



## **EGEC’s response to the EC Public consultation exercise on “Roadmap for a low carbon economy by 2050”**

Brussels, 26.11.2010

### ***Make Europe the most energy import independent region of the world- Renewables for Security of Energy Supply, Competitiveness and Environmental Protection***

EGEC welcomes the intention and initiative of the European Commission to show the path towards a secure, sustainable and competitive European energy system.

EGEC is committing itself to actively support a transition into an energy economy which is fair to all EU citizens, provides a level playing field for all actors on the EU scene, and aims at the goals of efficiency, sustainability, security and conservation of the local and world-wide environment.

8) Do you have any comments on the policies evaluated in the previous question? Do you have any comments on any other policies?

The roadmap is about a low carbon economy by 2050.

The European Council has given a long term commitment to the decarbonisation path with a target for the EU and other industrialised countries of 80 to 95% cuts in emissions by 2050.

To reach this objective we do not have to speak about low carbon economy but about carbon free economy. It means two things:

First, the electricity and heating and cooling sectors must be completely decarbonised: carbon capture and storage and nuclear energy (large Co2 emissions during exploration, construction and decommissioning phases) are not a sustainable and a long term options.

Secondly, the only possibility to have a carbon free economy is to develop much more renewable energy sources. Along them, geothermal will play a key role providing a renewable electrical base load and heating and cooling.

The Geothermal have the resources to supply at least 20% of Europe Global Energy consumption in 2050.

9) The EU will need a diverse portfolio of technologies to build a low-carbon future. Some examples of potential technologies and energy efficiency solutions are carbon

capture and storage, renewable energy technologies, electric vehicles, fuel cells, smart grids, heat pumps, cogeneration, next generation nuclear power, zero emission buildings, etc. Which technologies do you think will be the most important in achieving a low carbon economy by 2050 and how can the EU foster their development and deployment?

Challenged by climate changes, the need to secure sustainable economic growth and social cohesion, Europe must achieve a genuine energy revolution to reverse today unsustainable trends and live up to the ambitious policy expectations. A rational, consistent and far sighted approach to energy supply is critical for ensuring such transformation.

Geothermal is the only source of renewable energy capable of driving a consistent and reliable (24h per day, 365 days per year) energy production.

The Geothermal have the resources to supply at least 20% of Europe Global Energy consumption in 2050. The technology is available, should be proven all over Europe in various geological conditions by 2020 and become competitive with other sources by 2030. For large scale development there may be need of some kind guidance / direction with objectives put in place by the authorities to make things happen at this scale: European risk insurance scheme, regulatory framework, public awareness etc.

10) What are in your opinion the most important initiatives the EU should pursue in the next five to 10 years to secure a successful transition towards a low carbon economy by 2050?

The EU's energy policy should tend to have a long term 100 % RES mix scenario. But some barriers remain to remove:

- New binding RES targets must be established for 2030, with a sectoral approach (electricity, heating & cooling, transport)
- The competition on the electrical market must be improved.
- The externalities of energy production are largely related to health, environmental degradation and social aspects. These costs are real and should be adequately internalised. In order to have a real and fair comparison, additional costs (for example: network, regulatory, storage etc.) must also be counted.
- Removing subsidies to fossil fuels and nuclear and applying the 'polluter pays' principle to the energy markets, would go a long way to level the playing field.
- A CO2 tax must be created at a high level reflecting the environmental and social costs.
- The SET plan, being the EU technology policy, remains technology neutral. It has now to endorse all RES technologies and especially geothermal

11) The EU Emissions Trading Scheme is a central element of EU climate policy. The EU wants to foster international climate action by reinforcing international carbon markets, e.g. by making links among emissions trading systems and by further developing crediting systems. What elements do you think should go into the EU low-carbon roadmap? (e.g. bilateral agreements to recognise international allowances and credits, sectoral crediting systems, separate financing mechanism for the purchase of international credits from developing countries, etc.)

The EU's Emissions Trading System puts a cost on emitting CO<sub>2</sub>. By auctioning permits to the power sector for emitting CO<sub>2</sub>, major polluters have to pay for releasing greenhouse gases. It sends a clear message to investors: the cost of climate change, currently borne by society, will be increasingly shifted towards the polluter.

Such a system must be replicated at a global level

The initial phase of the EU Emission Trading System (2005-2007), did not function effectively: over-allocations resulted in billions of Euros in windfall profits and EU emissions have not been reduced. The 2008 ETS reform plans for a real price of carbon post 2012 - through full auctioning in the power sector.

We should use this experience in order to design the international carbon markets.

12) Achieving a low-carbon future means investing in the medium to long-term. How can the EU roadmaps help to create a stable environment to encourage investment in low carbon technologies?

Would it be a good idea to consider a mid-term objective for 2030 and, if so, in what form?

In order to achieve a carbon free economy, Binding Renewable Energy Targets for 2030 are needed:

As investment decisions in the energy sector are of a long-term nature and as 2020 is at our doorstep, the European Union should quickly proceed with fixing binding renewable energy targets for 2030, continuing its commitment towards developing this prosperous economic sector. A political discussion should start soon between all 27 EU Member States on the 2030 horizon in order to set the right framework towards a 100% renewable energy supply by 2050.

13) We want to cut emissions in the EU by 80% to 95% by 2050. Some of the measures needed to achieve this could bring about more sustainable growth, extra jobs, accelerated innovation, cleaner air, increased energy security and lowering our vulnerability to external energy shocks. Which of these do you think should be top of the list? What should the EU do to maximise the benefits you think should be delivered in priority by future climate action?

To cut emissions in such a order, we must go towards a carbon free economy not a low carbon one.

All measures mentioned above are essential for our sustainable development.

But to answer this challenge, only one solution exists: the renewable energy sources.

Sustainability encompasses not only ecological but also economic and social aspects, which must always be considered collectively and in their interactions.

A 2009 study by HSBC concluded that the three most promising sectors in terms of social return, job creation and relevance to the recovery of the global economy are renewable energy, building efficiency and sustainable vehicles.

Geothermal energy: a local answer, ecological and efficient, to reduce energy costs:  
friendly for the environment: contribution to the reduction of CO2 emissions

A safe and controlled technology: not depending on climatic conditions

an answer to different energy needs: electric power, heating, cooling, hot water

14) What sectors do you think may be most vulnerable to the negative impacts of climate change, and what policies do you think the EU should pursue to help them to adapt? Do you have any suggestions on the integration of adaptation policies in the Common Agriculture Policy, civil protection, environment, energy, transport, research and development policies?

The current energy, economy and climate challenges call for more ambitious objectives than just a new energy strategy. To meet these challenges, we need a radical shift in the way we produce and consume energy. The development of sustainable and affordable energy, thanks to renewable energy sources (RES), will be the key to a new industrial revolution. The creation of a strong common energy policy is required to answer this unique challenge. This new approach must lead to more ambitious goals (as 100% RES by 2050, with a 20% contribution from geothermal) and a deeper integration of the markets.

15) Do you have success stories that could lead to new initiatives for steering EU transition to a low-carbon economy you wish to highlight? Please add other further comments or suggestions here if you wish.

Hardly anyone could imagine how fast the renewable energy sector has developed over the past few years.

All forecasts on the expansion of renewable energy have consistently been surpassed.

Within just two decades, renewable energy has developed from an alternative energy source in a niche market to one of the most important energy sources worldwide and a driving force for a sustainable 21st century economy.

Renewable energy is currently on its way to becoming the mainstream source of Europe's energy system in the conceivable future.

By the end of 2009 the renewable energy sector secured more than 10% of Europe's final energy consumption, provided one-quarter of the EU's binding 20% greenhouse gas reduction target (or 7% CO<sub>2</sub> reduction against 1990 emissions), over 550,000 high quality jobs, and had an annual turnover exceeding €70 billion.