E R E F

European Renewable Energies Federation

EREF to public consultation on a new renewable energy directive for the period after 2020

February 2016

Consultation questions

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
	X			

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.

The RED has proved to be a successful tool in achieving the EU energy and climate change objectives. The clearly defined European regulatory framework for renewables by 2020, agreed in co-decision and enshrined in legislation, setting out binding national targets for renewables, was decisive in incentivising Member States to adopt enabling renewable energy support policies and in attracting private investment in renewable energy assets.

In addition to traditional mechanisms used to enforce binding targets, such as the enforcement of the legislative transposition obligation, the enforcement of implementation and the obligation to prepare national action plans in the format of a binding template, in the RED the Commission made use of a number of other governance tools, such as the revision of the NREAPs and the progress reports. This clear reporting and monitoring system was developed to ensure that Member States do not lag behind their declared contributions.

In 2014, the renewables share reached 15.3%, exceeding the projected EU trajectory, and 19 Member States are now expected to go beyond their national renewable targets (European Commission, Renewable energy progress report, June 2015).

EREF is a federation of national renewable energy associations from EU Member States, such as wind, solar, small hydro, bio-energy, tidal, wave, and geothermal sources. EREF is striving to defend the interests of independent power, fuel and heat production from renewable sources and to promote non discriminatory access to the energy market.

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The most important indirect benefits are the development of a modern and future-oriented industry, value added at the European, national and local level, jobs and acceptance.

The increase of deployment of renewables resulted in innovative technologies and technological cost reductions. Further benefits include positive health and environmental effects as well as climate mitigation due to reduced GHG emissions and reduced imports and use of fossil fuels. According to a report released by the EC Joint Research Centre, GHGs emitted by the EU in the three years up to the end of 2012 fell by 8.8 percent as a result of replacing fossil fuels with renewables.

Due to these positive effects, EREF believes that the RED should be kept but amended by taking the following topics into account.

The RED has lacked the tools to follow through the ambitious EU renewable energy objectives. Since 2011, several Member States have questioned the appropriateness of renewable support schemes and have proceeded with abrupt cuts and retroactive changes in national support mechanisms, thus undermining the viability of existing projects and undermining the necessary investment security. The rule of law principle underpinning investor protection has demonstrated the limits of the current regulatory framework. E.g., renewable energy deployment is currently stalled in Bulgaria following severe and retroactive cuts to support mechanisms. Consequently, existing projects in these markets became more expensive and investors will avoid these markets for the foreseeable future.

The current RED failed to ensure priority dispatch when coming to cross border flows which is crucial for a European power market (renewables are curtailed instead of exported when member states protect domestic fossil/nuclear capacity). Despite that priority dispatch is still key for ensuring renewable energy production and installation in the European Union.

2. How should stability, transparency and predictability for investors be ensured with a view to achieving 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	*X*				
Best practice is derived from the implementation of the existing Renewable Energy Directive	*X*				
Regional consultations on renewable energy policy and measures are required		*X*			
Member States consult and adopt renewable energy strategies that serve as the agreed reference for national renewable energy policies and projects	*X*				
The Commission provides guidance on national renewable energy strategies	*X*				

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

The mid-term evaluation of the RED clearly concluded that the RED owes its effectiveness to its three main instruments – binding national renewable energy targets, national renewable energy action plans (NREAPs) and biennial reporting.

As investors are currently operating in a regulatory vacuum (until now, only six Member States have declared post-2020 renewable energy targets), EREF calls on the European

Commission to set individual indicative benchmarks for Member States to guide them in defining their contributions. These should be included in the RED. It is paramount that the national climate and energy plans as well as the monitoring system are anchored in legislation (preferably in the RED). In the absence of binding national goals, the plans are necessary to offer investment certainty and to ensure that the European goal is achieved. Embedding the development of the plans into the legislative procedure will also ensure their legitimacy, as the European Parliament and stakeholders will be fully involved in the process.

The national plans should include the concrete national contributions, technology-specific deployment volumes, indicative trajectories with interim targets, and indicative trajectories with interim targets for all three sectors – power, heating and cooling, and the transport sector.

In addition to progress reports monitoring the RED implementation should allow for more oversight of the European Commission over Member States' progress, and allow it to intervene in case Member States make counter-productive changes to their regulatory or market framework, especially retroactive changes to support mechanisms. The European Commission has to ensure that Member States cannot amend their plans at will and negatively impact target achievement.

As the renewable energy target of at least 27% at European level has a binding character, it is also important that national contributions of Member States are clear and that their sum meets or exceeds the target.

A European "gap-filling" instrument should be included in the RED, as should an EU-wide "gap-avoider". The first could be of financial nature and would involve using already existing funds, such as the structural funds. Member States would have access to funds specifically earmarked for the development of renewable energy. The "gap-avoider" would also lead to the achievement of the target, only by addressing the ambition gap of Member States when deciding on their contribution, i.e. at an earlier point in time.

EREF calls on the Commission to develop a flexibility roadmap and would like to offer its involvement in direct and regular exchange over the coming months. EREF also calls for a review of existing instruments e.g. for debt guarantees for SME enterprises and lessons to be learned rapidly concerning the availability of those instruments, their embeddedness on EU/EIB and Member States' level. Moreover, all structural funds regulations need review in order to ensure strict priority for RES development in all sectors and priority for strong regional cooperation in this field.

Furthermore, Member States should be rewarded in proportion to their ambition, for example, through increased and facilitated access to financing earmarked for renewable energy and related projects.

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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 objective 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		*X*			
In relation to national/regional natural resources, specific technology relevant trajectories for renewable energy up to 2030	*X*				
Overview of policies and measures in place and planned new ones	*X*				
Overview of renewable energy trajectories and policies to 2050 to ensure that 2030 policies lie on the path to 2050 objectives	*X*				
Qualitative analysis		*X*			
Trajectories for electricity demand including both installed capacity (GW) and produced energy (TWh)		*X*			
Measures to be taken for increasing the flexibility of the energy system with regard to renewable energy production	*X*				
Plans for achieving electricity market coupling and integration, regional measures for balancing and reserves and how system adequacy is calculated in the		*X*			

context of renewable energy.					

Please explain.

National energy and climate plans will be the backbone of the governance system and therefore they should be reliable, transparent, comparable, and legitimate to enable the fulfilment of the 2030 renewable energy target. Energy and climate planning is crucial to moderate policy uncertainty and its repercussions on investment risk and to subsequently enable the cost-effective deployment of renewables by 2030.

National plans must provide a holistic and detailed overview of Member States planned policies for the 2030 target. Plans should include:

- **Targets, and objectives for 2030 and 2050**: to ensure that Member States are in line with the EU's long-term decarbonisation objectives and will inform investors on expected market growth potentials;
- **Sectorial and technology-specific targets:** Member States renewable energy commitments should be broken down in sectorial targets (electricity, heating and cooling, transport) and per technology. For wind energy, Member States should include specific objectives for onshore and offshore. In particular, due to the long lead times and high upfront costs required for offshore wind, the 2030 renewable energy commitment of Member States need to provide for a specific volume of projects to enable scalability enabling cost reductions;
- **Indicative technology relevant trajectories and intermediate targets**: to ensure a linear progress towards the 27% renewable target and to give an early indication of potential deviation.
- **Phase out policies and targets for incumbent capacity from fossil (for electricity, transport and heating) and nuclear use in order to curb on overcapacity of electricity in the Member States and to reduce dependency from import and CO2 output.**
- **Clear sunset support policies for Member States with strict phase out policies (Stranded investment assistance, structural fund policies for transition towards sustainable energy systems)**

National plans should be developed on a standardised template to allow for consistency and comparability of Member States' progress in cooperation with the European Commission as it is vested with the responsibility to coordinate and oversee the 2030 target delivery. The renewable energy components of national plans should be decided in co-decision and

rooted in the EU rule of law to ensure that the main governance tool is legitimate. This could be done in the form of an annex to the new RED.

Other policies in the energy sector have to complement and not undermine the strength of the renewable energy policies. So, for example, capacity markets and/or the existence of poorly designed tendering systems cannot coexist with strong renewable energy policies. A robust Energy Union is based on the transformation of our current centralized and inflexible energy system into a decentralized and flexible one. This requires putting variable renewable energy at the centre of the system and allowing and incentivizing the existence of flexibility options (such as flexible renewable energy generation, storage, DSM, grid expansion, etc.).

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 MS
- 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.

There is currently no need for introducing harmonized EU-wide support schemes, as national support schemes have been converging more and more over the past years. Moreover, such schemes would not bring any benefits in terms of effectiveness and cost-efficiency. First of all, not only are national markets and the degree of technological maturity different in different Member States, but so are refinancing conditions, prequalification requirements and the taxation system. Introducing an abstract general rule that would account for all these differences seems impossible. Secondly, with increasing shares of RES, and the difficulties with the integration under a current energy-only market, biased by subsidies to the incumbent energy sector, overcapacity in electricity and capacity market regulations as well as regulated prices, harmonisation of RES support schemes does not take the needs of the system change and the various degrees of obstacles in the different Member States into account.

Bottom-up convergence of support mechanisms has already led to decreasing support levels and to making renewables respond to market signals (e.g. the introduction of market premiums). Further convergence will also depend on the elimination of other barriers, such as administrative barriers or the barriers preventing the completion of the internal energy market (e.g. regulated prices, subsidies for conventional power generators). The European Commission should continue to give guidance on this issue and push for the completion of a functioning internal energy market.

National support schemes have proved to be valuable in the past and there is still significant need for them, among others due to the fact that there is no carbon pricing system (even if there would be carbon price the large amount of RES would still have to deal with several considerable other barriers). The Commission needs to strengthen the role of local

authorities and cooperatives' and citizens' RES involvement and should rather clarify the importance of small scale development of RES and its specific and increasing system balancing capability, which goes far beyond the pure production of kW.

We believe that introducing regional renewable energy targets backed-up by support schemes will only replicate the difficulty of breaking down the EU binding target of 27% RE into concrete commitments and ensuring target achievement at another level. The goal is to increase regional cooperation. This could be done, for example, via common auctions of two neighbouring Member States, which are open to projects in both countries. Necessary requirements would be a level playing field between project sites and the existence of physical transfer of electricity.

If Member States were required to open their support schemes to generation from other Member States, this would pose serious risks in terms of public acceptance and would destabilize the regulatory framework already in place, with the risk of not meeting the binding 2030 RES target.

As for the use of sustainable renewable fuels in transport, however, the status quo should be upheld , i.e.that sustainable renewable fuels from all Member States are eligible for EU-wide support via renewable energy obligations (biofuel quotas)..

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/or regional scale?
   - How could such mechanism be activated and implemented?
   - What would be their scope (what types 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?

There is currently no need for introducing harmonized or regional support schemes, as the markets in Europe and the stage of development of various technologies are very different. Although wind and solar power have reached maturity and cost competitiveness in most markets, there are still barriers to their full deployment – be it the power of incumbents or high capital costs, which increase the need for support or public acceptance. Furthermore, most Member States are lacking a robust grid expansion, as is the European Union still lacking sufficient interconnection capacity.

It is also important to note that, in recent years, we have witnessed an increased convergence of national schemes, with Member States learning from each other's best practices. Regional cooperation in areas such as market integration of renewables and market design are also picking up speed, for example via cooperation like the one in the Pentalateral Forum. EREF encourages the European Commission to incentivize such initiatives and to set the necessary foundation for more regional cooperation and exchange of best practice and information. Central is also the involvement of stakeholders.

The Commission should especially support current initiatives such as from the German Government to open access to part of their support mechanisms participation of RES installations from other Member States.

Nevertheless, in order to reach the binding target of at least 27% RES in final consumption at European level, and in case Member States' national contributions do not add up to this binding pledge or countries fall behind their stated contribution, the European Commission should have the possibility to intervene and correct these developments. The mechanism required to ensure target achievement should be designed in a timely fashion and be anchored in legislation, to ensure its legitimacy and to provide investment certainty.

An efficient mechanism could be EU-wide financial support to renewable energy via a newly established EU level financing facility. This instrument should be discussed and agreed upon with Member States, and should specifically target renewable energy projects and facilitate the delivery of the binding target. By increasing cooperation between the EU and the

regional level and between Member States, and also involving green banks, this instrument would also lead to multiplying the local and regional benefits of renewable energy. Claude Turmes gave a useful proposal in his Luxembourg Declaration of October 2015.

6. The current Renewable Energy Directive gives Member States the possibility to enter into various cooperation mechanisms (statistical transfer, 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 mechanism in the period beyond 2020.

The mid-term evaluation of the RED concluded that: "Having RES national targets for 2030 would be a precondition for effectively applying cooperation mechanisms beyond 2020. Especially the development of joint projects and joint support schemes is unlikely without strong incentives to cooperate beyond 2020. As the Council conclusions on the 2030 climate and energy policy framework do not foresee national RES targets, much will depend on whether the Governance 2030, and especially the part on fostering regional cooperation, will be able to provide comparable incentives" (Mid-tem evaluation of the Red, April 2015). If national target achievement is no longer the main incentive for using the cooperation mechanisms, it is unclear what incentives Member States will have to cooperate.

EREF calls on the European Commission to set individual indicative benchmarks for Member States to guide them in defining their contributions. Member States that cannot or do not want to achieve their contribution nationally could make use of the new, redesigned cooperation mechanisms, which would in turn increase the chances of collectively meeting the binding target of at least 27% RES in gross final energy consumption.

EREF encourages the European Commission to incentivize initiatives such as the Pentalateral Forum and to set the necessary foundation for more regional cooperation and exchange of best practice and information. The success of cooperation mechanisms beyond 2020 will largely depend on the Commission's ability to create incentives that make cooperation economically attractive. Member States that go beyond the Commission's proposed growth path, including through cooperation mechanisms, should receive incentives in proportion to their ambition. For example, ambitious Member States should benefit from increased and facilitated access to structural funds earmarked for renewable energy and related projects. The ambitious Member States would also benefit from facilitated access to funds from the NER400 programme for renewable energy projects.

Non-legislative measures would be preferred. An example could be the Pentalateral Energy Forum which is based on organization of round tables, leading to political declarations made by Ministers of number of Member States. However, increased participation of stakeholders would be necessary in order to ensure transparency.

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 State to cooperation mechanisms so far?

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

Other? Please explain

The limited use of cooperation mechanisms under the 2020 framework has been extensively documented in literature. To our knowledge, the main reasons for which the use of cooperation mechanisms has failed to attract Member States are difficulties in predicting whether the 2020 national binding goals will be achieved solely nationally, especially with the trajectory getting steeper towards the end of the decade. It has also proved difficult to quantify the exact costs (e.g. grid infrastructure upgrade) and benefits (e.g. employment) of cooperation mechanisms, and their distribution among host and buying Member State, as well as communicating this information to citizens. Public opposition to exploiting the best domestic renewable energy sources (for the host country) or financing renewables deployment (for the buying country) have also been difficult to address by public authorities.

A major technical barrier is the uncertainty about the specific design of cooperation mechanisms which has hindered their implementation to date. Agreeing on a common support mechanism, when countries have divergent renewable energy potentials and technology preferences, different power market regulation and design (access, price regulations) has been a challenge for the creation of joint support mechanisms. The lack of sufficient infrastructure capacity and its utilization has been a key obstacle in the development of joint projects requiring physical transfer of electricity between the host and the buying country.

A further lack of ambition to cooperate lies in the priority of some Member States to support their incumbent champions and to prefer almost insular solutions via capacity markets and other means which are, in effect, rescue aid in disguise. Without curbing down on these distorting effects and overproduction from old nuclear and fossil units there is no way to cooperate effectively with such Member States.

A major legal concern is the uncertainty related to how State aid guidelines provisions will apply to cooperation mechanisms. The administrative set-up and the distribution of responsibilities between the host and buying state are also believed to create an additional burden to national administrations and further disincentivize cooperation.

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.

EREF is supporting the opening of Member States' support mechanisms to generation from other Member States, in principle. However, due to the distortions of the national markets as underlined above there is a risk of undermining the existing regulatory framework in a Member State. Strict reciprocity to access the support mechanism and market for RES investors, clear phase out plans in the respective Member States when it comes to coal and nuclear production , an end to subsidies and capacity markets as well as to administrative barriers and access of new players to the respective market would be a prerequisite for cooperation. The Commission should cooperate with those EU member States who are trying to open their mechanisms in a controlled way. EREF sees the risk that opening of support systems merely for the sake of opening could rather endanger the achievement of both the 2020 and the 2030 targets by significantly increasing the risk in terms of public acceptance (e.g. not benefitting job creation and local added value). Moreover, in 2014, the European Court of Justice ruled in the Ålands Vindkraft case that Member States are not required to support renewable electricity generation in other Member States and could thus

retain control over their national support mechanisms. Since current imbalances, barriers, state aid to the incumbent industry and overproduction in the electricity market are still the dominant obstacles for a fully harmonised approach, the clarity and value of the Aland decision and the acceptance of the impossibility to harmonise the RES sector do prevail also beyond 2020 and have to be respected by a new RED, as was the case with the current RED.

In addition, renewable electricity producers are not the main stakeholders affected by an opening of support schemes, as a large share of power is being sold directly. Direct marketers are the ones entering into contracts and bearing the responsibility for their balancing zone.

Thus, the opening to support schemes should only happen on a voluntary basis and if there is a physical flow of electricity to the Member State providing the support. The physical flow aspect is essential, as renewable energy systems are also required to provide ancillary services.

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				X	
EU-level requirements on market players to include a certain share of renewables in production, supply or consumption				X	
EU-level financial support (e.g. a guarantee fund in support of renewable projects)	X				
EU-level support to research, innovation and industrialisation of novel renewable energy technologies	X				

Enhanced EU level regulatory measures	X				

EREF strongly believes that national binding targets are the most effective and cost-efficient way of achieving the EU renewable energy target of at least 27% RES in gross final energy consumption. In the absence of national targets, the European Commission should define, as part of the governance system and via rule of law (i.e. the Renewable Energy Directive), a clear course of action based on national contributions which add up to the binding target. The Commission needs to ensure that the actions to be proposed by the Member States in order to achieve the binding EU wide target needs to be binding.
For example, the Commission could set individual benchmarks for Member States to guide them in defining their national contributions.

Through a dedicated dialogue between the Commission and Member States, the sum of the national contributions should at least reach and better exceed the binding EU target. In this context, the European Commission should push for increased regional cooperation and redefine the content and the use of cooperation mechanisms.

If the sum of the national contributions does not meet the target, the Commission should make use of a dedicated, timely-defined and regulatory EU back-up instrument to cost-effectively meet the target.

The European Commission should develop an innovation strategy coupled with a robust industrial policy to boost the deployment of renewables throughout the EU. This should be complemented by support measures to promote and export European renewable energy technologies outside the EU. EREF welcomes the planned initiative of the European Commission to boost research and innovation in renewable technology. In this respect, the Commission should also support their market uptake.

EREF opposes the introduction of EU-wide auctioning schemes or quota systems as a gap filler. First of all, the design of such an instrument would be an administrative nightmare and would hardly be able to account for all the different markets and maturity of the technologies in various Member States. Secondly, an EU-wide system would risk interfering with the functioning and the success of this instrument at the national level. Thirdly, it would increase the policy focus on the power sector, instead of concentrating on all three sectors equally, especially considering how the heating and cooling and the transport sector are already lagging behind. Here it is important to note that the sectors should be discussed separately, as an EU-level requirement on market players to include a certain share of RES

in production, supply or consumption would be relevant for the transport sector, but not for the power sector.

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?

In Europe, renewable energy investment has been driven by stable and clear investment conditions. These include a strong Renewable Energy Directive, with national binding goals for Member States and national support schemes. As both of these elements are threatened by what shapes up to be the design of the new Governance Framework 2030, uncertainty is only going to rise.

Whilst Europe still leads in innovation, other parts of the world are rapidly catching up in renewable energy deployment. In the post-2020 period, ambition from policy makers will still be required to drive the sector forward and cement the EU's position as the world number one in renewables. Maintaining global leadership in renewables requires a strong home market with clear growth perspectives.

Yet, retroactive changes in key European markets since 2011 have severely tarnished the EU's reputation as a safe and attractive hub for renewable energy investment. Renewable energy investors are also faced with a regulatory vacuum for the post-2020 period due to the unclear set-up of the Energy Union governance mechanism. Only six Member States have declared post-2020 renewable energy targets and the lack of clear pipeline visibility by 2030 prevents timely investment decisions, endangers the bankability of renewable energy projects and impedes further delivery of cost reductions.

Stable regulatory frameworks therefore remain crucial for sustaining renewable energy deployment and the EU's global leadership. A robust governance system for the 2030 target is key to providing long-term predictability to investors.

The European Commission should also demonstrate that a transition to a power system with large-scale integration of variable RES is feasible and will provide economic benefits.

Furthermore, Europe currently lacks an investment focus on strategic sectors, which has caused a decline of the industrial base. The current climate does not encourage investors to

take the first-mover risk. First-of-a-kind projects and technologies that have high upfront capital costs are finding it increasingly difficult to ensure financing, while exports of innovative renewable technologies are hampered by restrictive trade practices in other countries. The EU should push leading European technologies in the renewable energy industry through proactive industrial, innovation and trade policies.

Setting in legislation these policy priorities will ensure that a stable regulatory framework for the post-2020 period is in place, able to sustain a vibrant home market and thus ensuring the EU maintains its leadership position in renewables.

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

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

The European Commission regards the consumer as the centre of a transformed EU energy market. The new market design should facilitate the transition from consumers to prosumers and strengthen the role of the latter, allowing them to participate in the market on an equal footing with centralised power generation.

Community and cooperative projects have changed energy generation in many European countries and have significantly contributed to revitalising the local economy, to creating jobs and regional value as long as a not too high mandatory minimum scale is set.

Demand-side response should also be valued, together with self-generation, micro-storage and other mechanisms incentivising consumers to actively participate in the market. All barriers to own-consumption should be removed. We recommend that administrative constraints are limited to the lowest possible level. Regulatory barriers as well as disproportionate grid charges and taxes imposed to prosumers in some Member States should also disappear.

12. In general, do you think that renewable energy potential at local level is
- Highly under-exploited
- Under-exploited X
- Efficiently/fully exploited
- Over exploited

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

It is very difficult to formulate an answer that could include all sectors – the power, the heating and cooling, and the transport sector, and all Member States. Nevertheless, we believe the full potential of renewable energy is far from being effectively used. This also raises problems for the post-2020 period, as the unclear governance framework risks not tapping a lot of potential. Having national binding goals has had a positive effect and has been a driver for renewable energy development. In the absence of national goals, other means will be necessary to incentivize an increased RES deployment.

In many EU Member States, national goals have translated into regional and local goals and strategies for the development of renewables. This could be regarded as a best practice example. The European Commission could encourage other Member States to make use of such instruments, for example by requiring administrations to include them in their national plans.

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:

	Very important	Important	Not very important	Not important	No opinion
Lack of support from Member State authorities	X				
Lack of administrative capacity and/or expertise/ knowledge/information at the local level	X				
Lack of energy strategy and planning at local level	X				
Lack of eligible land for projects and private property conflicts		X			
Difficulties in clustering projects to reach a critical mass at local level			X		
Lack of targeted financial resources (including support schemes)	X				
Negative public perception			X		

Comments?

In Germany for example, one of the main deterrents of renewable energy projects at local level is the introduction of mandatory auctioning starting 2017. This system poses new barriers to the development of projects by energy cooperatives, especially for wind energy. By refusing to fully use the so-called de Minimis rule of the Guidelines on State aid for environmental protection and energy 2014-2020 of the European Commission, the German administration is de facto hindering competition. Energy cooperatives develop small projects in their regions, one at a time, and are therefore not able to divide project costs and risks between different simultaneous projects. They thus stand to lose between €189,000 and €315,0001 for each wind power plant that does not win the bid. This means that energy cooperatives will not be able to participate in the energy market any more.

[1] Numbers are based on BMWi "Marktanalyse – Windenergie an Land", 2015, p. 4 and Fachagentur Windenergie an Land "Dauer und Kosten des Planungs- und Genehmigungsprozesses von Windenergieanlagen an Land", 2015, p. 2-3. The average installed capacity of a new wind power plant in 2014 in Germany: 2.7 MW, the average costs from pre-analysis to the definitive permit according to the Federal Immission Control Act: 70-115 €/kW planned installed capacity.

A significant advantage of energy cooperatives is that they produce electricity from RES for the local demand and thus easily integrate green power into the energy system. Their projects might not have lower generation costs, but they result in far lower system costs. In Germany, as in other Member States, this specific cost advantage of community energy projects is not taken into account by the administration. Instead of supporting the direct use of renewable power at the local level, the German administration is rendering these concepts unfeasible.

Three aspects are to be noted in this context: First, all specific cost advantages that would benefit locally generated and consumed green power, such as lower grid fees, have been repealed or refused for community energy projects. Secondly, administrative requirements hinder a smooth realization of concepts that focus on the direct use of locally generated electricity. Last but not least, the cost structure of the energy system, especially the renewable energy surcharge and grid fees, penalize organizations that use power to heat installations and electric storage to balance fluctuations of wind and PV energy.

Community energy projects are one of the best means for activating flexibility options, but they are burdened by financial obligations. This negatively impacts their economic feasibility and leads to a paradoxical situation: While there is strong political support for unlocking balancing options, existing legislation hinders exactly the best solutions for targeting them.

Acceptance is another strong suit of community energy projects, as it is easier for these projects to access available areas, as do they benefit from the support of the public.

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		X			
Supporting local authorities in preparing strategies and plans for the promotion of renewable energy		X			
Facilitating cooperation between relevant actors at the local or municipal level	X				
Facilitating access to targeted financing	X				
EU-wide right to generate, self-consume and store renewable electricity	X				
Measures to ensure that surplus self-generated electricity is fairly valued		X			
Harmonized principles for network tariffs that promote consumers flexibility and minimise system costs		X			

Comments.

In many Member States, renewables have experienced rapid growth rates due to well-designed feed-in tariff and feed-in premium schemes. These schemes should set the bar for expanding renewables. Importantly, these schemes encouraged massive participation of prosumers and communities, leading to a fairer distribution of the benefits and more public support of renewables. The revised RED should require Member States to establish

remuneration mechanisms that secure a fair price for surplus self-generated electricity, e.g. through feed-in tariff, feed-in premium or net-metering at a level close to the retail price.

We further urge the Commission to publish guidelines/best practice on net-metering and virtual net-metering, recognising recent developments in, e.g., Greece and the Netherlands.
EREF urges the Commission to take a cautious approach to tendering for renewable energy generation and calls for tendering frameworks to be carefully designed to achieve a cost-effective expansion of renewable electricity generation. Tendering auctions should be applied only to large-scale (or utility-scale) established renewable electricity generation projects. Small/medium-scale, community-based, cooperative, social enterprise and municipal projects and emerging renewable technologies should not have to participate in tenders. The latter should receive appropriate support through aforementioned incentives.

As mentioned above, prosumers are increasingly subject to grid fees and taxes that dissuade and/or penalize self-production of renewable energy or storage. It is key that if grid charges are imposed on prosumers, it is important that they reflect the true cost. In Spain the Unión Española Fotovoltaica calculated each 100 MW installed solar results in 2.6 million euro in lost energy revenues. This represents 0.01% of the total Spanish system revenue. Grid charges also need to take into account the benefits renewable self-consumption and self-production can have for the system (price suppression, balancing, power quality, social and environmental benefits etc.).

In addition, electricity prices must ensure that demand response is possible and encouraged, since this will support grid integration of variable renewables. In this context, it is important to increase variability in retail prices. The Commission should issue guidelines/best practice for a new electricity rate design, consisting of the following elements:

- Low fixed charges (order of magnitude 20 per cent) to recover the cost of keeping a customer connected to the grid, metering, billing etc. Fixed charges should be as low as possible because they limit consumer options for demand response and they run counter to energy savings.
- Time-varying rates for energy supply to reduce overall generation costs and give consumers the option to save money by taking advantage of low-cost hours through demand side management. This part of the electricity bill should make up the majority of the electricity bill (order of magnitude 80 per cent) to ensure that consumers invest in energy efficiency measures and are encouraged to shift their electricity use away from times of grid congestion or insufficient renewable power production capacity.

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. 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?

Article 15 of the RED represents a first step in creating a comprehensive 'guarantees of origin' (GO) system that will allow consumers to choose what electricity they consume. Current low GO prices suggest they have a very limited if any impact on investment decisions for new renewable energy projects. It would therefore be important to require those that claim to supply green energy to specify in their product information to what extent the consumer can expect additional renewable energy project investments. Beyond this, EREF calls for increased transparency about the environmental quality of energy sources and the following improvements:

Firstly, while electricity disclosure rules cover all supplies, GOs are currently limited to renewable energy sources. The Commission should make the issuing of GOs mandatory for all electricity sources and harmonise the electricity disclosure rules. It is also possible to differentiate better between renewable energy sources. More information on bioenergy feedstock and potential ecological impacts (other than carbon footprint) of renewable energy could be added.

Secondly, it is important for both residential and commercial consumers to receive information about the carbon and radioactive waste content of a unit of electricity. The Commission should ensure that suppliers identify (on their websites, invoices, labels etc.) the carbon and radioactive waste content of all their different energy products based on real electricity purchased, allowing the consumer to compare the relative impact of different suppliers.

The Commission should establish rules to harmonise the calculation of the carbon and radioactive waste content of electricity across the EU, so that consumers receive reliable and comparable information and to integrate the market in favour of cross-border trade. The radioactive waste content should be calculated on the basis of spent fuel.

16. Please rate the importance of the following barriers in hampering the deployment of renewable H&C in the EU:

	Very important	Important	Not very important	Not important	No opinion
Real or perceived incoherence in existing EU policies		X			
Lack of administrative capacity and/or expertise/knowledge/information at national level		X			
Lack of energy strategy and planning at the national and local level		X			
Lack of physical space to develop renewable H&C solutions				X	
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	X				
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	X				
Lack of targeted financial resources and financing instruments	X				
Lack of definition and recognition of renewable cooling		X			
Lack of electricity market design supporting demand response, decentralised energy and self-consumption and thermal storage in buildings and district systems	X				
Lack of mapping tools to identify the resources potential at regional		X			

scale with local renewable energy					
Lack of tools and information to compare the lifecycle costs of the various alternative heating and cooling alternatives	X				
Negative public perception			X		

Comments.

Unfortunately, the heating and cooling sector has been consistently ignored by policy makers at both the European and national level. The long-awaited EU Strategy for Heating and Cooling should set a clear signal of commitment towards introducing more renewable energy into the sector and dealing with the many barriers that plague it.

Despite it being the task of national and local administrations to develop a heating strategy, the European Commission should encourage the further development of municipal planning regulations. The goal would be to develop a mid-term strategy of decarbonizing the building stock that details the necessary implementation steps. A more congruent structure of the financial support for renewable heating and cooling technologies is needed, with a focus on overall political goals.

A strong signal is also needed in regard to financing community and municipal renewable heating projects. Participative ownership structures are a constituent element of the energy transformation process and are the norm when financing renewable energy power projects. In the heating and cooling sector, there is a strong need for introducing individual warranties and allowing for public participation to projects.

Investing in RES community generation capacities and network infrastructure is a capital-intensive endeavour. The amount of interest to be paid to banks is thus of particular importance for the economic feasibility of projects. In order to incentivize financing and mobilize private capital for a transformation of the heating and cooling sector, public administrations could introduce deficiency guarantees.

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	X				
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		X			
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	X				
Measures supporting best practices in urban planning, heat planning, energy master planning, and project development		X			
Criteria and benchmarks for promoting district heating and cooling taking into consideration the local and regional conditions		X			
Nearly zero-energy building (NZEB) standards to include a mandatory minimum use of renewable energy	X				
Including systematically renewable energy production in buildings' energy performance certificates	X				
The promotion of green public procurement requirements for renewable heating & cooling in public buildings		X			

Heating and cooling equipment installers should present renewable energy alternatives when asked to replace fossil fuel heating and cooling equipment		X			
Develop best practices for enterprises, including SMEs, to integrate renewable heating and cooling into their supply chains and operations			X		
Requirement to consider renewable energy alternatives in subnational, national, regional or EU security of supply risk preparedness plans and emergency procedures			X		
Targeted financial measures	X				

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

A key issue influencing the development of renewable heating at the national level is the wrong implementation of Article 13 paragraph 4 RED, which states that "Member States shall, in their building regulations and codes or by other means with equivalent effect, where appropriate, require the use of minimum levels of energy from renewable sources in new buildings and in existing buildings that are subject to major renovation. Member States shall permit those minimum levels to be fulfilled, inter alia, through district heating and cooling produced using a significant proportion of renewable energy sources".

In practice, a 100% fossil generation is possible, as there is no requirement that the district heating network uses renewably generated heat. This contravenes to the clear intention of the RED to incentivize the use of renewable heating in district networks. A clarification at EU level that requires Member States to use only district heating which supplies a certain ambitious and increasing share of renewable energy would be necessary.

A stronger growth in renewable heating and cooling goes hand in hand with a stronger link to renewable power generation. Excess renewable power should be considered as a further source of renewable heating and cooling. If properly incentivized, this could, together with other alternatives, be at the core of a future stable and innovative, totally clean and renewable energy system in Europe.

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 important
A fully harmonised gate closure time for intraday throughout the EU		X			
Shorter trading intervals (e.g. 15 min)	X				
Lower thresholds for bid sizes	X				
Risk hedging products to hedge renewable energy volatility		X			
Cross border capacity allocation for short-term markets (i.e., some capacity being reserved for intraday and balancing)		X			
Introduction of longer-term transmission rights (> 3 years)			X		
Regulatory measures to enable thermal, electrical and chemical storage	X				
Introduction of time-of-use retail prices		X			
Enshrine the right of consumers to participate in the market through demand response	X				

The key to efficiently operating a market with large shares of renewable energy are integrated and liquid intraday and balancing markets. This is the first step towards transforming our energy system from a conventional fossil-fuelled one to one allowing and rewarding flexibility.

The following points are essential for increasing the integration of renewable energy and the participation of flexibility options in the market:

- Shorter and harmonized gate closure times of 15 minutes before delivery
- Shorter and harmonized imbalance settlement periods of 15 minutes
- Shorter and harmonized auctions of 15 minutes

- Smaller and harmonized minimum bid sizes of 1 MW

Although it should be the task of Member States to further develop their intraday and balancing markets, the European Commission could issue guidance entailing best practice examples to help Member States address various challenges they might face or propose new elements regarding market design in either network codes or the market design legislation. By helping countries to revise their markets, the European Commission would be an instrumental driver in further integrating renewable energy and allowing it and other flexibility options, such as storage or DSM solutions, to develop, become cost-efficient and participate in the market, thus leading to a more rapid system transformation.

In addition, as the generation of variable renewable energy will exceed the maximum electricity demand at certain times, enhancing sector coupling and the use of renewable power in the heating and cooling and the transport sector as well as in industrial processes should be pursued. At times when there is no immediate demand, excess generation can be stored for later uses in the power sector or converted to another energy source for use outside of the power sector (e.g. heat, hydrogen). Curtailing renewable generation, as it is currently the case, is neither economically nor energetically sensible and should not be an option in the future energy market.

The aim is to achieve full integration of the renewable energy generated in the power sector and to use it in all other areas. The key of tapping into power-to-X solutions in the future is to establish a level playing field, in particularly concerning the discrimination via taxes and duties as compared to other forms of energy.

19. Currently, some exceptions from 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, if and in which case and why exemptions would still remain necessary (e.g. small RES producers, non-mature technologies)?

EREF regards balancing responsibility as possible and desirable in systems where there is a level playing field for renewable energy generation. Exemptions (e.g. for smaller or mid-size installations – while notably the exemptions under the Guidelines for Environmental and

Energy Aid 2014 – 2020 seem arbitrary and should be revisited) should remain in place until markets can guarantee that renewable energy producers are not being discriminated against.

The time is not yet right to make all generation technologies subject to full balancing responsibilities. With many backward-looking balancing markets in various Member States, which are based on arrangements that only apply to conventional power generation, and with differences in market maturity and penetration of renewable energy production, subjecting renewable energy producers to full balancing responsibility would only lead to more discrimination in some European markets and risk bringing the development of renewable energy to a halt.

Renewable energy technologies are already providing ancillary services and their participation in balancing markets is already being considered and implemented in EU member States. The European Commission should in a first step encourage Member States to create functioning intraday and balancing markets that allow for the participation of renewables and flexibility options and are based on best practice examples.

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

	Very important	important	Not very important	Not important	No opinion
Treatment of curtailment, including compensation for curtailment	X				
Transparent and foreseeable grid development, taking into account renewable development and integrating both TSO and DSO level and smart technologies	X				
Predictable transparent and non-discriminatory connection procedure	X				
Obligation/priority of connection for renewables	X				
Cost of grid access, including cost structure	X				

Legal position of renewable energy developers to challenge grid access decisions by TSOs	X				
Transparency on local grid congestion and/or market-based incentives to invest in uncongested areas	X				

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.

Important barriers faced by renewable energy developers when it comes to grid connection are often related to an absence of clear information on the available grid connection capacity, a lack of planning for future grid extension and reinforcements on behalf of system operators, and insufficient grid capacity. Regarding this latter point, guaranteed or priority access is key to ensuring the development of the grid infrastructure necessary to effectively integrate renewable energy in a non-discriminatory way; this is especially the case in the countries without priority dispatch provisions in their national law.

In the last decade, most Member States have had to fight with insufficient grid capacity and long and burdensome processes of grid reinforcement and expansion. This situation negatively affects renewable energy power producers, as the grid is an important factor in driving renewable energy development forward.

As more variable renewable power comes into the grid, curtailment has increasingly become an issue. Guaranteed or priority access is key to ensuring the development of the grid infrastructure necessary to effectively integrate renewables in a non-discriminatory way, especially in those Member States without priority dispatch provisions in their national legislation.

Curtailment should not be understood as a means to optimize grid investments. Non-system security related curtailment should be voluntary and understood as a service, and thus remunerated according to clear and transparent rules.

A solution to avoiding curtailment altogether would be driving sectoral coupling forward. Until now, the local and district gas heating infrastructure has not been impacted by renewables development. Here, priority access and dispatch for renewable energy should be introduced. The infrastructure could be then used as a means to take in power that would otherwise be curtailed in the area affected by the bottleneck. The power would be

exempt from tax and other duties and would be available only to additional loads (which would be selected according to certain prequalification criteria). This option is particularly attractive in areas with many historical buildings. As these buildings cannot be renovated energetically, they could be connected to district heating and be heated by renewable heating.

Regarding the cost of grid access, the transformation of our energy system is a task for society as a whole, and should not be shouldered solely by renewable energy producers. Grid reinforcement and expansion benefit all producers and consumers, their costs should therefore be socialized.

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 X
    - No, merit order is sufficient

Priority dispatch for all RES is the only way the EU can guarantee the achievement of its goals. Due to current market design, there is often a lack of transparency in the curtailment rules representing an additional market risk for RES producers.

Priority dispatch is relevant on a number of different levels:

- For RES with significant marginal costs, such as bioenergy, which come after conventional energy sources in the merit order (as long as the external costs of conventional energy sources are not fully internalized)
- For RES with low marginal costs as opposed to conventional energy sources with low marginal costs (e.g. nuclear power and lignite power plants), the external costs of which are not internalized or the insurance premium of which does not reflect the actual risk
- For RES as opposed to conventional CHP plants which can displace renewable energy power due to revenues from heat sale. Incentives for the use of these plants that influence their place in the merit order intensify the problem.
- In regard to feed-in management which is not part of the electricity market, but is done by the transmission system operators. Without priority dispatch for renewable energy sources, the risk of some transmission system operators curtailing renewables before conventional power plants increases.

Priority dispatch should be granted to 'combined offshore grid solutions' where two or more countries could be connected via offshore wind farms, to reflect the increased risks developers face in such novel approaches.

Renewable power generators have to face increasing market risks due to curtailment. The renewable power loss in Germany rose by 185% to 1,581 GWh in 2014, which represents more than 1% of total renewable energy production. This percentage is expected to only rise in the next years, which requires the European Commission and Member States to actively pursue new solutions to address the issue. In order to achieve an economic optimum, the merit order should include not only the real costs of conventional power generation, but also a factor representing the individual impact of generation on the bottleneck.

A solution addressing the problem of excess power is sectoral coupling, which makes sense from both an economic and an energy point of view. Unfortunately, this alternative has not been yet considered by many Member States, with exception of Denmark (e.g. power to heat). With an increasing share of fluctuating renewable energy and with solutions to decarbonisation and increased flexibility needed by the energy intensive industry and the transport sector, sector coupling can play an important role as part of an overall European strategy.

The goal is to use excess power which cannot (bottleneck management) or should (peak clipping) be taken up by the grid in other sectors. Sector coupling can be gradually driven forward by cost-neutral incentives and can lead to the development of competitive markets and industries providing power-to-X solutions and innovative ancillary services.

Generally, renewable energy should continue benefitting from priority dispatch until a fully transparent, fair and well-functioning power market is in place.

22. Please asses 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		*X*			

streamlined permitting procedures					
Online application for permits		*X*			
A defined maximum time-limit for permitting procedures, and effective consequences if deadline is missed		*X*			
Harmonisation of national permitting procedures			*X*		
Special rules for facilitating small-scale project permitting, including simple notification	*X*				
Pre-identified geographical areas for renewable energy projects or other measures to integrate renewable energy in spatial and environmental planning				*X*	

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.

Fair and shorter permitting and connection procedures would significantly reduce project development costs for renewable energy developers. The ED did not measurably help to reduce lead-times. National authorities and network operators should issue consent and connection of renewable generators within shorter and defined time-limits.

Another important issue refers to the number of bodies that are involved in issuing of permits. As a minimum prerequisite, Member States should streamline procedures and report to their improvements as foreseen in the current RED. In the long run, Member States could appoint a single permitting authority that would be in charge of the coordinating the whole process, as it is the case for TEN-E / PCI projects.

Others barriers faced by renewable energy project developers in the administrative authorisation process are related to compliance with spatial planning, the number of parties / authorities involved and to barriers related to other stakeholders involved in the process (social acceptance issues).

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

In some Member States, difficulties faced by small project developers reviewing the reasons for the long duration until being granted or, in some cases, being refused grid connection remain a significant problem regarding grid regulation. In Germany, the Clearingstelle EEG, a clearing panel to deal with disputes regarding the Renewable Energy Sources Act, can act as a mediator. The introduction of similar institutions by other Member States could be a solution to improve grid regulation.

A further problem is the management of interconnections according only to the economic interests of the transmission system operators, which leads to lack of grid efficiency.

For more information on barriers regarding the integration of renewables into the grid, please also consult Keep on Track!, the PV Grid and RES LEGAL projects.

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				*X*	
Cost of compliance				*X*	

The emphasis should not lie with reducing paperwork; in fact much of it is there for a good reason. Focus should instead be on streamlining and building capacity in authorities, for example by setting up a one-stop shop for project permits.

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	*X*				
Increased control and quality assurance from public authorities	*X*				
Understanding of the benefits and potential of renewable technologies by installers	*X*				
Mutual recognition of certificates between different Member States	*X*				

Strengthening the vocational and further training of installers in regard to renewables is a long-term task at both the European and the national levels. Creating content on key issues regarding renewable energy and incentivizing the installers to understand the benefits and potential of renewable technologies will lead not only to an increased quality of their work, but to an increased interest for the topic.

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

Local communities sometimes perceive wind farms, their overhead lines and other grid infrastructure, as intrusive and of limited value to the community. It is thus important to increase the use of open dialogue and awareness-raising by both public administrations and project developers as well as increase participation of communities in projects.

The need for a lean planning process and well-defined roles for the bodies involved in planning is crucial. National planning and permitting strategies are essential to understand the level of public participation and information during the development of larger renewable projects.

The active participation of citizens, through cooperatives, has been identified by various European projects as a major factor in improving social acceptance of renewable energy projects. Enabling local community ownership without great complexity has become an important issue. In Germany, one of the main deterrents of renewable energy projects at local level is the introduction of mandatory auctioning starting 2017. This system poses new barriers to the development of projects by energy cooperatives.

By refusing to fully use the so called *de Minimis* rule of the Guidelines for Environmental and Energy Aid 2014-2020, the German administration is de facto hindering the development of further cooperatives and thus endangering social acceptance.

What is more, the de Minimis levels fixed in the Guidelines seem arbitrary and fixed without taking into consideration the nature of (in particular community or even prosumer) RES projects in particular for wind, but also for other RES. When revisiting those levels, the Commission should also think about introducing a special framework for community standards.

The European Commission in any event needs to review the State Aid Guidelines and drastically improve the value of balancing and system change and integration capability for small scale installations on the local distribution, storage, balancing and demand side management level and its value in an overall decrease of the costs of system change by avoiding of some of the grid enforcement and storage technologies.

The Commission should ensure that EU policies support those that are already producing and those that would like to produce their own renewable energy. The Commission should enshrine the right to self-produce, self-consume, sell to the grid, store, and engage in demand side management, not least in its proposal for a revised RED. The inclusion of prosumers has a range of benefits including local engagement; increased acceptance, direct or financial participation, diversification of actors and increased energy democracy. Indeed, traditional utilities and big investors would never have initiated the numerous local renewable energy projects, as they are generally discouraged by the transaction costs of many small projects. It is therefore important that EU provisions support decentralised energy generation to ensure fair distribution of the significant economic benefits and participation in the energy transformation is encouraged.

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

By introducing a sectoral goal of 10% renewable energy in the transport sector, the RED set a vital and successful sign for developing alternative fuels and drives. However, the prolonged debate about the advantages and disadvantages of alternatives to fossil fuels – especially about biofuels from food-based crops – has led to legal uncertainties, hereby lowering investment security in the sector. The revision of the RED to restrict renewable first generation biofuels to a share of only 7% as well as the introduction of multiple counting has de facto lowered the 10% target. The once ambitious target has been weakened, as multiple counting does not really meet EU policy objectives, but only multiplies the contribution of renewables without actually increasing their production and profiting from the benefits (reducing fossil fuel dependency, reducing air pollution). The European biofuel industry is thus struggling, as they cannot fully use the production capacities which were built based on trust in the European framework conditions.

As regards other solutions to sustainable mobility, the RED has been mostly unsuccessful in triggering their development. Electric mobility, hydrogen cars, power to gas or power to liquid are all alternatives for the transport sector which the RED has, until now, not successfully incentivized.

The Commission needs to propose a comprehensive fossil fuel replacement programme for all Member States with ambitious goals, clarity on the interlinkage between the local, regional and Member States' level. Public transport needs clarity of which replacement path the local and regional policy may foresee. Learning from the sustainability debate around biofuels and the increased importance of RES fuel from non-organic /biomass origins but from wind or solar should guide towards a holistic planning support for local authorities. This is not an EU harmonisation policy field but rather a guidance need approach to Member States to help their local and regional level for coherent policies. Trucks design and long distance transport needs a coherent policy of Member States. The Commission could encourage with adequate research that Member States sharing trans-European highways to electrify highway lanes for trucks and buses, to rekindle and enforce combi transport systems (rail/road) and biofuel use.

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

In recent years, an emotional discussion about food crops used for biofuels led to a debate about indirect land use change which significantly hampered the development of sustainable biofuels. Nevertheless, applying ILUC factors to biofuels only makes sense if all industries are included and all products are applied ILUC factors. Their exclusive application to renewable biofuels discriminates against them and leads to major disadvantages for the industry, working in favour of the status quo and conventional fuels.

In this context, it is necessary to create long-term framework conditions that guarantee legal certainty and security of investment. EREF believes that the aim for increasing the share of sustainable renewable fuels in transport should also be more ambitious. Measures should be introduced that incentivize increasing the efficiency of the transport sector, to avoid traffic and to reach a modal shift. Existing potentials for biofuels should be fully exploited and electric mobility as well as other forms of energy use, such as hydrogen cars, should be promoted e.g. for strengthening their position in the Fuel Quality Directive (possibly a double-counting similar to what was introduced under the RED).

For biomethane, the problem is that there is no EU-wide biomethane mass-balancing system, thus the EU wide trading of biomethane is not possible. The creation of an

integrated European mass-balancing network would lead to the removal of this significant barrier.

As long as the external costs of using fossil energy are not included in their price, electric mobility and other alternatives will remain more costly. Incentives should thus be introduced to promote their use, such as tax incentives, financial support for customers or the quick installation of area-wide charging systems.

Regarding the latter point, the lack of infrastructure poses a massive challenge to the development of renewable mobility and electric mobility, as does the low range of electric vehicles. Vehicle manufacturers will only start investing in sustainable mobility once the problem of the infrastructure will be addressed.

A less significant issue refers to the still higher acquisition costs of electric vehicles. Nevertheless, these initial high costs are balanced out by lower operation costs (for fuel, use, wear) over the useful life of the vehicle.

Sustainable transport should be a topic seriously addressed by the European Commission. This includes rethinking emission levels of new cars beyond 2020 (emission levels of 95 g CO_2/km should be envisioned). Furthermore, standardized driving cycles should be introduced, in order to enable comparison of emission levels in different Member States.

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		*X*			
More harmonised promotion measures at Member States level		*X*			
The introduction of certain market players' obligations at the EU level			*X*		
Targeted financial support for deployment of innovative low-carbon technologies (in		*X*			

particular to the heavy duty transport and aviation industry)					
Increased access to energy system services (such as balancing and voltage and frequency support when using electric vehicles)			*X*		
Increased access to alternative fuel infrastructure (such as electric vehicle charging points)			*X*		

As part of a reliable and stable framework, binding and ambitious sectoral goals are necessary for effectively transforming our energy system. They are paramount for ensuring investment certainty, and are especially important in the transport sector, where a target of 10% should continue to be part of the RED.

Without sectoral targets, policy will continue to focus on the power sector, leaving the heating and cooling and especially the transport sector behind. Fossil fuels remain very cheap, as external costs are not included in their price, and they make it difficult for clean alternatives, such as sustainable renewable fuels and electric mobility, to compete. In the long-run, these alternatives will remain more costly, which is why they require binding sectoral goals and increased efforts to decarbonise transport. The sectoral goals and increasing the efficiency of transport should also be accompanied by research and development initiatives and financing, and positive incentives geared at changing consumer behaviour.