

Session: The role of bioenergy in light of changes to the energy landscape

Organizers: International Energy Agency (IEA), United Nations Economic Commission for Europe (UNECE)

Target group: Open to all participants

Globally, excellent progress is being made in deploying renewable energy for electricity production, with renewables now providing 25% of electricity generation. However, electricity only provides a small percentage of all the energy we use, with fossil fuels still providing most of the energy used to produce energy for buildings and industry and for transport. Deep decarbonisation of these sectors will require a major improvement in energy efficiency along with an increase in electrification where appropriate, but it will also require a much-enhanced contribution from renewables.

Bioenergy is the renewable source which currently contributes most in the buildings, industry and transport sectors. A significant expansion of sustainable bioenergy forms a critical component of energy supply in low carbon scenarios. For example, the IEA's 2DS Scenario calls for a 4-fold increase in bioenergy in final energy supply by 2060, with bioenergy playing a particularly important role in the transport sector, increasing by a factor of 10.

However, amongst the renewable energy sources, bioenergy is the most diverse and complex, with many potential feedstocks, conversion processes and energy products. It also involves many interactions with non-energy sectors such as agriculture, forestry and waste management. Above all, it is essential that any increase in the production and use of bioenergy contributes positively to the achievement of a number of sustainable development goals and avoids as far as possible adverse environmental, social or economic consequences.

Guiding questions:

- *What is the current of bioenergy in today's energy systems and what role should it play in the future?*
- *Can bioenergy contribute in a cost-effective way to substantially increase renewables in the energy mix?*
- *How can we ensure that bioenergy production and use contribute to sustainable development and cut carbon dioxide emissions?*
- *Can the supply of bioenergy be sustainably enhanced and what resources will be most important?*
- *What policy frameworks will be needed to stimulate bioenergy?*

Time	Content	Resource person
09:00 – 09:05	<i>Welcome and Moderator</i>	Mr. Nazir Ramazanov, Chair of the UNECE Group of Experts on Renewable Energy (GERE)
09:05 – 09:10	<i>Introduction</i>	Mr. Kostiantyn Gura, Advisor to Head of State Agency on Energy Efficiency and Energy Saving, Ukraine
09:10 – 09:25	<i>The current and future role of bioenergy</i>	Dr Adam Brown, Consultant, Renewable Energy Division, IEA
09:25 – 09:40	<i>Bioenergy and sustainable development</i>	Mr. Uwe Fritsche, Scientific Director, IINAS
09:40 – 09:55	<i>Enhancing sustainable bioenergy supply</i>	Mr. Luis Janeiro, Programme Officer - Renewable Energy Roadmaps, IRENA
09:55 – 10:10	<i>Regional perspective on bioenergy</i>	Mr. Borys Dodonov, Country Expert Ukraine, IEA
10:10 – 10:25	<i>Panel discussion and Q&As from audience</i>	Ms. Olga Yeriomina, Associate Director, Power& Energy Utilities, EBRD and participants
10:25 – 10:30	<i>Conclusions</i>	Moderator and UNECE