



*The Voice of European Air-Conditioning, Refrigeration and Heat Pumps Contractors*

## European Commission's consultation RENEWABLE ENERGY STRATEGY

Brussels, 7<sup>th</sup> February 2012

AREA ([www.area-eur.be](http://www.area-eur.be)) is the European organisation of air-conditioning, refrigeration and heat pumps contractors. Established in 1988, AREA voices the interests of 22 national members from 20 European countries, representing more than 9,000 companies across Europe (mainly small to medium sized enterprises), employing some 125,000 people and with an annual turnover approaching € 20 billion.

### **Section A: General policy approach**

In light of the results of recent communications on a Roadmap to a low carbon economy and transport white paper as well as the Energy 2050 Roadmap:

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 combination of EU and sectorial level targets is appropriate**

#### Comments:

The refrigeration, air conditioning and heat pump (RACHP) contractors' industry believes in setting general targets and to let the market develop the most cost efficient solution to achieve them.

However, the past EU and Member State energy policy has sometimes deviated from this principle by giving subsidies in varying height and duration based on different sets of requirements for different technologies.

In a situation, where the reduction of GHG emission is wanted and a larger use of RES is aimed for, both targets should be the measurement points for any set of targets to be set.

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**

#### Comments:

Strong focus on R&D is one of the key elements to make these technologies more cost competitive and more efficient and should also lead to technical solutions for new market segments, where RES solutions cannot be applied today.

- **Facilitation policies** (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc)

#### Comments:

Legal requirements are currently often an obstacle with regard to their treatment of different technologies in a subsidies perspective. Requirements on efficiency are based on different methods, within and between countries. Having to fulfill these requirements often makes additional tests and development cost necessary, thus limiting the single European market and making a cost efficient development of one product for all EU countries difficult, sometimes impossible.

- Abolition of support mechanism or subsidies to other energy sources
- **Better financing possibilities**

Comments:

The EU should provide support schemes to overcome the higher initial investment cost. This could be executed via national cooperation partners in the banking sector that understand the specific risk-return ratio.

## **Section B: Financial support**

Member States at present rely on various forms of national support mechanisms to fulfill their national renewable targets for 2020. This section refers to the further development of support mechanisms post-2020.

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

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

Comments:

This depend very much on the loyalty in the implementation of already decided pieces of EU legislations, such as F-gas, EPBD, RES and Ecodesign. If these texts are fully implemented in all member states, the need for prolonged support will be less.

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?

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

Comments:

Successful support schemes follow a set target, are transparent, easy to administer, long term and budget independent. They need to be adjustable to changing circumstances. So for example if the target of cost competitiveness is reached, it must be possible to stop it. In the meantime a gradual phase out should be set up in order to guide the markets into independence.

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

- **No, support levels should be entirely up to Member States.**

Comments:

Governing bodies that pay for the subsidies should be the ones that define the financial support. The decision on support schemes should be left with the 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)**

Comments:

If not there is an obvious risk that the support will be misused creating uneven competition on the market.

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

It would actually be helpful to aim for an assessment of all sectors based on a common structure. This would enable at least a basic comparison of the sectors and would make it possible to see where to best invest/provide support in order to channel available funds most efficiently.

6. 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 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)**

Comments:

As said above there is an obvious risk that the support will be misused for national purposes. By gradually opening the support scheme this might be avoided or at least be reduced.

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

**- Yes, some support schemes are more distorting than others (please specify which you consider most distorting)**

Comments:

Support schemes that are not very well designed are most distorting. A good support scheme is transparent, easy to understand and use, follows a defined goal and is budget independent.

### **Section C: Administrative procedures**

Articles 13 and 14 of the Directive lay down rules on administrative procedures, information and training.

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.

**- Lack of commonly agreed technical specifications**

Comments:

Contrary to the aim of the different pieces of legislation being applicable in one European market, Member States are starting to set up additional requirements, often on efficiency and quality.

The industry strongly supports a drive for better quality, but believes that identical requirements would not harm installation quality while at the same time making it easier to sell the same type of products across Europe.

**- Lack of credible and certified training and qualification**

Comments:

The general skills level for mainly technicians within the heat pump segment is from a RACHP perspective low. Many contractors and their staff originate from the plumbing industry and have none or just minor knowledge of the complex refrigeration system that is the heart of a heat pump system. We therefore strongly support mandatory training and certification schemes similar to the F-gas Regulation.

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

- **Push for more standardization and harmonization on EU level or mutual recognition**

**Comments:**

In terms of requirements on efficiency and quality, the mutual recognition of requirements, always based on European Standards is of key importance. Having to prove quality for each country separately is not only costly, but also time consuming, slowing down the delivery of new and often improved products to the European markets!

**Section D: Grid integration of electricity from renewable energy sources**

Article 16 of the Directive lays down a number of binding rules related to network development, access and operation in order to ensure that electricity from renewable energy sources may access the electricity network freely.

1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?

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**

**Comments:**

If only considering electricity from renewable sources, this is not applicable from a RACHP perspective.

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).**

**Comments:**

From a RACHP perspective the most important rule is the one related to district heating and district cooling.

- 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 availability of demand response (smart grids ...) > Consider heat pumps in the context of smart grids in smart cities**

**Section E: Market integration**

Current national support schemes expose renewable energies to market signals to various degrees. In many cases, these support schemes nevertheless result in parallel "systems" for conventional and for renewable generation which are largely unresponsive to each other. The following questions ask in which way this could be addressed in a post-2020 perspective

where renewables will represent a significant share of the market.

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**

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

- **Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)**

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

- N/A

### **Section F: Renewables in Heating and Cooling**

The challenges for renewable energy in the heating and cooling market are sometimes considered to be different in that its use is in many cases already cost-competitive but impeded by other barriers. Many of the barriers should be addressed when the Directive is implemented.

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?

- **Lack of awareness**

- **Lack of capacity (installers, other)**

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?

- **Geothermal > hydrothermal and aérothermal**

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?

#### **Comments:**

In order to tackle the increasing energy demand, energy efficiency needs to be in focus. Heat pumps provide both: they make use of considerable share of RES and at the same time use the still necessary auxiliary energy most efficiently. They serve as multiplier in case electricity is coming from green sources.

### **Section G: Renewables in transport**

#### **Comments:**

This section is not within our area of competence.

## Section H: Sustainability

### Comments:

This section is not within our area of competence.

## Section I: Regional and international dimensions

The cooperation mechanisms of the current Directive offer a framework for cooperation between Member States and with third countries. A number of initiatives are currently under consideration for putting regional coordination in practice, both within the EU as well as with neighbouring regions.

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

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

### Comments:

As not even already adopted pieces of EU legislation such as the F-gas have been properly implemented by all member states there are some homework to be done before introducing third countries.

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?

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

### Comments:

Of course it is of great interest and importance to get also other countries onboard. Especially eastern European countries have a) a great interest in improving their skills, and b) a desire to align with EU regulations. A possible way of coordinating these activities could be through UNEP.

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)**

### Comments:

In time. As said above these countries must implement and apply existing legislation (e.g. F-Gas) before entering into these issues.

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

- **Agreements between the EU and third countries**

5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders"<sup>1</sup>, 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

<sup>1</sup>COM (2011) 539 of 7.9.2011 available on: [http://ec.europa.eu/energy/energy2020/international/index\\_en.htm](http://ec.europa.eu/energy/energy2020/international/index_en.htm)

policy? What should be the priorities?

No comments

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?

Comments:  
This question is not within our area of competence.

### **Section J: Technology development**

of technologies industrial initiatives were set up according to two criteria, their large-scale availability by 2020 and the willingness of industry to engage in public private partnerships.

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?  
  
- N/A
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?

Comments:  
Small scale RES based heating and cooling should be given specific and continuous support. While the technologies are largely available and developed, still many obstacles exist towards their wide spread dissemination in the market place.

RES heating and cooling will be a successful augmentation of RES electricity. While it will be covered partly by the smart cities initiative, it is a building block that requires individual support.

Heat pumps have seen tremendous growth throughout Europe over the past 5 years, however the technology still has improvement potential on the component and especially on the system level.

Heat pump based hybrid systems enable the use of renewables in virtually 100% of all application fields. Their capacity to provide heating and cooling at the same time makes them the preferred choice in office buildings and commercial applications.

Industrial applications are possible, but need further research into new refrigerant pairs to increase the covered temperature range.

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

- Successful but some drawbacks (please specify which)

Comments:

Existing measures have been successful, where available, but in general, the number of projects supported in the field of deployment under IEE was limited. Larger funding budgets should be made available to enable more continuous research.

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