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RE-THINKING 2050
a 100% Renewable Energy Vision for the European Union

15 April 2010, 8:H30-10:H00
Members Saloon Sala 4
European Parliament, Rue Wiertz

It is a great pleasure to welcome you here today. This event has been organised in collaboration with EREC European Renewable Energy Council and I would like to thank Prof. Zervos for all the effort he has put into the organisation of this morning's event.

Today, we are presenting a study entitled "Re-thinking 2050 - a 100% Renewable Energy Vision for the European Union". Studies of this kind are of the utmost importance for policy makers.

Decisions in the near future must take the 2050 objectives into account without forgetting either Europe's competitiveness or its social model.

"Re-thinking 2050" lays out a blueprint for what European society will look like if we achieve a fully sustainable energy supply. This is why "Re-thinking 2050" is so important.

This study also looks at the economic, environmental and social benefits of the adopted solutions.

A feature that I particularly appreciate in the study is that it presents a number of solutions for the intermediate stages 2020 and 2030.

The study finishes with concrete policy recommendations, such as full liberalisation of the energy market, moving towards super smartgrids, hybrid energy solutions and virtual power plants and smart energy cities.

The twenty-first century presents several major challenges for Europe and its place in the world. Global competition is currently undermining the European social model. But the 21st century will also represent a number of threats to our way of living and our natural environment.

There is today an overall consensus on the need to reduce greenhouse gas emissions globally by 50% by 2050. This represents a cut of at least 80% in the industrialised world. There are also great hopes that a global agreement on climate change will be reached in the near future, hopefully in 2010 in Cancun. This means that in 2050, our society will have to be organised in a different way (work, transport, leisure, city planning, housing, electricity production....).

Taken separately, these are threats that we have to face. But taken together, they can also be seen as opportunities for a transformation of our society. The climate change requires a paradigmatic shift in the way we produce, store and distribute energy. Especially, the distributed nature of renewable forms of energy will hopefully represent an opportunity to reshape our economic and social system towards a wealthier and at the same time more equitable model. Distributed energy is distributed wealth.

Energy is one of the major sources of wealth in every society and both the availability and configuration of the energy system have been critical in shaping the availability and distribution of wealth.

Unlike fossil fuels -which are only found in a few places - renewable energies, including solar, wind, hydro, geothermal, biomass and ocean waves, are everywhere.

The most significant impact is likely to be on developing nations. The reason the poor are “powerless” is literal. They lack “power.” Lack of access to electricity is a key factor in perpetuating poverty around the world. Conversely, access to energy means more economic opportunity and better quality of life.

In the future, millions of people, businesses, and other institutions will have the opportunity to play an active role in renewable energy production and benefit from its value.

In the new era, businesses, municipalities and homeowners increasingly become the producers as well as the consumers of their own energy—the so-called “distributed generation.” Just as the distributed communication revolution of the last decade spawned network ways of thinking, open source sharing, and the democratization of communications, the "Energy Revolution will follow suit with the democratization of energy.

As I suggested in a recent paper, the great pivotal economic changes in world history have occurred when new energy regimes converge with new communication regimes. When this convergence takes place, society is restructured in wholly new ways.

Similarly, today, the same design principles and smart technologies that made possible the internet, and vast “distributed” global communication networks, are just beginning to be used to reconfigure the world’s power grids. This will mean that people will be able to produce renewable energy and share it peer-to-peer, just as they now produce and share information, creating a new, decentralized form of energy use. We need to envisage a future in which millions of individuals can firstly collect and produce locally generated renewable energy in their homes, offices, retail stores, factories and technology parks, secondly where they can store that energy in the form of hydrogen, and finally share their power generation with each other across a Europe-wide intelligent intergrid.

We can begin to envisage a Europe where millions of people are “empowered”, both literally and figuratively, with far reaching implications for European social and political life. The Energy revolution will imply profound changes in our society: from a centralized, bureaucratic society of today to a decentralized, flexible society of tomorrow.

The Energy Revolution will not only be an opportunity to advance equity in the distribution of wealth and to widen power among social actors; it will also allow for a broader involvement of countries that have traditionally been energy importers. Within Europe, a continent-wide, fully integrated, intelligent intergrid could allow each EU member country to both produce its own energy and share any surpluses with the rest of Europe in a “Network” approach to assuring EU energy security. At the global level, the limited number of countries exporting gas and oil will be replaced by near 100 developing countries that have an enormous renewable potential. The Energy Revolution will dramatically change the globalization process.

In 1960, President Kennedy challenged the baby-boom generation in the United States to join him in putting a man on the moon within the decade and exploring the far reaches of outer space. The sequel, in the 21st century, is for the EU to lead the world in saving the Biosphere of the earth.

I hope this forum offers an opportunity to discuss the challenges of an Energy Revolution. It is a honour to have Prof. Zervos and Director-

General for Energy. Prof. Zervos will give us an overview of the study and Mr. Philip Lowe will supply the Commission's reaction to the study. The presentations will be followed by a debate.