Group of Experts on Cleaner Electricity Systems

Presentation

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➢ Highlights: Implementation of the work plan for 2018-2019
➢ Future work plan for 2020-2021
Group of Experts on Cleaner Electricity Systems
Implementation of the work plan for 2018-2019

ENERGY

Activities:

➢ Assess a future role for thermal power plants in sustainable electricity systems

➢ Increase flexibility in coal-fired electricity generation

➢ Decrease emissions and increase efficiency from new and existing coal-fired power generation using best practices across UNECE region

➢ Assess means for development and deployment of carbon capture, use and storage (CCUS) technology and know-how

➢ Opportunities in combined heat and power (CHP), gasification and coal to develop other technologies or products (such as liquids or chemicals)
Group of Experts on Cleaner Electricity Systems
Implementation of the work plan for 2018-2019

ENERGY

➢ Role of fossil fuels in supporting renewable energy deployment
➢ Role of gas and liquefied natural gas (LNG) in electricity generation (with the Group of Experts on Gas)
➢ Innovation in the extraction and use of coal mine methane for electricity production and other uses (with Group of Experts on Coal Mine Methane)

Events (round table/stakeholder dialogue) have been conducted. Reports (room documents) will be presented at EG session on 5-6 November, Geneva.
A. Electricity as driver for achieving deep transformation of the energy system

Deliverables:

• Round table on electricity as driver for achieving deep transformation of the energy system;

• Background document on interplay of technologies, including between flexible clean coal, natural gas and renewables;

• Background document on the alternative electricity market models;

• Background document on lessons learnt on opportunities for development of combined heat and power, gasification and chemical use of coal.
B. Modernization and decarbonisation of electric power system

Deliverables:

• Round table discussion on HELE technologies deployment, development of UNECE emissions and efficiency standards for electric power plants, and options for financing clean energy projects;

• Round table on options for financing CCUS;

• Subject to extra-budgetary funds or in-kind contributions, generic guidelines on minimum efficiency and carbon dioxide reduction standards in the ECE region;

• Subject to extrabudgetary funds or in-kind contributions, generic guidelines for financing clean energy projects.
C. Energy management in smart urban ecosystem

Deliverables:

• Background document on current status and prospects for the development of ICT in support of high-performance buildings and smart, sustainable cities.

• Background document on the impact of E-Mobility on power system design and operation.

• Case studies from UNECE member States on the results achieved through implementation of policies supporting development of E-Mobility and ICT for high-performance buildings and smart, sustainable cities (subject to identification of extra-budgetary funds, in-kind contributions, or willingness of experts to take a leading role).
D. Promote a gender perspective in the work of the Committee on Sustainable Energy and its Groups of Experts

Deliverables:

• Session on “Women and diversity in energy”
• Case study: “The success of women in ‘non-female’ profession”
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Thank You