

International scientific experts confirm key role of forests for overcoming fossil fuel dependence and mitigating climate change, but call for balanced approaches

(Vienna, 14 November 2011) More than 70 leading scientists and young investigators from 35 countries gathered at a high-level research conference on *The Future Role of Bio-energy from Tree Biomass in Europe* from 7 to 11 November in Vienna, Austria, to exchange latest scientific information about forest bio-energy and to calibrate future research strategies. The conference was organized by the [International Union of Forest Research Organizations](#) (IUFRO), the [European Cooperation in Science and Technology](#) (COST) and the [European Science Foundation](#) (ESF) in collaboration with the [Austrian Federal Research and Training Centre for Forests, Natural Hazards and Landscape](#) (BFW).

Rising prices of fossil fuel as well as global efforts to mitigate climate change and reduce greenhouse gas emissions from fossil fuel combustion have resulted in a strong interest in using forest biomass for energy. In Europe, the Renewable Energy Directive (2009/28/EC) sets a binding target for the EU to achieve a 20% renewable energy share by 2020, in which the largest contribution is expected to come from biomass from agriculture, forestry, and waste for heat and power generation as well as transport fuels.

Wood energy, the most important source of bioenergy in the world, can play a key role in responding to growing demands for a potentially carbon neutral supply of energy. There is considerable potential for mobilizing unutilized sources of forest biomass, such as logging residues and small-sized trees. It is estimated that an additional 100 – 300 million m³ can be harvested annually from such sources in the EU, after considering ecological and economic constraints (Verkerk et al, 2011). However, the low relative value of these sources and their operational properties currently limit their utilization for energy and demonstrate the need for efficient technologies, methods and supply chains.

In his opening address, **Niki Berlakovich, Austrian Minister** of Agriculture, Forestry, Environment and Water Management highlighted the important contribution of forest bio-energy towards achieving a self-sufficient energy supply in Austria by 2050. **Paul Ruebig, Member of the European Parliament**, addressed Europe's grand challenge of overcoming fossil fuel dependence and mitigating climate change. Both speakers testified to the support of the European Parliament and the Austrian government, and encouraged the European research community to continue its efforts and seek innovative solutions.

Prof Niels Elers Koch, President of IUFRO and Chair of this High-level Research Conference said: "Forest bio-energy is a global market, but the science has largely remained a national and regional phenomenon. In this International Year of Forests 2011, and as we approach the International Year for Sustainable Energy for All 2012, this conference is a very timely contribution towards advancing international science collaboration and identifying common research priorities".

Prof Koch highlighted that IUFRO has made bioenergy, bio-based products and their life cycle analysis a strategic priority focus for the next four years and added “Sustainable, well managed forests can contribute to a switch over to a greener economy and renewable energy systems with low impact on climate and environment. Therefore, we are very pleased about the cooperation with COST, ESF and BFW in organizing this conference”

“COST had anticipated the importance of forestry, wood technology, pulp and paper within science and technology when it established its scientific Domain on Forests, their Products and Services as a platform for nationally-funded research activities,” said **Dr Monica Dietl, Director of the COST Office**. “This Domain is the ideal instrument to share knowledge and joint efforts in Europe and beyond. This allows maximising contributions by the science and technology sector. Strengthening cooperation between IUFRO and COST will further enhance the synergies of both organisations, make better use of resources and create new opportunities for the benefit of the European Research Area.”

Dr. Peter Mayer, Director of the Austrian Federal Research Centre for Forests (BFW) and co-chair of the scientific conference, highlighted the importance of multilevel cooperation in research on bioenergy and climate change. “BFW has made the increase of knowledge related to bioenergy from forests one of its main priorities to provide decision makers and stakeholders with objective information for good decision making” says Peter Mayer. “This will also provide the basis for continued balanced approaches in the sustainable management of forests”.

The scientific conference confirmed the potential of forest biomass to lessen the strain on energy supply in the longer term and to contribute substantially to carbon emission reductions in Europe as well as globally. At the same time, the experts underlined that the increased demand for wood as a source of energy must be balanced with other needs such as conserving biodiversity, storing carbon, ensuring livelihoods of forest dependent communities and indigenous peoples, and the needs of conventional forest industries. New technologies and new forest and bio-based products have the potential to provide responses to the growing and changing markets and the societies' expectations.

In order to more fully capture the potential of forest bioenergy, the experts highlighted the need for a more efficient integration and governance of supply chains, further improvements in biomass inventories and the assessment of sustainability impacts, as well as a more active collaboration and communication within the global scientific community and with stakeholders and decision makers. Towards this end, and as a concrete follow-up to the conference, the [IUFRO Task Force on Forest Bioenergy](#) will embark on collecting and publishing a series of case studies of forest bioenergy reflecting diverse circumstances and diversity in approaches and effective solutions.

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About IUFRO:

The International Union of Forest Research Organizations (IUFRO) is the only world-wide organization devoted to forest research and related sciences. Its members are research institutions, universities, and individual scientists as well as decision-making authorities and other stakeholders with a focus on forests and trees. For further information, please visit: www.iufro.org

About COST:

COST - European Cooperation in Science and Technology – funds trans-European networks ('COST Actions') across all scientific disciplines for 40 years. It thereby strengthens Europe's research and innovation capacities and contributes to its scientific, technological, societal, economic or cultural development. COST has understood the importance of the areas of forestry, wood technology, and pulp and paper in S&T early on and established the Domain 'Forests, their Products and Services' as a platform for nationally-funded research activities. For further information, please visit: www.cost.eu/fps

About ESF:

The European Science Foundation (ESF) is an independent, non-governmental organisation that promotes collaboration in scientific research, funding of research and science policy across Europe. Its members are 78 national funding and research-performing organisations and learned societies from 30 countries. For further information, please visit: www.esf.org

About BFW:

The Research and Training Centre for Forests, Natural Hazards and Landscape (BFW) is a multidisciplinary research and training institution of the Federal Government of Austria. BFW supports the sustainable development of society through the preparation of scientific guidelines and through dissemination of knowledge on the multifunctional use of natural resources. For further information, please visit: <http://bfw.ac.at>