

CONSULTATION QUESTIONNAIRE

Preparation of a new renewable energy directive for the period after 2020

assoRinnovabili Response

1. General approach

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			

In the last years, also thanks to the RED provisions, RES have seen remarkable growth, giving a contribution to the total energy production that would have been unpredictable just a few years ago.

Renewable energy offers an immediate means to reduce climate change and air pollution and to limit dependence on energy imports.

RES deployment has indeed to be strongly fostered through direct support systems or penalising the use fossil energy sources (for example through instruments like ETS – opportunely improved – or the Carbon Tax).

Most of the RED provisions have been very relevant for the achievement of the directive objectives, but the three measures that made the Directive successful were binding national targets, National Renewable Energy Action Plans (NREAPs) and biennial reporting.

The introduction of mandatory targets and indicative interim targets for all EU MS have been useful for driving investments in renewable energy sector, providing clear signals for operators, contributing to reduce RES technology and financing cost and to unlock financial resources, collecting data and monitoring the sector in a more complete and transparent way than in the past.

In Italy, the overall targets have been achieved very early because of the decrease in the demand but, above all, thanks to the strong contribution of RES in the electricity sector, while little has been done in the transport sector.

This means that the targets were probably not enough ambitious and the allocation was not properly adequate, not fully taking into account the state of the art, the potential and the specific characteristics of our Country.

The government improperly used the achievement of the target to justify some retroactive changes in support mechanisms. This suggests that the meaning of targets (as a minimum and not maximum level to be reached) should have been – and ought to be in the new Directive – more clearly underlined.

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>	X				
<i>Best practice is derived from the implementation of the existing Renewable Energy Directive</i>	X				
<i>Regional consultations on renewable energy policy and measures are required</i>		X			
<i>Member States consult on and adopt renewable energy strategies that serve as the agreed reference for national renewable energy policies and projects</i>	X				
<i>The Commission provides guidance on national renewable energy strategies</i>		X			

Stability, transparency and predictability should be ensured with clear and stable regulatory and legislative interventions.

The lessons learned from the experience of 2020 package are:

- A stable long term legislation framework is necessary for driving investments in renewable energy sector, providing clear signals for operators, reducing cost of financing and unlocking financial resources. All abrupt changes in support mechanisms, in particular retroactive, undermine confidence of investors and put the achievement of targets at risk.
- Ambitious and legally binding targets are effective tools to drive and promote investments, create jobs, push R&D and ensure EU technology leadership in RES innovation.
- An integrated and coherent renewable energy generation, greenhouse gases reduction and energy efficiency promotion policy has proven to be an effective approach and it is the best way forward.
- Further efforts are needed for the removal of administrative barriers, and the clearness of planning and permitting procedures.
- An efficient support mechanism is able to adapt to the maturity and the changing costs of renewable energy technologies.
- More and smarter infrastructures are needed to ensure the highest possible cost-effective integration of the energy mix.
- Reporting activities are necessary to provide a regular overview of the measures taken or planned at national level and the progress made in RES growth. It is also necessary that EU Commission monitor and check MS progress.

The priorities that, if appropriately set in legislation, will ensure the achievement of the at least 27% renewable energy target, are:

- Clear planning of RES policies at national level. National energy plans should fix the way to fulfil the target, possibly following a Commission template
- Monitoring of results in each Member State, with the possibility for the Commission to intervene when the Country make counter-productive changes (such as retroactive changes to support mechanism) proposing corrective measures, but also to incentivise MS that go beyond the Commission's proposed growth path.

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

	Very important	Important	Not very important	Not important	No opinion
Long term priorities and visions for decarbonisation and renewable energy up to 2050		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					
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		X			

how system adequacy is calculated in the context of renewable energy					
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The most important aspect is to guarantee a stable long-term legislation framework not only linked to 2030 but onwards to 2050.

It is also very important to avoid all abrupt changes in support mechanisms, in particular retroactive that undermine confidence of investors and put the achievement of targets at risk.

National energy and climate plans should inform of future markets growth potential and RES national policies, and help investors make decisions. For this reason, it is very important for plans to be developed well before 2020.

Plans should be reliable, transparent, comparable, and legitimate to enable the fulfilment of the 2030 renewable energy target.

A standardised template would be very useful to allow for consistency and comparability of Member States' progress. Therefore, national plans should be developed in cooperation with the European Commission.

The long-term vision (2050) should serve as a guide and not as an excuse to postpone important decisions, which need to be taken in the two coming decades.

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

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

Any support scheme could be introduced only as a complementary measure in case of a gap vs. the 27% target.

The first choice for promoting RES deployment is to enforce the CO₂ price through market-based mechanisms like the ETS. At the same time, a new market design fairly fit for RES and harmonised as much as possible throughout the EU will facilitate a market-based integration of RES, while an appropriate evolution of the grid and its management will allow the full exploitation of RES potential.

Indeed the challenge today for RED II is to create a stable framework able to provide regulatory transparency to investors, and to allow them to choose across Europe the locations where to invest.

After all these steps have been taken, it will be necessary to check if there is a remaining gap towards the 2030 RES target, which is instrumental to take reasonable further decisions necessary to fill this gap towards the 27% target.

The need for an eventual intervention should be assessed once all national Plans are defined, in order to take timely and wise decisions on the best options to integrate them.

A fully harmonised EU-wide support scheme would be the best option to guarantee the development of RES industry in a competitive, fair and liberalised market, but this solution seems unrealistic to reach within 2030, considered each MS current situation.

There will be a need to smooth over national differences, taking the different potentials, policies, costs, administrative barriers etc.... into account.

Gradual alignment of national rules (support schemes but also administrative/grid/market rules) through a common EU scheme is at this stage more advisable.

Convergence will strongly depend on the elimination of structural barriers preventing the completion of the internal energy market (regulated prices, subsidies for conventional power generators, insufficient interconnection, no access to balancing markets etc.) and should be adapted to renewable energy technology maturity, and specific renewable potentials.

The convergence of support mechanisms could lead to gradually decreasing support levels and making renewables respond to market signals, and should be based on a common methodology for renewables cost assessment.

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?*

Further interventions should be taken into consideration only after an assessment of the status quo towards the 2030 RES target is carried out in time to exploiting the necessary investments.

Anyway, any support scheme should be introduced only as complementary measure in case of gap vs. the 27% target after all other conditions and measures for complete RES deployment have been exploited and with the aim to bridge that gap for the period requested.

Whether such schemes are introduced, they should be activated and implemented under an EU initiative while being funded as much as possible by EU resources to the extent they contribute to the EU target. All Member States could contribute to the complementary funding necessities.

An EU support scheme with common financial resources may face some barriers:

- *The fear of big projects made by foreign investors, that cause impact without bringing benefits on the territory;*
- *The risk that the country will pay for the common fund more than it will receive back in terms of project developed, national industry benefit, etc...(for instance because of the convergence of the investments to countries with a less developed RES market, easier administrative procedures, more easily exploitable natural resources etc...)*
- *The strong disincentive to regional cooperation mechanisms.*

A common scheme have in any case to be accompanied with an awareness-raising campaign, to show on one hand the global benefits of renewables, and on the other to make more usable a common fund (considering the inadequate exploitation of the European fund made by our country in past).

Practical organisation of such schemes could include direct implementation at EU level with (competitive) auctions for selecting the host country. Auctions should be targeted to fill the gap between the trend and the target set at EU level.

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.*

The first RED introduced statistical transfers, joint projects and joint support schemes. After an initial enthusiasm, they remained unexploited later on.

These instruments should be included again (the time may be ripe, considering the progress towards the establishment of a single energy market in Europe), but with adjustments.

Indeed, cooperation mechanisms could be reinforced and finally really implemented on a wide basis because the aim is not national anymore, but EU-wide. Statistical transfer as well as joint deployment should be based on distribution of environmental and energy benefits, if compared with the different (climate ad well as environment addressed) compulsory national targets eventually still in force.

Key measures for reinforcing the system are a clearer guidance at European level on how to implement these instruments (including instructions to governments on measures / reciprocal agreements to be adopted, who is going to ratify them and so on) and the provision of more comprehensive information on targets and on the real possibility of each country to reach them (if targets are not enough ambitious for all, there is no incentive in establishing cooperation mechanisms)

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

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

The potential of cooperation mechanisms, in term of statistical release, joint projects and joint support scheme is still untapped because of various barriers mainly linked to uncertainty and unclear rules that stopped MS but also linked to very low targets assigned.

At the very beginning of RED implementation, many MS have started exploring the possibility of using these kind of mechanisms to fulfil their targets. Italy, for instance, has announced in his first NREAP a contribution from statistic release, but very soon it was quite clear that the goal would have been reached with only internal and national resources.

More challenging targets maybe could have pushed more MS to adopt some kind of cooperation mechanisms. It also useful to highlight that Each MS preferred to sustain domestic intervention, because of local benefits in terms of jobs, incomes, and economic growth.

Some MS have been also reluctant to see their taxpayers or consumers' money used for investments outside their country and maybe the creation of a European common fund to financing joint projects would help the future development of cooperation mechanisms.

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.

The main condition is the effective transportation of electricity into the other Member State, with the aim of replacing internal fossil fuel electricity, eventually against certificates, which report consequences and benefits of RES production on the paying Member State. The latter, anyway, are unable to report on the territory the real overall benefits related to RES power production. Hence, EU and national interconnections should be reinforced. Anyway, it is fundamental to consider practical issues such as eligibility criteria.

A producer with access to EU resources for the development of renewable energy projects should ensure financial soundness and proven experience. Indeed, the higher the scale of the project, the stricter eligibility criteria should be

Moreover, calls for tender held at European level with reasonable timetable and transparent procedures must be considered. Selection criteria should favour projects with teams from many countries and that use best practices. At the same time, mandatory investment in campaigns to raise awareness in the territory are necessary (both beforehand, on the cooperation agreement, and on the project).

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-level or regional auctioning of</i>		X			

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

<i>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>		X			
<i>EU-level support to research, innovation and industrialisation of novel renewable energy technologies</i>		X			
<i>Enhanced EU level regulatory measures</i>		X			

CO₂ measures and market reforms should act as the main drivers towards the long-term goal of decarbonisation and the large-scale uptake of low carbon technologies, including RES-E.

However, if further support is deemed necessary to activate the flow of investments necessary to “fill the gap” to 2030 for the electricity sector, it should be market-based, competitive, cost-efficient and least distortive for the electricity market and not too complicated to set up. It should even be established at regional/European level with the aim of bringing a more coordinated process across Member States.

Together with the above-mentioned measures, the EU must implement any possible action in order to incentivise Member States to adopt reliable and transparent policies on renewable energies, through renewable energy action plans, reinforced oversight on actual and future renewable production and protection of existing investments.

It is necessary to plan renewable energies deployment of over the long-term, with transparent rules for monitoring the existing and planned plants and those at the end of their technical lifecycle.

In addition, each country should protect the production of existing plants from unjustified curtailments, inspections/controls/expenses not envisaged by the rules and retroactive measures.

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?*

The strong ambition is to maintain in the long period the record of being “the number one in renewables”

The introduction of transparent and reliable policies for the development of RES is the key element to strengthen EU position and make additional investments possible.

To this extent, the most successful aspects of RED should be identified and strengthened, and the least effective ones improved. It would be firstly advisable to raise awareness about RES benefits and strategic importance.



The imposition of binding targets is the key driver of success, but the interpretation of these targets as an upper limit is certainly to avoid.

Such a result anyway can be achieved only if it is based on a competitive industry structure where RES are deployed according to market-based mechanisms and are valorised thanks to their advantages towards EU climate, environmental and energy targets.

Hence, all the measures which allow a fair valorisation of power from RES, a renewal of the energy markets and power industry structures should be envisaged.

In particular, a renewed ETS is a key requirement to allow the internalisation of carbon price in power price and enhance the benefits arising from RES deployment.

At the same time, the participation of renewables to power markets is a key factor to let investments in renewables be driven by market signal.

Indeed, as Renewable Energy Sources mature and become major contributors to electricity supply, their integration in electricity markets is crucial to enhance competitiveness and ensure that the future electricity mix is both environmentally and economically sustainable. To this extent, operational integration of RES should be fulfilled by giving RES the same rights and obligations to market participation as the other market participants. However the transition should be smooth and conditioned on a fit-for-RES market design (for further information see the answers to the other questions). Therefore, for instance, aggregators should be allowed to participate to the market in order to facilitate access for smaller RES producers, while specific technical investments for certain plants categories could be fostered in case these are necessary to offer services requested by the TSO.

2. Empowering consumers

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

	Very important barrier	Important barrier	Not very important barrier	Not important barrier	No opinion
Self-consumption or storage of renewable electricity produced onsite is forbidden	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 development of on-site renewable generation has an important role in the energy transition. Self-production is typical in many sectors and is common since its first appearance in the power sectors. For instance in Italy self-production accounts for around 12% of the total annual consumption. A new potential development is a widespread increase of distributed generation accompanied by partial self-production, even for smaller consumer. The installation of small renewable plants allows consumers to control their energy costs and has important social indirect benefits, like greenhouse gases' reduction and new jobs creation. This emerging figure (namely, the "prosumer") is hence playing a more important role in the sector and should be integrated into the market on a level playing field.

For these reasons, it is necessary to adopt measures that make all citizens aware of the importance of self-consumption, encouraging small renewable plant installations through simplified administrative, technical, procedural and fiscal procedures.

Another common barrier comes from the lack of political and regulatory ability to shift on fiscal measures all the costs which arise from implementing EU energy and climate targets. A series of non market-based measures have been implemented to encourage self-consumption, such as metering schemes, purchasing obligation, price regulation or balancing and balancing costs exemption, barriers to electricity selling for non-consumed electricity, modified rules for system cost sharing.

These costs were passed to energy consumers as taxes and levies and in case of self-consumption there could be partial pass-through. To avoid such an unfair distribution, so called “consumer divide”, it would be necessary to make the final price of electricity to the final consumer as close as possible to its market value, leaving behind all the levies charged on power – i.e. on consumers – which derive from public policy targets agreed for the benefit of the all community

Moreover, the RED II should create a clear framework for distributed generation in order to give stability to the sector allowing all European consumers to self-produce their energy. For example, these elements could be useful:

- Simplified administrative and connection procedures for self-consumption or storage of renewable electricity plans;
- Require a mandatory periodic report by each Member State in order to update the Commission about the development of national self-consumptions sector and the actions put in place to overcome the barriers listed above.

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

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

The full potential of RES has not been reached yet. Indeed, RES exploitation is theoretically unlimited and its limit depends only on cost-effectiveness. The right balance has to be found considering also the benefit of RES diffusion at local level and the learning curve effect and consequent cost reductions.

Through opportune energy planning at local level, it could be possible to identify all suitable areas for renewable installations, considering the principal renewable sources available and specific local features. For example, a municipality could be more inclined to the installation of specific renewable plants thanks to the high presence of the relative source.

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

	Very important barrier	Important barrier	Not very important barrier	Not important barrier	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					

There are other barriers that may specifically hamper further deployment of renewable energy projects at the local level (municipalities and energy cooperatives)

- 1) Lack of appropriate rules about “Closed distribution systems” (art.28 of Directive 2009/72/EC) in each Member State regulation, even to promote self-consumption in “complex systems” such as commercial and condominium sites where there are different final consumers.
- 2) Complexity of administrative and permitting procedures. Special attention should be given to the repowering of existing installations in Europe as technologies evolve and improve, as this would ensure cost effectiveness of the best and formerly exploited sites. For this to happen, measures should be introduced to make the renewal of the existing plants possible and less complex: fiscal measures on restructuring, easier administrative/permitting procedures for repowering.
- 3) Lack of appropriate information about small renewables plants. On one hand it would be necessary to disseminate appropriate information about the benefits of self-consumption as opportunity to save money and contextually to contribute to a sustainable energy system. On the other hand giving more information to local communities about local effects/impacts and large scale/global benefits of RES projects could help in overcoming local opposition (NIMBY effect).

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				

In general, decisions on the pathway to local energy development belongs to Member States.

Local administrations should realise an energy planning of its area in order to identify the best renewable sources available for self-consumption and it should be mandatory to make public the results, for example with a specific web site. In this way, every citizen would be informed on the opportunity to install a renewable source for self-consumption and the administrative procedures to be followed.

In case target financing is available, it could be used also for spreading among the local population involved part of the advantages which benefit the nation and the EU, for instance from the energy and climate perspective.

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. CO2 emissions be included? Should it be extended to the whole energy system and include also non-renewable sources? Other ideas? To what extent has the current GO system been successful in providing consumers with information on the sources of electricity that they consume? Max 500 words]

This system can be improved by increasing the scope of information provided, also in terms of effects that certain sources have on climate and energy targets. Information on the sources of energy can be reinforced and disclosure systems at EU level can be even more harmonised. In order to increase customer awareness, the final client should be able to check how the fuel mix of the supplier fit to his preferred choice.

It could be useful to enlarge the GO system to non-renewable, including additional information such as CO₂ emissions and investments addressed to the plants.

More than this, it would be important to avoid failures such as “double-counting” while GOs could be used to overcome NYMBY attitude. It would in any case much more important to increase the awareness of consumers on what can be obtained by a pervasive development of the energy system towards an increased weight of the electricity produced from RES and efficient fossil fuels, while at the same time showing the costs of such a development.

3. Decarbonising the heating and cooling sector

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
<i>Real or perceived incoherence in existing EU policies (such as RED, EED and EPBD)</i>					X
<i>Lack of administrative capacity and/or expertise/knowledge/information at the national and local level</i>		X			
<i>Lack of energy strategy and planning at the national and local level</i>		X			
<i>Lack of physical space to develop renewable heating and cooling solutions</i>				X	
<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>					X
<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>			X		
<i>Lack of targeted financial resources and financing instruments</i>		X			
<i>Lack of definition and recognition of renewable cooling</i>					X
<i>Lack of electricity market design supporting demand response, decentralised energy and self-consumption and thermal storage in buildings and district systems</i>		X			
<i>Lack of mapping tools to identify the resources</i>			X		

<i>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>		X			
<i>Negative public perception</i>				X	

Renewable heating and cooling is technologically feasible but still requires an important investment effort to be based on long term planning and commitment.

As underlined in the IEE project [Keep-on-track](#), the main barriers to the development of renewable heating and cooling are:

- Complexity of the legal framework and access to finance

Several laws regulate the RES-H sector and different provisions are set up at regional level.

Planning, if present, is rarely carried out at local level and with the inclusion of all the aspects involved, environmental issues included.

There is also a lack of implementation of primary measures and inconsistency between measures of different nature, which causes difficulties in the access to finance.

This is true particularly for heat pumps that have the double benefit of contributing both to renewable energy and energy efficiency targets. In such respect risk sharing, dedicated credit lines and on bill repayment seems up to now the most efficient ways to promote energy efficiency investments, but not always their implementation have been optimal. This three main initiatives have been implemented in some countries with both positive and negative results. Improvements in those areas could be the right solution to empower those initiatives while reducing the burden on the electricity bill.

- Information

There is a general lack of expertise of involved actors.

RES-H&C are still relatively unknown among citizens and installers. There is a need to increase the general awareness of different possible applications offered by the sector: domestic installations, industrial plants, public buildings.

Information and support to raise awareness among banks are needed.

- Incomplete legislative framework

The underdevelopment of the supply chain implies higher risks and a tendency to use imported biomass. Moreover, many urban, industrial and agricultural biomass residues and pruning are treated as wastes, with the practical impossibility to use them as fuels at a competitive price. There is the need to set up a modern logistics infrastructure: forest management, system automation, transports.

The lack/delay in the completion of the legislative framework is discouraging the development of new projects. (The regulation of biomass residues – so called “sottoprodotti”- is not yet available. The possibility to inject biogas into natural gas network is still not operational, since the legislative framework should be completed with all the necessary technical rules).

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
<i>Renewable heating and cooling obligation²</i>		X			

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

<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>		X			
<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>		X			
<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>		X			
<i>Including systematically renewable energy production in buildings' energy</i>					

renewable sources in their supply, or requiring energy consumers to include a given proportion of energy from renewable sources in their consumption.

<i>performance certificates</i>					
<i>The promotion of green public procurement requirements for renewable heating & cooling in public buildings</i>		X			
<i>Heating and cooling equipment installers should present renewable energy alternatives when asked to replace fossil fuel heating and cooling equipment</i>		X			
<i>Develop best practices for enterprises, including SMEs, to integrate renewable heating and cooling into their supply chains and operations</i>		X			
<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>	X				

To make decarbonisation of heating and cooling sector and a massive deployment of RES_{H&C} possible, some measures are needed:

- Introduce a clear and stable legislative framework;
- Improve access to financing for RES-H&C;
- Improve the public perception of the RES-H&C sector;
- Stimulate training for and certification of conventional operators;
- Simplify the rules and implement a support scheme for district heating networks.

Decarbonisation of heating and cooling supply must be based, to be effective and long lasting, on measures addressed to the development of the market. Hence, a real carbon price would allow to include in the cost/benefit analysis a market based value of the climate effects of energy consumption and would make room for res-based technology. Targeted financing is in any case still necessary to overcome barriers of entry for investments which require an important amount of resources (not only monetary) if compared with immediate and perceived benefits. In this view, interventions such as district heating infrastructure deployment could need an adequate support in term of incentives for the energy savings that this technology enables if in absence of this kind of support many projects could not be viable.



In any case, to achieve the most efficient goal and exploit the potential of the energy resources placed in the district (thermal RES, waste heat from the industrial sites,...), projects should always be based on local conditions, which can be very different.

4. Adapting the market design and removing barriers

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

	Very important	Important	Not very important	Not important	No opinion
A fully harmonised gate closure time for intraday throughout the EU	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			

An evolution of market rules would facilitate the participation of renewable energy sources (RES) into the market and allow for the creation of a level playing field across generation technologies. The Association considers of the utmost importance the creation of a fully harmonised and nearer to real time gate closure time for intraday markets throughout the EU, together with shorter trading intervals. Moving market operations closer to real-time makes planning decisions much more accurate, in particular for variable RES, and contributes to reduce physical imbalances. Nevertheless, it is important to stress the fact that any modification of market rules must be part of an overall revision of the market design. The implementation of market coupling following the European Target Model should represent an opportunity for Italian power generating capacity. Opportunities should arise from the



alignment of the system services markets towards a common balancing market. However, differences are still pronounced among Member States and the alignment is expected only in the long-term.

The introduction of negative prices may instead hamper the deployment of renewable energies, in particular those not incentivised, causing a loss of primary sources and favouring fossil fuels. For this reason, assoRinnovabili does not support the introduction of negative prices in the European power markets.

With reference to storage technologies, regulatory measures should support their development and integration into the market, similarly to renewable sources. Storage may represent an important source of system services, to the provision of which renewable energies could be enabled, on a voluntary basis and with economic compensation mechanisms.

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

assoRinnovabili shares the view of increasing balancing responsibilities to renewable energy producers, in particular those producing from non-programmable sources. However, it is necessary to take into account the different profiles of each technology. Wind power, solar PV and run-of-the-river hydropower are variable sources and hence naturally prone to physical imbalances. For this reason, we should favour their participation to the market without ignoring their non-programmable nature. Specific measures may contribute to address integration challenges efficiently. For example, moving intraday market operations closer to real-time, the aggregation of production plants in portfolios from different renewable sources and the introduction of allowances differentiated by source within which not apply any sanction would all foster the development and integration of renewable energies into the electricity markets.

Producers should be granted the possibility of large-scale aggregation of all RES, both variable and not, and of RES and conventional sources.

Market structure could envisage the creation of new Market Operators responsible for the management of production plants portfolios in the day-ahead and intraday markets, and new traders of balancing resources, the Balancing Operators. This would produce the following advantages:

- Market actors, in particular V-RES producers, would be endowed with a new instrument to hedge against renewable energy volatility;
- A simplification of the operational management of data and informational flows during the settlement of imbalances;
- Units connected to the distribution grid would have access to the day-ahead, intraday and balancing markets through the aggregating operators;
- Technologic and commercial innovation would be fostered and new business models developed.

The participation of RES to grid services should occur only on a voluntary basis. Should RES be bound to supply mandatory services, then some form of support should be granted to those existing plants that require technological upgrade to be capable of providing such services. The opportunity of requiring mandatory services from RES should be assessed via a prior Cost-Benefit Analysis.

Balancing markets should be well-functioning assigning the right value to all balancing products.

Balancing products designed to ensure a level playing field between RES and conventional power plants, e.g. with adequate activation and delivery periods. Imbalance settlement periods are set out according to market maturity (more granular and liquid intraday markets with gate closure close to real time allow shorter imbalance settlement periods) and imbalances should be settled according to a single price mechanism.

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

	Very important	Important	Not very important	Not important	No opinion
Treatment of curtailment, including compensation for curtailment	X				
Transparent and foreseeable grid development, taking into account renewable development and integrating both TSO and DSO level and smart technologies					
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			

Curtailment: TSO should be more transparent in showing reasons for curtailing RES. In case of curtailments, you must recognize the day ahead price and THE incentive lost

Priority for RES: Dispatch: Full priority of dispatch should be maintained for existing plants. Connection: Obligation for TSOs/DSOs to accept all RES connection requests.

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

Even though in the current Italian framework plants are ranked in terms of their short-run costs and hence RES are likely among the first technologies in the merit-order, priority dispatch is still an indispensable element to not waste renewable resources, worsening fossil fuels dependence. This is true both for incentivised renewable energies and not, in the event of the introduction of negative prices

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

	Very important	Important	Not very important	Not important	No opinion
Creation of a one stop shop at national level to allow for more streamlined permitting procedures					
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			

It is necessary to introduce simplified permitting procedures, in particular for small-scale projects. Administrative procedures should be closed within certain time limits. The administrative system should be more transparent and publish the authorisations issued and those still undergoing approval. EU should encourage Member States to map their territory to assess the best development areas for renewable plants, in terms of the characteristics of the territory or the presence of adequate infrastructure. The best areas for RES plants should not only be those where it is possible to operate a RES plant, but simply those highly suited for their presence. It should be possible to introduce economic penalisation to those States or Regions that do not issue authorisations for RES plants, approve moratoria in their territory or introduce retroactive measures. The ban to introduce retroactive measures, both concerning incentives and authorisations, should be a key element of the new European directive. The prevention of any of such measures from national Governments and regulatory authorities in charge of granting authorisations is of the greatest importance.



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

Full openness and more cooperation between DSOs and TSOs are necessary. At local level grid development is essential – especially in those areas with high presence of non-programmable RES – as well as a more profuse deployment of smart grids. The association see with extreme favour the development of storage systems in support of DSOs/TSOs activities, as already started in the experimental stage in Italy

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 first step to reduce inefficiencies, delays and the administrative burden consist in procedures that are more transparent. In addition, it is necessary to foster the digitisation of the submission and preservation of documents and more generally the computerisation of administrative procedures. The development of better and higher coordination among the various institutional and private actors that take part to the authorisation process is fundamental to avoid the duplication of documents and potential confusion for producers.

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			

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

It is essential to improve the promotion of renewable sources at both European and national level, through information and training channels. The strategy on renewables should be the distinctive mark of all EU actions. Renewable energies, sustainability and energy efficiency must be the cornerstones of any European policy. Municipalities and local administrations should launch projects in schools and public buildings to enhance



environmental performances. It is essential to make known the results achieved and those that can be achieved with the green economy. European Union must spread green culture as far as possible.

5. Increase the renewable energy use in the transport sector

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		

An important element for the success of RED Directive is to have set a binding target by 2020 that includes a minimum of 10% of biofuels over the EU automotive consumption of petrol and diesel, to be achieved by all Member States.

The binding character of this target is appropriate, although its implementation at the national level has not proven to be effective enough to the target achievement by any Member State.

Similarly, a further element of the success of RED Directive is believed to be due to the fact that the contribution given by biofuels produced from wastes, residues, non-food cellulosic material, and ligno-cellulosic materials is acknowledged to be twice as much as the other biofuels (as for the Art. 21, paragraph 2). This has given the basis to the start of the wastes usage for the renewable energy production.

On the contrary it's necessary to note that the introduction of sustainability criteria for bioliquids, although in principle understandable, actually created significant imbalances in the sector, leading to dramatic price increases, as well as a long process of adjustment by producers to meet the new requirements. Such aspects have no doubt contributed to the achievements failure.

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

To date, the main barriers to the development and take-off of the industry, in our country, are represented by three main factors:

- *Economic - incentive: just think about the Certificate mechanism of release for consumption (CIC), due in light of the availability for consumption of fuels from renewable sources. As of today, it is not possible to make a reliable prediction on the actual incentive to the production of biomethane from Certificates of Release for consumption (CIC), as they are not awarded directly to producers (nor the ways the producers get the real benefit are certain). In addition, Certificate value is not public, so producers cannot give guarantees to investors on the estimates of their price and therefore on the biogas production plant economic feasibility, making hard the financial viability by banks;*
- *Informative: there is a general lack of knowledge and experts: only very poor and unofficial data are available. The unavailability of information, the absence of competent stakeholders and the lack of communication channels between the involved parties do not allow the elaboration of a comprehensive strategy (legislative framework and support scheme) for a sustainable transport system;*
- *Regulatory: the delays in issuing sector rules induce investors distrust. A primary example is that the production of biomethane is still not allowed in our country despite more than four years have passed after the publication of the Decree N. 28/2011 which established the principles for the incentive. The outright bans to the release for consumption of certain types of gas, the lack of needed regulation, as well as many points of uncertainty in the current rules make impossible to produce biomethane not only for injection into the gas pipeline, but also for using it in the automotive sector, although in Italy this represents one of the most promising sectors with the highest potential.*

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
<i>Increased use of certain market players' obligations at Member State level</i>	X				
<i>More harmonised promotion measures at Member States level</i>	X				
<i>The introduction of certain market players' obligations at the EU level</i>	X				
<i>Targeted financial support for deployment of innovative low-carbon technologies (in particular to the</i>	X				

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				

The following corrective measures are crucial for unlocking the transport sector:

- Long term strategy and support to biofuels;
- Legislative certainty for biofuels: the lack of a clear trajectory is severely undermining industry confidence and preventing new investment;
- A European strategy for the transport sector beyond 2020;
- Long-term mechanism for e-mobility. More tax incentives for electric cars: buying an electric car is significantly more expensive than buying a conventional one. Tax incentives could level the playing field and incentivise consumers to buy more electric cars, thus enhancing their widespread introduction. Planning of the charging electric infrastructure;
- Long-term security of the support measures.

The biofuels sector faces serious issues related to the collection and storage of the primary products used for the production of biofuels. Sometimes it has been cheaper for biodiesel producers to import raw materials than to purchase them from the local markets. Public focuses on the price of biofuels compared to petrol and diesel. This largely determines the purchasing decision. When financial incentives for biofuels are reduced, consequently the demand for biofuels diminishes.