

CEER's Response to the European Commission's Consultation on a new Renewable Energy Directive for the period after 2020

2 February 2016

Part I: Background and main messages

This document contains the feedback of the Council of European Energy Regulators (CEER) to the European Commission's Public Consultation on a new Renewable Energy Directive (RED) for the period after 2020.

CEER is continuously monitoring developments in support schemes across the EU and publishes a biennial Status Review of Renewable and Energy Efficiency Support Schemes in Europe with comparative information on support schemes for Renewable Energy Sources (RES) for electricity, by technology and type of support instrument. Moreover, in January 2016, CEER has published a new report on key RES support scheme elements, providing valuable insights into national design options for achieving greater cost-efficiency and deeper market integration. CEER expertise in the field of RES is based on National Regulatory Authorities' (NRAs) daily implementation practice of RES support schemes and the elements those schemes are based on.

This consultation is deemed very important to assess the achievement of the RED so far and provides an opportunity to reflect on the challenges that lie ahead for achieving long term EU-level targets on this field. The upcoming review of the RED is one central element of the futureoriented energy system currently under discussion. In this context, CEER draws the attention of the Commission to the contribution provided to the consultation process on a new energy market design, outlining its vision of the future of the electricity sector in Europe and touching upon some key aspects related to the future of renewables.

The aspects below are considered key for enhancing both cost-efficiency in RES support and market integration of RES while contributing to achieving the 2030 EU-level targets for RES and CO_2 emissions:

1.1. Competitive and market-compatible support mechanisms for low carbon generation

Our objective must be to minimise the total cost of a low carbon electricity system and we understand the desire to phase out support mechanisms. However, the rationale for supporting RES should be kept in mind, namely achieving a 27% share of RES in our final energy consumption by 2030 in a cost-efficient manner. That said, we consider it important to recognise that support for RES generation could be phased out more quickly with an effective EU Emissions Trading Scheme (ETS). As such, we see a commitment to creating a robust carbon price as a priority.

Where subsidy mechanisms for RES electricity are still appropriate, we need to ensure that they do not shield parties from short-term market signals and lead to inefficient operating



decisions. We also think it is crucial that the allocation of support is, where meaningful, competitive (using, for example, an auction).

1.2. Bringing Renewable Energy Sources (RES) into the market

The electricity market design should encourage the integration of RES-based generation into the market. This will be achieved when RES-based generation bears the same risks and has access to the same markets as conventional generation. As such, the market arrangements should be non-discriminatory, reflect marginal costs where appropriate, and should not incentivise market-distorting behaviours.

Hence, we think that all RES generators should be exposed to short-term market price signals. We therefore consider that balance responsibility should be viewed as the norm for all market players (with appropriate routes available for the smallest participants to delegate it). In this respect, market integration of RES-based generation is currently limited by three types of obstacles:

- The lack of a level playing field: In most national support schemes based on Feed-in Tariffs (FITs), RES-based generation does not bear the same market responsibilities as other market participants. In principle, balancing responsibility should apply to all generators in order to incentivise all market participants to undertake thorough scheduling and forecasting. Independently from the existence of support schemes, all RES-based electricity should be included in a balancing perimeter.
- The lack of trading opportunities: RES-based generation forecasts are only reliable very close to real-time. It is, therefore, crucial that RES-based generators can access well-functioning short-term markets in which to sell their electricity output and to balance their positions or support system balancing. This is particularly important for the integration of wind and photovoltaic generation into the market, given their intermittent generation characteristics.
- The lack of market price sensitivity: Financial support should not incentivise RES-based generators to produce electricity irrespective of market prices, in particular at times of negative electricity prices on wholesale markets.

Possible improvements to be considered for the market integration of RES-based generation include:

- Ensure that balance responsibility is applied to all RES-based generation;
- Ensure that short-term markets are efficient and accessible by all types of market participants, and that short-term market gate closures (intraday hub, cross-border intraday, balancing energy bids) are harmonised as close as possible to real time, and all intraday trade (internal and cross-zonal) is harmonised to 15 minutes products;
- Limit / monitor the extent to which financial support promotes market-distorting behaviours, ensuring that RES-based generators are exposed to short-term price signals.

In the short term, support schemes based on market *premia*, where incentives are granted as a premium in addition to the market price received by generators, could represent the first step as an evolution from FITs and contribute to making RES-based generation more responsive to market signals. Quota systems where certificates are granted via market mechanisms may be an even more market-orientated scheme.



Achieving a full market integration of RES is at least a mid-term objective for which we can already today lay the ground through progressively exposing RES-based generation to market signals.

1.3. Ensuring grid connection, grid access and grid expansion

On the network side, TSOs and DSOs, working in tandem, should enhance coordination in grid planning and development and in their use of system flexibility so that RES curtailment and the need for network expansion are minimised. In cases of grid congestions, priority access for RES generation should be guaranteed and curtailments only implemented as a last option after all network and market related measures have been taken.

1.4. Cooperation mechanisms/ geographical scope for support schemes

A possible EU framework for RES support should aim at define the core elements of support, while leaving it to the MS to decide upon the implementation options and the level of support to be granted in accordance to their national RES potentials and preferences. As such, MS should agree on some key principles of RES support such as:

- The need for market integration, incl. balancing responsibilities
- The regular review of support levels to reflect cost deployment
- Optional cooperation between MS when environmental and economic interests are matching.

Our response provided in this document focuses on the topics falling within the competencies of the majority of Energy NRAs, i.e. issues related to the decarbonising of the heating and cooling sector and the enhancement of renewable energy use in the transport sector are not covered.



Part II: Questions of the consultation

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			

The transposition of the RED into national RES legislation with a clear commitment to RES through binding national targets has been very important to scale up RES generation, especially in MS where RES would not have been supported otherwise. RES penetration has brought a number of benefits, some of which are global in nature (e.g. the reduction in greenhouse gas emissions, reduced primary energy import), whereas others have a more localised impact (e.g. the reduction in pollutant emissions or the positive effect on the development of RES related industries and the associated employment and business opportunities).

However, the financial support paid out to RES producers has been increasing, from approx. 19 bn. \in in 2009 (scope: 15 MS's) up to more than 51 bn. \in in 2013 (scope: 21 MS's)¹ and the use of national targets did not lead to the most cost efficient development of RES for the EU as a whole. It is also important to mention that not all provisions set out in the RED have been successfully implemented: This includes the use of statistical transfers (Art.6), joint projects between MS (Art.7) and with third countries (Art.9), joint support schemes as well as the promotion of biofuels (Art.17 et seq.).

Moreover, large deployment of RES has also contributed to some extent to the decline of the wholesale electricity price level, along with the decrease in energy demand and commodity prices.

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	Not very	Not	No
	important		important	important	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

¹ As reported in successive CEER's Status Review of Renewable and Energy Efficiency Support Schemes.



Regional consultations on renewable energy policy and		X
measures are required		
Member States consult on and adopt renewable energy strategies that serve as the agreed reference for national renewable energy		X
policies and projects		
The Commission provides guidance on national renewable energy strategies		X

Ensuring a stable framework is crucial in order to mitigate risks and ensure low-cost financing for investment in RES-based generation, hence minimising the cost of RES support for society. This is best ensured by a well-designed (e.g. incl. predictable dynamic adjustments) and transparent national support scheme, embedded in an overall national energy concept in line with the European Energy objectives and the IEM.

The national framework for RES support should in any case be transparent, coherent and predictable, notably:

- It should encompass and clearly expose from the beginning criteria which would trigger its further evolution;
- Regular updates to correct possible undesirable developments should be possible and explicitly addressed in the legislative framework;
- Fundamental changes should be well prepared and communicated, and they should stay in place for some time to allow the stakeholders to adapt to it;
- Retroactive changes to the support conditions (level or duration of support) should be avoided.
- It should be embedded in the overall national energy strategy and documented in a national plan covering all relevant dimensions;
- It should be embedded in an overarching European Framework for RES support, with a set of common core elements binding for all MS. This approach would add an additional layer of stability and predictability for RES investments. Moreover, it will ease investments across borders and contribute to achieving EU's 2030 target.

RES targets play a decisive role in cementing national commitments to the RES deployment by conveying more importance and visibility to it.

The stability and the strength of the carbon price mechanism is also a key element to provide visibility to investors. In the medium/longer-term, an improved EU Emission Trading System (ETS) should become the main driver for investment in RES-based generation. It should, however, be pointed out that this would lead to a technology neutral remuneration mechanism for all RES technologies, which may call for a reformulation of national RES objectives, since they are in many cases differentiated by technology.



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					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					Measures should not be synonymous with support.
Plans for achieving electricity market coupling and integration, regional measures for balancing and reserves and how system adequacy is calculated in the context of renewable energy	X				

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

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

A more coordinated approach across MS for RES support should in theory lead to a more costefficient deployment of RES generation throughout Europe, ensuring a better exploitation of



the existing natural endowments that locates generation plants there where the most abundant renewable sources are available. Nonetheless, the better adequacy to natural endowments cannot be the only element to be looked at to minimise the cost of deployment of renewables as far as RES deployment has to manage other constraints, e.g. in relation to grid issues such as access and expansion, curtailment and compensation rules as well as to market issues such as market coupling and liquid short-term markets.

Although CEER considers that a greater coordination should indeed be encouraged and new approaches to cross-border support schemes be investigated, cross-border schemes restricted to neighbouring countries appear easier to manage and more realistic in comparison with a common EU wide support scheme.

In any case, the definition of harmonised rules for the support of RES at the EU level is necessary in order to avoid the risk of competition between national support schemes, which could result in attracting investments in the MS that have put in place the most profitable support schemes, irrespectively of the overall economic efficiency. The harmonisation of national schemes which is already under way through the implementation of Guidelines State Aid for environmental protection and energy 2014-2020 (EEAG) is a first step in that direction, which is sufficient at the moment, since it already defines a set of common principles that all national schemes should comply with, while maintaining flexibility at the national level.

- 5. If EU-level harmonised /regional support schemes or other types of financial support to renewable energy projects would be introduced:
 - What hinders the introduction at the EU wide and/or regional scale?
 - How could such mechanism be activated and implemented?
 - What would be their scope (what type of projects/technologies/support mechanisms could be covered?
 - Who would finance them?
 - How could the costs of such measures be shared in a fair and equitable way?

For the time being, regional cooperation between MS is not used for the promotion of RES. Besides the Norwegian-Swedish certificate scheme, there is no formal cooperation in place yet in other MS. Although this is explicitly promoted in the RED and addressed in the EEAG, there are **important barriers to the implementation of support schemes at a regional level:**

- Different national RES deployment objectives /levels of ambitions and strategies make it difficult to find a common ground for agreeing on the level of support and the pace to follow.
- As support schemes are currently financed through national taxes or surcharges, it would be difficult to convince citizens of the merits of a cross-border support scheme, especially when its practical implementation leads to a greater financial burden for the citizens in one of the participating countries.
- There is also a high degree of complexity in the financial, technical and legal details to be considered in the design and implementation of any cross border support scheme. As way of example, implementing a cross border FIP where the market premium is defined on the market results of national spot markets poses important challenges to the design of the joint support scheme.
- A lack of market coupling challenges any co-ordinated approach to joint support schemes. This is particularly true for areas where transmission constraints between nations would influence investment decisions, taking away from the intended outcome



of efficient allocation. Many MS may have higher hurdles to overcome to interconnect with neighbouring nations (i.e. France and Spain, UK and mainland Europe) so not all MS will have the same ease of addressing these barriers.

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 nonlegislative measures that could be introduced to foster the development of cooperation mechanisms in the period beyond 2020.

New EU legislative measures prescribing cooperation mechanisms might be counterproductive to foster their development. Prerequisites for a fruitful cooperation between MS are common economic and environmental interests in a regional support approach and the public acceptance for such an undertaking. A physical connection between the cooperating MS would also facilitate public acceptance of the project. Against this background, setting the right incentives for voluntary cooperation would be far more effective than any legislative measure. Such incentives, if at all, could only be provided by introducing binding national targets. Without these, there are no incentives for MS to use statistical transfers, joint projects and/or joint support schemes.

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	-	Not	No
	important		important	important	opinion
Unclear legal provisions					X
Administrative complexities	X				
Lack of cost-effectiveness /					X
uncertain benefit for individual					
Member States					
Government driven process, not					X
market driven					
Member States reluctant to see					X (see
their taxpayers/ consumers'					answer to
money used for investments					question 5)
outside their country					

Cooperation mechanisms between MS are a very complex undertaking, because it needs to consider the different national jurisdictions in relation to environmental protection, taxation, permitting and licensing issues, etc.

Moreover, the indicative progression line defined in the RED for achieving the intermediate targets was too flat and the fact that the binding target was only set for 2020 did limit any need to use cooperation mechanism from the start.

However, the interest for cooperation may increase for those MS with no strong national backup for RES deployment as the delivery year 2020 is approaching. Those MS likely to underachieve their 2020 target could be interested in a statistical transfer. For the 2020 perspective, it is very likely that the potential for the use of cooperation mechanisms will, if at all, be limited to statistical transfers.



Moreover, the above question seems to be based on the assumption that support schemes should, at some point, be designed to be cross-border. However, looking at the continuous development of the internal electricity market in the last 10 years, it can be seen that while RES support was national in scope, RES based electricity is not. Strong winds in the North Sea lowers wholesale electricity prices in almost all of Europe. Even without achieving cross border support schemes, markets are already cross-border, which is the overarching goal.

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.

International investors are offered a wide range of investing choices in RES based projects across the EU. Cross border RES investments are inducing cross border financial flows as well as a gain in experience between MS. With the integration of European electricity markets, investors can easily invest in a RES based project in one MS while selling the output yet in another MS.

In a setting where investors are investing in a RES based project in one MS while being eligible for support in another, it is important to keep in mind and ensure the consistency of the whole support system and in particular between the following elements: national targets, state-driven statistical transfers and producer-driven cross-eligibility. Notwithstanding all underlying complexities, the following criteria should be taken into account when designing a possible concrete framework for cross-border participation:

- Costs and benefits of a cross-border scheme should be thoroughly assessed for all participating countries;
- The support scheme should be as simple and transparent as possible;
- The support level should best be determined by a common auction procedure;
- Burden (financially and in terms of land use) sharing should be fair for consumers in participating MS to ensure acceptance of such a scheme;
- The existence or development of relevant physical interconnection capacity is also important to ease public acceptance.

9. Please assess what kind of complementary EU measures² 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/ relevant/ adequate	No opinion
EU-level incentives such as EU-level or regional auctioning of renewable energy capacities				X	

² Without prejudice of the actual funding mechanism, where required, of the complementary EU measures



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

If no specific governance is put in place in order to ensure the adequacy of national targets with the 27% EU renewable energy target by 2030, complementary measures will probably be needed. The interaction of these complementary measures with national support schemes should however be carefully considered, as they may not be directly compatible. In line with the EEAG requirements, support schemes for RES should mainly take the form of feed-in premium or renewable obligations for suppliers (quota systems). These two types of schemes have very different properties, therefore adding a single EU-measure on top of these very diverse national schemes would very likely prove inefficient.

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?

This question does not fall in the scope of NRAs responsibilities. No concerted CEER answer deemed possible.



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 The design of		X X			
electricity tariffs		<u>л</u>			

RES self-consumption (SC) facilitates consumers' empowerment, e.g. by allowing prosumers to actively and directly participate in and profit from the energy system, and by controlling their own energy costs. In the case of net-metering, prosumers make use of the public grid as an unlimited and free of charge storage facility. However, in the discussion about barriers to self-consumption, it should not be omitted that part of the benefits of SC are built on the premises that it is fully or partially exempted from at least certain system costs while the remaining consumers have to bear the full system costs. Therefore CEER underlines that, supporting RES SC through exemptions or other financial incentives have distributional consequences for all remaining consumers. The stronger the incentives for SC are, the higher the costs faced by the non-prosumers. And the higher the costs for energy supplied through the network are, the



greater the incentives for SC. An equitable distribution of system costs among all energy consumers need to be taken into account when designing SC schemes.

Furthermore, the need for a specific support for SC may not be that clear, since SC is already a reality of some physical systems. For instance, the electricity produced by RES installations located near consumption (e.g. PV panels on a rooftop) is already physically partially self-consumed, regardless of the existence of a support scheme. The benefits and costs linked to SC must be identified and properly quantified, especially having in mind that the network dimensioning is in most cases based on peak load which may not be covered by RES SC.

RES SC poses also important challenges to the overall energy system such as the induced higher system operational costs when production and consumption are not appropriately coupled, in time and space. Against this background, CEER would like to underline that the following aspects to SC need to be taken into account when discussing SC:

- Any SC scheme needs to be embedded into the overall market design incl. the RES support scheme;
- The microeconomic optimisation pattern of self-consumers might be counter carrying the efficiency of the overall system, at society's costs;
- All electricity in the network needs to be balanced to ensure security of supply. For this, it is important to foresee a framework providing for the rules on how to deal with all produced (e.g. self-consumed and fed into the grid) electricity.
- Incentives provided for SC may trigger distributed storage facilities such as stationary batteries which may prove less efficient than concentrated forms of storage or other forms of flexibility.
- Regarding charges to be faced by self-consumers, all system costs (including, but not exclusively, grid costs) must be considered in a comprehensive analysis.
- Metering is key for the successful development of SC and the traceability of electricity produced, self-consumed and fed into the grid. Configuration of the metering system should be such that gross electricity generation and net input (output) of electricity from (into) the grid could be both measured independently, and not just by differences, so *two* meters would be needed for (at least) two reasons:
 - As previously set forth, since system costs are now differently allocated across MS to electricity either consumed from the grid or self-generated, it would be necessary to know both figures on at least an hourly basis.
 - In order to calculate the fulfilment of EU-wide and national RES and efficiency targets, also self-production should be taken into account.

CEER has planned a specific report on the issue of self-consumption for 2016, which will address these questions. It should also be emphasised that self-consumption is not solely an issue linked to decentralised RES generation but also, and to a much larger extent, to conventional (fossil-fuelled) generation.

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



This question does not fall in the scope of NRAs responsibilities.

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

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

The situation differs strongly between the MS and as such does not allow for a common CEER response.

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- not in NRAs' scope



Supporting local authorities in preparing strategies and plans for the promotion of renewable energy			X- not in NRAs' scope
Facilitating cooperation between relevant actors at the local or municipal level			X- not in NRAs' scope
Facilitating access to targeted financing EU-wide right to			X- not in NRAs' scope X- see
generate, self- consume and store renewable electricity			answers to question #11
Measures to ensure that surplus self- generated electricity is fairly valued		X – This should be left to the NRAs	
Harmonised principles for network tariffs that promote consumers' flexibility and minimise system costs		X – This should be left to the NRAs	

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

Yes.

CEER sees the further harmonisation of European disclosure systems as a long-term goal. As national electricity retail market circumstances can vary greatly, CEER emphasises that the implementation of the recommendations provided below should be done with some flexibility, where the context of national markets and national legal requirements should be taken into account.

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

When and where available, GOs should be used as the only instrument for tracking electricity from renewable sources within disclosure systems. The CEN/CENELEC and EECS standards for electricity GOs should be used as a basis for further harmonisation of disclosure systems. To promote the issuing of RES-GOs, all electricity suppliers should be encouraged to use GOs to prove to consumers the renewable origin of the electricity supplied under contracts that guarantee the supply of electricity produced from renewable sources.

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



In order for customers to be thoroughly informed, two levels of information could be provided. Level 1 refers to the mandatory information that is already provided on the energy bill (supplier mix, related CO2 emissions and radioactive waste) as required by European Directives. Level 2 would then provide additional information that is already available on the GO, such as the geographic origin (country or, if applicable, region), the specific renewable energy source(s) and electricity production technology(ies), as well as the product mix. This information would then be displayed to consumers, clearly separated from the mandatory disclosure statement, and could therefore be made available on the website of the supplier and/or of the competent body for disclosure. In that case, and if relevant, a reference in the annual statement should draw customers' attention to this additional information.

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

Such an extension would help making the basis of the disclosure system more consistent and reliable, and also to provide opportunities for marketing electricity products based on specific non-renewable sources in a trustworthy manner. A single, coherent and properly designed system addressing all electricity from all sources has the potential of reducing administrative burdens and costs.

Other ideas?

Electricity suppliers should be encouraged to use GOs to prove to consumers the renewable origin of the electricity supplied under contracts that guarantee the supply of electricity produced from renewable sources.

Further, private "green electricity" quality labels should be encouraged to use RES-GOs as their unique tracking mechanism, in order to be reliable and trusted by electricity customers. Private label models can – under certain circumstances – be considered as creating added value for more demanding customers, if it can be guaranteed that additional impact is associated with the contract (such as direct investment of funds in new renewable generation capacity or reductions of CO2 emission).

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

All EU MS were required to establish and maintain a Renewable Energy Guarantees of Origin (RES-GO) certification scheme according to Article 3.9 of the RES Directive. The scheme serves to enable producers, traders and suppliers to demonstrate that the electricity they sell is from renewable sources. However, the implementation of the provisions for electricity disclosure and GOs has led to the development of different systems in different MS. While all disclosure systems need to be based on the concept of the GO as prescribed in the Directive, the methodology for disclosure can be different in each MS. The development of an efficient and effective "green electricity" market at European level is poorly supported by this situation, which makes the cross-border trade of electricity from renewable sources more difficult and makes disclosure systems more expensive to operate. Some countries have extended the instrument of the GO to all types of electricity generation, not only for renewable sources or from high-efficiency Combined Heat and Power (CHP) (e.g. in Austria, Switzerland).

At the same time, there has been a spontaneous harmonisation among many MS on disclosure and RES-GOs through initiatives such as the CEN/CENELEC standard for electricity GOs and the AIB's EECS GO standard, supported by initiatives such as RECS International, and projects such as E-TRACK and RE-DISS I, etc. CEER believes that the need for further integration of the different disclosure systems and for a common framework for disclosure



supported by a harmonised tracking system is motivated by the need for an efficient and reliable system at European level. National solutions can be reliable, but integrating them into the European market can be very costly. Therefore, a harmonised solution is preferable from an efficiency perspective.

Please see CEER Advice on Customer Information on the Sources of Electricity, which was published on 4 March 2015: http://www.ceer.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/CEER_PAPERS/C

ustomers/Tab5/C14-CEM-70-08_CustomerInfo-Sources%20of%20Electricity_Advice_March%202015_0.pdf

Decarbonising the heating and cooling sector

Concerted answer from CEER not possible on the issues addressed in questions 16 &17.



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		

Specific comments on the answer elements provided in the table:

a) Harmonised gate closure time for intraday throughout the EU

Harmonised gate closure time is of paramount importance for the implementation of a truly integrated market. This GC time should be compatible with the design of the balancing market: a clear separation between intraday and balancing markets is needed.



b) Lower thresholds for bid sizes

This is a task which regulators are working on in the EBNC.

- c) Risk hedging products to hedge renewable energy volatility While hedging products are important, also for RES, we do not see any role for EC, MS or regulators to interfere in the market for hedging products.
- d) Cross border capacity allocation for short-term markets (i.e., some capacity being reserved for intraday and balancing):

It is important to distinguish between reservation of transmission capacity for the <u>exchange Balancing Capacity</u> and for <u>Intraday trade (of energy)</u>, as these are two separate issues:

Reservation of transmission capacity for the exchange of Balancing Capacity is supported by ACER in the forthcoming Electricity Balancing Guideline, as it may increase social welfare, by enabling TSOs to exchange balancing services with each other. In order to do this, they may need to reserve transmission capacity in order to guarantee the delivery.

Reservation of capacity to the intraday timeframe is another issue, and it would require the introduction of options (similar to balancing capacity being an option product) in the intraday timeframe. This is not in line with the IEM market setup. Further, with well-functioning day-ahead and intraday markets, it would not improve social welfare, and it would not improve the market integration of RES.

General remarks:

The integration of RES-based generation into the market will be achieved when RES-based generation bears the same risks and has access to the same markets as conventional generation. As such, the market arrangements should be non-discriminatory, reflect marginal costs where appropriate, and should not incentivise market-distorting behaviour. The well-functioning of short-term markets is particularly important for the integration of wind and photovoltaic generation into the market, given their intermittent generation characteristics.

Efficient short-term markets (day-ahead, intraday and balancing) require a clear separation between the different mechanisms organised on the basis of their time-frame and should avoid market segmentation within the same timeframe (e.g., during the intraday time frame, three mechanisms are currently active: intraday, re-dispatching and replacement reserve procurement). Harmonisation and coordination of current designs is the key to efficiency. Possible improvements to be considered include:

a) Separation of intraday and balancing markets with clear differentiation of the periods when market participants can balance themselves and when TSOs take over the balancing responsibility. This requires the harmonisation of all short-term gate closure times (internal and cross-border intraday gate-closure time, balancing energy gate-closure time) as close as possible to real time, including the harmonisation of the relevant congestion management procedures;



- b) Harmonisation of short-term (intraday and balancing) market time units. This should be specifically for national and cross-border schedules, intraday products and balancing products;
- c) Efficient intraday pricing of energy and transmission capacity. One possible option for transmission capacity pricing could be the introduction of intraday auctions alongside continuous intraday trading;
- 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

In principle, all generation means should face the same market rules, independent to the incentives that some systems may receive in addition such as a premium. We therefore consider balance responsibility should be viewed as the norm for all market players, however with appropriate routes available to delegate that for the smallest participants. This norm would apply to all RES producers falling under a FIP scheme, while also having the possibility to assign a BRP to act on their behalf. In the case of small producers falling under a FIT scheme, a third party should bear the full balancing responsibilities for all RES electricity fed into the grid and sold on the market. Small producers could nevertheless have basic information duties toward this third party in order to contribute reducing its balancing costs which can in the end be supported by all consumers.

	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					
Obligation/priority of connection for renewables	X				
Cost of grid access, including cost structure					

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



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

• Treatment of curtailment, including compensation for curtailment:

Curtailment treatment may differ depending on its motivation. Curtailment for market reasons (i.e. negative prices) has to be dealt with in terms of support schemes rules or other economic based approaches.

Curtailment for network congestion reasons has first to be prevented (grid planning and transparency, localisation incentives, flexibility contracts etc., see below). Co-ordination of curtailment between DSO and TSO is important and will be addressed in CEER work looking at the TSO/DSO interface as well as.

Of course, the curtailment of renewable energy production is the last action a grid operator could put in place, since it is not desirable for the system to lose energy with negligible variable cost and environmentally friendly. CEER is working to reduce the amount of renewable energy curtailed, enhancing the use of flexibility given by all the resources available, included demand response, through the wholesale and ancillary markets and the incentive regulation pushing at the implementation of innovative functions (smart distribution system).

In those circumstances where it is not possible to ensure transmission and distribution of electricity produced from renewable energy sources without affecting the reliability or safety of the grid system, it may be appropriate for RES producers to be given a financial compensation as it ensures the greatest level of predictability for RES investors and the lowest support costs for society

- Transparent and foreseeable grid development, taking into account renewable development and integrating both TSO and DSO level and smart technologies: Cost effective grid roll-out is key to cost effective implementation of decarbonisation and the CEER work on the future TSO and DSO relationship will address issues like network planning and governance. CEER is also considering how flexibility will be used as a tool to reduce network build and optimise network operations and ways to incentives DSOs to innovate.
- **Predictable transparent and non-discriminatory connection procedure:** Approaches to connections differ across MS and, provided they do not distort cross border trade, are a matter for national competence given the differences in member states. Ensuring transparency and non-discrimination is already within NRAs tasks.
- Cost of grid access, including cost structure
 See above comments on the need to minimise grid development costs. Share of grid access cost between SO and producers differs in the different MS, under NRAs scrutiny.



• Transparency on local grid congestion and/or market-based incentives to invest in uncongested areas:

CEER's promotes transparency as part of its work on the future TSO and DSO relationship and is considering the role of the DSO as purchaser of flexibility to minimise network build related to congestion and other network issues. Incentives to invest in uncongested areas can be based on connection costs, connection contracts or grid tariffs.

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

All generation and demand should be dispatched in function of their price (or more precisely in function of their bids submitted in day-ahead and intraday coupling algorithm). It is to be noted that in the presence of block (non-convex) bids, this dispatch may deviate from a strict merit order. Energy market are coordinated (dispatched) on the basis of their offered price and this is the only rule allowing the choice between different technologies and producers at operational stage and the implementation of the day-ahead and intraday market coupling. Of course, the bidding behaviour of market players for specific technologies may be influenced by the support they receive in addition to the day-ahead and intraday markets.

Financial support should not incentivise RES-based generators to produce electricity irrespective of market prices, in particular at times of negative electricity prices on wholesale markets. Renewable with low variable costs are de facto dispatched in priority on the basis of their low bid price. So no exemption to the general principle of the merit order should be allowed.

In FIP and Quota schemes, RES producers are selling their electricity directly on a market place and are bearing full balancing responsibilities. In FIT schemes, RES electricity can be placed on the market by a central entity. In all these schemes, the right for priority dispatch becomes redundant and dispatching on the basis of merit order principles is sufficient. The market outcome will balance out demand and supply of electricity, possibly leading to a situation where an oversupply of generation would lead to supply bids not being realised in accordance to the merit order. As a market result, RES installations would only shut down their production in times of very low (negative) electricity prices.

However, a priority access for RES electricity to the grid is still relevant for ensuring their integration in the overall system. This is especially relevant in cases of network congestions, where the possibility of curtailing electricity generation becomes necessary for network operators. Hence, the rules provided for in Art. 16 (c) of the current RED should be kept3; this rule providing for keeping RES curtailment at a minimum is to be understood as a case for priority access, and is not an issue of priority dispatch.

³ "MS shall ensure that appropriate grid and market-related operational measures are taken in order to minimising the curtailment of electricity produced from renewable energy sources. If significant measures are taken to curtail the renewable energy sources in order to guarantee the security of the national electricity system and security of energy supply, Members States shall ensure that the responsible system operators report to the competent regulatory authority on those measures and indicate which corrective measures they intend to take in order to prevent inappropriate curtailments."



In those circumstances where it is not possible to ensure transmission and distribution of electricity produced from renewable energy sources without affecting the reliability or safety of the grid system, it may be appropriate for RES producers to be given a financial compensation as it ensures the greatest level of predictability for RES investors and the lowest support costs for society. Keeping the right for priority access in place should also be in line with the overall RES objective for 2030, since curtailments of RES electricity would lead to a higher deployment needs for RES.

In the light of the above explanations, the opportunity of a RES revision should be seized to clarify the meaning and objectives of Art. 16 in relation to priority access and priority dispatch. Further orientation for establishing a priority access order for the different RES technologies may become necessary in the future to address possible increases in RES curtailment activities.

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	mportant		mportant	mportant	X
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					X



simple notification			
Pre-identified geographical areas for			X
renewable			
energy projects or			
other			
measures to integrate			
renewable			
energy in spatial and			
environmental			
planning			

NRA's competencies don't generally include permitting & authorisation issues

Smoother permitting should not be understood as potential risk of less control on RES generation: it remains RES producers' responsibility to respect all necessary and relevant applicable rules. This approach can be more efficient, allowing for shorter permitting procedures under given circumstances (typically small-scale projects), checking some aspects once the facility has already begun to generate. However, for reasons of public acceptance, facilitating permitting procedures should not interfere with environmental protection measures.

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

This is a very case-by-case question; no concerted CEER answer possible.

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					
Cost of compliance					

This question does not fall within the competencies of NRAs. No concerted CEER answer possible.

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

This question does not fall within the competencies of NRAs. No concerted CEER answer possible.

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

Public acceptance towards RES projects can best be improved through an active communication strategy putting forward the necessity for grid development and the overall benefits for society, and through participation schemes for civil society.