors at the local or municipal level					
Facilitating access to targeted financing					
EU-wide right to generate, self-consume and store renewable electricity					
Measures to ensure that surplus self-generated electricity is fairly valued					
Harmonized principles for network tariffs that promote consumers' flexibility and minimise system costs					
[Box: Other? Please explain. Max 500 words]					
15. Should the current system for providing consumers with information on the sources of electricity that they consume be further developed and improved?					
[Box: 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. CO ₂ 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? Max 500 words]					

3. Decarbonising the heating and cooling sector

<u>Questions:</u>					
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)					
Lack of administrative					

<i>capacity and/or expertise/ knowledge/information at the national and local level</i>					
<i>Lack of energy strategy and planning at the national and local level</i>					
<i>Lack of physical space to develop renewable heating and cooling solutions</i>					
<i>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</i>					
<i>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</i>					
<i>Lack of targeted financial resources and financing instruments</i>					
<i>Lack of definition and recognition of renewable cooling</i>					
<i>Lack of electricity market design supporting demand response, decentralised energy and self-consumption and thermal storage in buildings and district systems</i>					
<i>Lack of mapping tools to identify the resources potential at regional scale with local renewable energy</i>					
<i>Lack of tools and information to compare the lifecycle costs of the various alternative heating and cooling alternatives</i>					
<i>Negative public perception</i>					
<i>[Box: Other? Please specify and explain. Max 500 words]</i>					

<i>17. Please rate the most effective means of addressing these barriers and advancing the decarbonisation of EU heating and cooling supply:</i>					
	<i>Very effective</i>	<i>Effective</i>	<i>Not very effective</i>	<i>Not effective</i>	<i>No opinion</i>

<i>Renewable heating and cooling obligation²</i>					
<i>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</i>					
<i>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</i>					
<i>Measures supporting best practices in urban planning, heat planning, energy master planning, and project development</i>					
<i>Criteria and benchmarks for promoting district heating and cooling taking into consideration the local and regional conditions</i>					
<i>Nearly zero-energy building (NZEB) standards to include a mandatory minimum use of renewable energy</i>					
<i>Including systematically renewable energy production in buildings' energy performance certificates</i>					
<i>The promotion of green public procurement requirements for renewable heating & cooling in public buildings</i>					
<i>Heating and cooling equipment installers should present renewable energy alternatives when asked to replace fossil fuel heating and cooling equipment</i>					
<i>Develop best practices for enterprises, including SMEs, to integrate renewable heating and cooling into their supply chains and operations</i>					

² 'Renewable energy obligation' means a national support scheme requiring energy producers to include a given proportion of energy from renewable sources in their production, requiring energy suppliers to include a given proportion of energy from renewable sources in their supply, or requiring energy consumers to include a given proportion of energy from renewable sources in their consumption.

<i>Requirement to consider renewable energy alternatives in subnational, national, regional or EU security of supply risk preparedness plans and emergency procedures</i>					
<i>Targeted financial measures</i>					

[Box: Other? Please specify and explain. How could such measures be designed? How could they build on existing EU rules? Max 500 words]

4. Adapting the market design and removing barriers

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

[Box: Any other view or ideas? Please specify. Max 500 words]

FOSG considers that the implementation of long-term contracts is an important aspect that should be further discussed and debated within the framework of the new market design and new RES Directive. The implementation of a very long-term transmission capacity market would help support effective market design that would incentivise the construction of new RES generation in the most favourable locations whilst maintaining security of supply and a reliable network operation. This framework would facilitate the funding of new generation projects enabling the market to determine the most economic mix of generation technologies to meet the Member State's requirements.

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

[Box: 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)? Max 500 words]

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

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

[Box: 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. Max 500 words]

As stated in question 3, the deployment of renewables needed to reach the 2030 EU targets will only be successful if it goes hand-in-hand with the reinforcement and expansion of grids across Europe. A pan-European grid development is instrumental to ensure a reliable, flexible and cost-efficient power system. Europe needs to urgently build a strong grid as a backbone for a power market dominated by renewables. A transparent and anticipatory grid planning process is key to build the pan-European grid.

Pan-European interconnections are essential and need to be complemented by a smart and intelligent national transmission and distribution grid. This requires a revision of the Energy Infrastructure Regulation (Regulation 347/2013) that aims at finding a solution for the following existing gaps:

- Lengthy permitting processes: It is urgent to accelerate permit-granting processes for interconnections by reducing and simplifying the multiple administrative requirements in place in different countries.
- Complex and incompatible cross border regulatory frameworks: A stable and attractive framework for the financing of the new interconnections should be established. This can be achieved by gradually developing a harmonised regulatory environment across Europe to foster the development of new grid infrastructure.
- Insufficient incentives to develop the technologies of the future: There is a strong need to introduce effective incentives for the development of innovative grid technologies. This will develop European industry and translate into export potential and job creation.

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

[Box: Please specify: If yes, in which case and why? What are the lessons from the implementation of RED? Max 500 words]

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

	<i>Very important</i>	<i>Important</i>	<i>Not very important</i>	<i>Not important</i>	<i>No opinion</i>
<i>Creation of a one stop shop at national level to allow for more streamlined permitting procedures</i>					
<i>Online application for permits</i>					
<i>A defined maximum time-limit for permitting procedures, and effective consequences if deadline is missed</i>					
<i>Harmonisation of</i>					

<i>national permitting procedures</i>					
<i>Special rules for facilitating small-scale project permitting, including simple notification</i>					
<i>Pre-identified geographical areas for renewable energy projects or other measures to integrate renewable energy in spatial and environmental planning</i>					

[Box: 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. Max 500 words]

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

[Box: Max 500 words]

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

	<i>Very important</i>	<i>Important</i>	<i>Not very important</i>	<i>Not important</i>	<i>No opinion</i>
<i>Administrative burden</i>					
<i>Cost of compliance</i>					

[Box: Please explain. How could the administrative burden and cost of compliance be reduced in the period after 2020? Max 500 words]

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

	<i>Very important</i>	<i>Important</i>	<i>Not very important</i>	<i>Not important</i>	<i>No opinion</i>
<i>Incentives for installers to participate in certification/qualification schemes</i>					
<i>Increased control and quality assurance from public authorities</i>					
<i>Understanding of the benefits and potential of renewable technologies by installers</i>					
<i>Mutual recognition of certificates between different Member States</i>					

[Box: Comments, other ideas, please explain. To what extent has the RED been successful in reducing unnecessary training and certification barriers in the Member States? Max 500 words]

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

[Box: Max 500 words]

5. Increase the renewable energy use in the transport sector

Questions:

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

	<i>Very successful</i>	<i>Successful</i>	<i>Not very successful</i>	<i>Not successful</i>	<i>No opinion</i>
<i>Contribute towards the EU's decarbonisation objectives</i>					
<i>Reduce dependency on oil imports</i>					
<i>Increase diversification of transport fuels</i>					
<i>Increase energy recovery from wastes</i>					
<i>Reduce air pollution, particularly in urban areas</i>					
<i>Strengthen the EU industry and economy competitiveness</i>					
<i>Stimulate development and growth of innovative technologies</i>					
<i>Reduce production costs of renewable fuels by lowering the level of investment risk</i>					
<i>Facilitate fuel cost reduction by integration of the EU market for renewable fuels</i>					

[Box: Any other view or ideas? Please specify. Max 500 words]

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. Max. 500 words.]

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:

	<i>Very effective</i>	<i>Effective</i>	<i>Not very effective</i>	<i>Not effective</i>	<i>No opinion</i>
<i>Increased use of certain market players' obligations at Member State level</i>					
<i>More harmonised promotion measures at Member States level</i>					
<i>The introduction of certain market players' obligations at the EU level</i>					
<i>Targeted financial support for deployment of innovative low-carbon technologies (in particular to the heavy duty transport and aviation industry)</i>					
<i>Increased access to energy system services (such as balancing and voltage and frequency support when using electric vehicles)</i>					
<i>Increased access to alternative fuel infrastructure (such as electric vehicle charging points)</i>					
<i>[Box: Any other view or ideas? Please specify. Max 500 words]</i>					