

DG Energy Consultation 2012

ENER.C.1 – Renewables and CCS Policy

The 'Online Questionnaire' is not easily accessible via the main webpage, seen here:
http://ec.europa.eu/energy/renewables/consultations/20120207_renewable_energy_strategy_en.htm

Key:

Chosen Response

RECS Reaction

Section A: General policy approach

1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?

- Yes, a mandatory target at EU level is appropriate
- Yes, an indicative and non-legally binding target at EU level is appropriate
- Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate
- Yes, a combination of EU and sectoral level targets is appropriate
- No, targets for renewable energy sources are unnecessary

RECS response:

Mandatory EU targets are appropriate with a few conditions:

- Renewables have tradable attributes detached from the physical electricity flow to better integrate the demand for these specific technologies.
 - o Increases consumer choice/demand in electricity production
 - o Allows for market-based support for renewable; this realizes cost efficiency
- Open the possibility for cross-border trade and competition for renewables among member states.
- Minimize nation specific support schemes by implementing EU-wide support; this will improve the cost efficiency
- Specific support based on targets for different technology groups (i.e. a target for: 1. near mature technologies, 2. medium-term technologies, and 3. long-term technologies). Using trading mechanisms it is possible to allow the market to decide which of the technologies within each group is the most cost efficient of the individual technologies within the bigger group.

If there are not enough specific RES attributes (tradable separately from the actual physical flow) available on the open market a nation that is rich in the given renewable resource (i.e. Spain and solar) can create more of that production and cancel the attributes for themselves meeting their target. Another option would be to lower their internal costs by creating more attributes than is needed and selling it on the open market to other nations to meet their targets. (1.408 characters)

2. Are other policy elements necessary to promote renewable energy post-2020, such as:

- Enhanced focus on R&D to bring down the costs of renewables technologies
- Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc)

- Abolition of support mechanism or subsidies to other energy sources
- Public procurement obligations in support of renewables
- Better financing possibilities
- Continue to ensure sustainability and scalability
- Other (please specify)

RECS response:

Technology specific support should be provided to:

1. Almost mature (near competitive technologies):

These technologies should never be provided national support and sparingly provided EU support. The mechanisms should use the electricity-attribute market to allow member-states to compete for their targets or build locally efficient technologies and cancel the attributes before they are released onto the open market.

Additional benefits of an attribute trading system are its ability to allow for end-user choice and eventual demand.

2. Immature technology (uncompetitive technologies):

A system for R&D progress, currently active in a few US states, could be of service here. In a few states they use a 'technology carve-out', or a target for specific technologies within the larger renewables target focused on immature technologies. By grouping all immature technologies together and creating an EU-wide target of 1-2% for the group of immature technologies the market players can determine which of the technologies within the group is the most cost efficient and hence the most likely to be competitive. The carve-out system has proved that immature technologies can have forced volume growth, as one would see via a feed-in scheme, but in a way that allows the market to choose which specific technologies will become cost-competitive on the open market.

The carve out approach is proven to be very flexible and effective in the US.
(1.392 characters)

Section B: Financial support

1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?

- Yes

- No

- For selected technologies/circumstances/markets (please specify)

RECS response:

For immature technologies:

All technologies follow a similar cost curve which requires additional volumes to eventually reduce the costs (i.e. experience curve). The question is which of the technologies will benefit most for the experience curve and which are destined to stay expensive? If the government (eventually the tax payer) has to choose they will often choose incorrectly because there is currently no way to fully internalize costs including R&D when you are relegated to receive the same electricity price as fossil fuel electricity.

The additional R&D costs (including increased installed capacity needed for the experience curve) should be incorporated in a combination of targets and market measures. These market measures, allowing nations to compete among all the immature technologies, will determine overtime the most cost-effective future technology. While individual technology specific targets (“carve-outs”) are acceptable, it would be better to group all immature technologies together and have, for example, binding targets EU-wide of 1-2% penetration, or a cap in terms of installed capacity in MW for the whole EU. In this way member states are able to choose which of the immature technologies is the most cost-effective and likely to reach near maturity in the medium-term while forcing increases in the volume of installed capacity in a similar manner that a FIT would provide.

A cap on installed capacity would then avoid that immature, and hence costly technologies, will lead to huge payment obligations while having no real benefit in comparison to mature and competitive technologies.

2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?

- Making support schemes more market-oriented (please specify how)

- Accelerate convergence of national support schemes

- Open up national support schemes to cross-border projects

- Phase out support schemes over time (please specify for which technologies if applicable)

RECS response:

Near mature technologies – with attributes traded via the GO:

1. End-consumer demand solutions: By strengthening the regulations for green products EU-wide, end-consumers will be able to influence the demand for GOs and help pay for the RES they desire. In this way consumer can choose a specific technology over another via bundled services (GO and electricity delivered from the same supplier) or unbundled services (GO and electricity delivered for separate

suppliers). In either scenario the consumer has helped to influence the demand and eventual cost-effectiveness of their chosen technology.

2. National competition for targets: Countries will be able to support technology systems in more efficient locations (i.e. Germany supporting Spanish solar via GO consumption, or France supporting Dutch biomass). If by luck one country is more rich in a particular resource the whole of the EU should support its development together.

Governments can setup specific R&D programs for immature technologies, driven by national expertise in the technology. In the end these technologies need to prove themselves in the European market without support to become a realistic option for the future.

3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?

- Yes, with benchmark values for support level per technology per Member State
- Yes, with EU-wide benchmark values for support level per technology
- No, support levels should be entirely up to Member States.

4. Should the structure of financial support be gradually aligned EU-wide?

- Yes (please explain how this could be achieved and which support structure you consider most suitable)
- No

RECS response:

The current support mechanisms creates inefficiency by allowing RE services to be placed in the location with the highest support-scheme and not necessarily where it would be most cost-efficient. By using the existing support mechanisms such as the Guarantee of Origin the EU would easily and efficiently be able to align support schemes EU-wide.

With regard to questions 3. and 4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).

5. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?

- Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes.
- Member States need to open their support schemes to renewable generation from other Member States (if so, please explain how this could be achieved, e.g. through convergence of national schemes, compensation mechanisms or other)
- Member States should open their support schemes to renewable generation from third countries (as above, please explain how this could be achieved)

RECS response:

The demand for renewable services among the public is also rising. This demand should be used to the benefit of RES by allowing consumers to choose which electricity production they support -- through their purchase of electricity. Electricity products should be better regulated so the consumer is better aware if the electricity product they are purchasing is actually that technology. Since you cannot track electricity through physical flows a GO must be used to track electricity consumption. Voluntary electricity consumption from the end-user could increase demand and decrease the cost of renewable services. Currently Belgium, the

Netherlands, and Austria regulate that if a supplier sells a 'green' product that the supplier must also cancel sufficient GOs to make that claim. This should be corrected and harmonized EU wide for both the cost-effectiveness of RES and consumer information/trust in the sector.

6. Do national support schemes and differences between such schemes distort competition?

- No, support schemes do not have a significant distorting impact on competition
- Yes, all support schemes distort competition to a similar extent
- Yes, some support schemes are more distorting than others (please specify which you consider most distorting)

RECS response:

Individual national support schemes distort the market by confusing cost-efficiency with financial-support. However, in general all support schemes with the exception of a fully disclosed bottom-up electricity market are distorting. The traditional top-down market was developed at a time when the product was electricity and not its originating location – times have changed. By denying the consumer the ability to vote with their purchase for a specific technology there have been cost inefficiencies created. All subsidies, including those for fossil fuels could be taken away if it were replaced with an electricity tracking system that tracked every MWh of electricity. This system also works well with targets, forcing changes over-time but still giving the opportunity of choice to the final consumer of the electricity.

Section C: Administrative procedures RECS has no comments in this section

1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive? Please provide explanations and specific examples where available.

- Length and complexity of administrative procedures relating to authorisation/certification/licensing
- Lack of commonly agreed technical specifications
- Lack of information on support schemes or other
- Lack of credible and certified training and qualification
- Other

2. Which policy response to the problems identified above do you consider appropriate?

- The approach of the current Directive to lay down a general framework for Member State action is fine
- Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other
- Push for more standardisation and harmonisation on EU level or mutual Recognition
- Other (please specify)

Please specify what would be in your view a workable solution to eliminate barriers.

Section D: Grid integration of electricity from renewable energy sources

RECS has no comments in this section

1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020? If so please specify which obstacles and the nature and degree of them for each of the following:

- Grid connection rules
- Cost-sharing rules
- Balancing rules
- Curtailment regime
- None of the above

2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective? (please explain why)

- Obligation for network operator to develop network
- Priority or guaranteed access
- Priority dispatch and obligation on TSO to counteract curtailment
- Other (please specify).
- None of the above

3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:

- Increase flexible back-up capacity (capacity payments ...)
- Increase availability of demand response (smart grids ...)
- Accelerate infrastructure development and interconnection
- Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time
- Increased availability of storage
- Enable renewable generators to offer balancing services to TSOs
- Other (please specify)

Section E: Market integration

1. In which of the following ways could renewable energy be made responsive to market signals?

- Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid
- Price risk – producers of renewable energy should operate without any aid
- Producers of renewable energy should bear greater responsibility for system costs.
- Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
- Producers of renewable energy should continue to be treated separately (no exposure to conventional market)

RECS response:

By increasing competition, and harmonization across Europe, costs such as these could easily be internalized, mirroring the actual cost of the electricity production.

2. How can it be ensured that market arrangements reward flexibility?

- Dedicated arrangements to reward availability of generation capacity
- Favourable regulatory treatment of storage operators
- Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
- Current market arrangements are sufficient to reward flexibility

RECS response:

Developing demand response signals includes the continued use and EU-wide harmonization of the GO.

3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables

- The current wholesale market model based on short-run marginal cost pricing is appropriate
- The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in generation capacities with a high capex/opex ratio (please specify which)
- Wholesale markets would have to move to reflecting full costs
- Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

RECS response:

By allowing electricity to become more than the physical flow you allow some electricity sources to be traded above and beyond the traditional electricity price. RE attributes would be more in demand (whether because of targets, or direct consumer demand) than traditional fossil fuels allowing them to retain a higher price per/unit electricity.

Section F: Renewables in Heating and Cooling **RECS has no comments in this section**

F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?

- Costs/lack of financial support
- Building regulations etc.
- Lack of awareness
- Lack of suitable information
- Lack of public support
- Lack of capacity (installers, other)
- Other (please specify)

2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?

- Biomass
- Geothermal
- Solar thermal
- Electrification together with higher share of renewables in electricity production
- Other (please specify)

3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?

Section G: Renewables in transport **RECS has no comments in this section**

1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?

- Costs
- Pace of technology development
- Lack of standards
- Lack of infrastructure
- Lack of awareness
- Lack of suitable information
- Limits of availability of sustainably produced biofuels
- Other (please specify)

2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?

- Road for passengers
- Road for goods
- Rail
- Water
- Air

Please explain your answer.

Section H: Sustainability

1. Do you think that additional sustainability criteria are necessary in the post 2020 period?

- No, the existing criteria are already burdensome to implement
- No, the existing binding sustainability criteria are sufficient
- Yes, sustainability criteria should apply to both all biomass and fossil fuels
- Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)

Please explain

RECS response:

Sustainability cannot be ignored, but while national regulations are currently sufficient it would be more sensible to make sustainability requirements EU-wide – in this way national legislation cannot overly distort the market.

Sustainability criteria should be in place for all production technologies including biomass, fossil fuels, and renewables.

Section I: Regional and international dimensions

1. Do you consider current rules for cooperation *between Member States* sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?

- Yes.

- No. (Please specify how they should be amended or which elements added)

RECS response:

Current rules for cooperation allow for significant market distortions. As previously mentioned, allowing separate national support schemes can create technological inefficiencies as a RES producer is enticed to go where the support level is high and not where the technology would be most efficient.

2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?

- No, the EU should first focus on developing its own renewable potential

- Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)

RECS response:

As long as the system is trustworthy and audited a GO trading system can be perfectly functioning in neighbouring countries or even further. Projects, such as the Desertec project, are important for the future sustainability of the EU. The GO system in combination with target requirements could provide the necessary incentives allowing projects like this to succeed in a way national targets never would.

3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?

- Yes (explain in which way and to which degree)

- No (explain why)

RECS response:

In the short-term investments such as these will be necessary to minimize grid congestion. In the long-run no priority should be given.

4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?

- Bilateral agreements between Member States and third countries

- Agreements between the EU and third countries

- Other measures (please specify)

RECS response:

Cooperation with third countries can be bilateral. The condition for this bilateral cooperation must of course be based on generic rules on a European level.

5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders"⁷, the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?

RECS has no comments in this section

6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?

RECS has no comments in this section

Section J: Technology development **RECS has no comments in this section**

1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?

- Technology performance and cost-competitiveness
- System integration
- Industrial manufacturing and supply chain
- Other (please specify)

2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?

3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?

4. How successful do you consider the existing measures have been and which have been the main drawbacks? Explain why.

- Very successful, no drawbacks
- Successful but some drawbacks (please specify which)
- Not successful

5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?