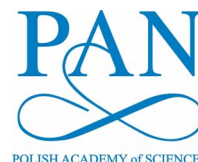




POLISH PRESIDENCY OF THE EU COUNCIL 2011



**Ministry of Science
and Higher Education**
Republic of Poland



**SCIENTIFIC SUPPORT TO A COMPETITIVE EUROPEAN LOW CARBON
ECONOMY: ENERGY, TRANSPORT AND EMERGING TECHNOLOGIES**

7 July 2011

Venue: The Palace of Culture and Science, Warsaw, Poland

Mikołajskiej Conference Room

Programme

The conference will address issues that will be central to the progressive transition of the EU towards a low carbon society: energy, transport and emerging technologies. The conference participants will discuss how science can support the building of a European low carbon economy while at the same time preserving its ability to be competitive at the global markets.

Europe is facing huge energy challenges: increasing demand, dependence on imports, the strain on fossil fuel resources, and threats to security of supply. This is taking place against the background of global climate change in which carbon emissions are a key factor with the EU currently depending on fossil fuels for the greater part of its energy.

Through its selected theme the conference will contribute to the Europe 2020 Strategy and more particularly to the flagships on "Resource-efficient Europe" and "Industrial Policy for the Globalisation Era".

The conference comes in a timely moment. On 8 March the European Commission set out its vision of how the EU can meet its objective of cutting greenhouse gas emissions by 80-95% by 2050 in the communication "A roadmap for moving to a low-carbon economy in 2050". The Roadmap provides cost-efficient and pragmatic pathways for key economic sectors to reach this target. A new Energy Efficiency Plan taps the considerable potential for higher energy savings throughout the energy value chain and closes the gap in reaching the EU's 20% energy saving objective.

The conference is organised jointly by the European Commission's Joint Research Centre (JRC), the Polish Ministry of Science and Higher Education and the Polish Academy of Sciences and it is under the auspices of the Polish EU Presidency.

08h30 09h00 *Registration*

09h00 10h00 OPENING SESSION

- **Dominique Ristori**, Director General, Joint Research Centre (JRC), European Commission
- **Maria Elżbieta Orłowska**, Secretary of State, Ministry of Science and Higher Education
- **Michał Kleiber**, President, Polish Academy of Sciences
- **Marcin Korolec**, Under-Secretary of State, Ministry of Economy

10h00 10h45 SETTING THE SCENE: the European Dimension

Moderator: **Krzysztof Maruszewski**, Director, JRC, European Commission

- Polish roadmap of low-carbon economy, **Bernard Blaszczyk**, Under-Secretary of State, Ministry of the Environment
- A roadmap for moving to a low-carbon economy in 2050 and scientific support to a low carbon economy, **Antonio Soria**, Head of Unit, JRC, European Commission
- A roadmap for moving to a low-carbon economy in 2050 and the need for scientific support: policy view, **Karsten Krause**, Directorate General for Climate Action, European Commission
- Discussion

10h45 11h15 *Coffee break*

11h15 13h00 ENERGY: Clean technologies and energy efficiency as key drivers for the transition to low carbon economy

Moderator: **Tadeusz Luty**, Wroclaw University of Technology

Description: In many ways, energy efficiency can be seen as Europe's biggest energy resource. The cost-efficient ways to make the European economy more climate-friendly and less energy-consuming are becoming essential for the future for Europe's economy. By 2050 Europe could cut most of its greenhouse gas emissions by using clean technologies. With its "Roadmap for moving to a competitive low-carbon economy in 2050" the European Commission is setting out a plan to meet the long-term target of reducing domestic emissions by 80 to 95% by mid-century. A low-carbon economy would have a much greater need for renewable sources of energy, energy-efficient building materials, hybrid and electric cars, 'smart grid' equipment, low-carbon power generation and carbon capture and storage technologies. The key driver for this transition will be energy efficiency. The debate will also highlight the role nuclear energy can play to achieve Europe's 2020 targets of reducing GHG emissions by 20%.

- EU energy policy: state of play, **Tudor Constantinescu**, Principal Adviser, Directorate General for Energy, European Commission
- JRC support to European policy on energy efficiency and renewable energy, **Heinz Ossenbrink**, Head of Unit, JRC, European Commission
- Energy Efficiency Act and Key Drivers, **Krzysztof Żmijewski**, Secretary General, Polish Public Board for the National Programme for Emissions Reduction (SRNPRE)
- New energy as a driver for growth, **Daria Kulczycka**, Head of Department of Energy and Climate Change, Polish Confederation of Private Employers Lewiatan
- Technological alternative to CO₂ geological storage, **Aleksander Sobolewski**, Institute for Chemical Processing of Coal, Poland
- Smart grid Hel peninsula pilot project, **Adam Babs**, Institute of Power Engineering
- The nuclear option: a means towards a sustainable low-carbon economy, **Roberto Caciuffo**, Head of Unit, JRC, European Commission
- Nuclear energy – a key element of sustainable development in 2050, **Grzegorz Wrochna**, Andrzej Soltan Institute for Nuclear Studies, Poland
- Discussion

13h00 14h00 *Lunch*

14h00 15h00 **TRANSPORT: Towards a competitive and resource efficient transport system**

Moderator: **Wojciech Suchorzewski**, Institute of Roads and Bridges of the Warsaw University of Technology

Description: Mobility is vital for the internal market and for the quality of life of citizens. Transport has become more energy efficient, but EU transport still depends on oil and oil products for 96% of its energy needs. The challenge is to break this dependence without sacrificing its efficiency and compromising mobility. In line with the flagship initiative “Resource efficient Europe” set out in the Europe 2020 Strategy the paramount goal of European transport policy is to help establish a system that underpins European economic progress, enhances competitiveness and offers high quality mobility services while using resources more efficiently. Synergies with other sustainability objectives such as the reduction of oil dependence, the competitiveness of Europe’s automotive industry as well as health benefits, make a compelling case for the EU to step up its efforts to accelerate the development and deployment of the key technologies.

- Cleaner and more efficient transport – the challenge, **Alois Krasenbrink**, Head of Unit (acting), JRC, European Commission
- The 2011 European Transport White Paper, **Paul Verhoef**, Head of Unit, Directorate General for Mobility and Transport, European Commission

- The future of sustainable biofuels in Poland, **Krzysztof Bajdor**, Deputy Director for Fuels and Renewable Energy, Automotive Industry Institute, Warsaw, Poland
- Challenges of transport and energy policies in new EU Member States, **Wojciech Suchorzewski**, Institute of Roads and Bridges of the Warsaw University of Technology
- Discussion

15h00 16h00 **INDUSTRIAL PRODUCTION AND THE ROLE OF EMERGING TECHNOLOGIES**

Moderator: **Krzysztof Maruszewski**, Director, JRC, European Commission

Description: A wide range of emerging technologies are expected to transform society. They are anticipated to revolutionise fields as diverse as energy, agriculture and health care. With applications in a broad variety of industrial sectors, life sciences and biotechnologies are playing an increasingly significant role in boosting technological innovation and bring new environmentally compatible products and processes based on renewable raw materials to the market. In convergence with other technologies they provide the knowledge-base for the sustainable management, production and use of biological resources, new, safe, affordable and eco-efficient products and support competitiveness and sustainability of major European industries.

- Life cycle-based indicators, supporting a Low Carbon Society and a Resource Efficient Europe, **Małgorzata Góralczyk**, JRC, European Commission
- Research and development in biotechnology – towards innovation industry in Poland, **Ewa Bulska**, Chemical Department, Warsaw University
- Energy saving technologies in SMEs? Some facts and figures from the CHANGE project (IEE programme), **Katarzyna Grzejszczyk**, Polish Chamber of Commerce
- Fossil, fissile and renewable energy sources , they role in sustainable country development, **Andrzej G. Chmielewski**, Institute of Nuclear Chemistry and Technology, Poland
- Hungarian Presidency experience, **Antal Nikodémus**, Head of Unit for Innovation and Research, Hungarian Ministry for National Economy
- Discussion

16h00 16h30 **CLOSING SPEECH**

Krzysztof Maruszewski, Director, JRC, European Commission