

EU-China Roadmap on energy cooperation (2016-2020)

Against the background of multiple challenges related to addressing climate change, environmental degradation and energy security and changing market conditions, China and the European Union have a mutual interest and role to promote low-carbon development, protect the environment, address climate change and encourage clean energy development.

Therefore, having agreed that the goals of future cooperation between the EU and China in the field of energy should be to:

- Ensure that energy cooperation makes a key contribution to the comprehensive strategic partnership between China and the EU;
- Enhance mutual trust in energy cooperation;
- Streamline the coordination of cooperation in the field of energy;
- Build mutual trust on market-related energy issues;
- Contribute to the transformation of the energy system, to the sustainable development of the global energy system and to energy and climate resilient investment;

China and the EU intend to enhance collaboration in areas of mutual interest related to the management of the energy system – on both the supply and the demand sides - as well as other relevant crosscutting issues.

A. Energy Supply: Sourcing, Production and Distribution

Both China and the EU are highly dependent on imports of fossil energy sources and together represent approximately a third of total global consumption. This creates common interests in the pursuit of energy security, cleaner technologies and renewable energy sources. Future cooperation related to the *Supply of Energy* should focus on three sectors: renewable energies, fossil fuels and nuclear power.

1. Renewable energy sources

- a. Foster trade and investment in renewable energy, thereby reducing costs by improving competition.

b. Develop distributed generation and Combined Heat and Power (CHP):

- Jointly promote the development and the implementation of distributed energy resource systems as well as cogeneration of electricity based on renewable energy sources, in particular in less developed regions;
- Share best practices in the promotion, development and implementation of CHP production from renewable energy sources;
- Facilitate the construction of infrastructure and the development of the market for district heating and cooling and for CHP.

d. Expand the bio-gas sector:

- Exchange insights on bio-gas technologies, markets and policies;
- Further the production of methane and bio-gas, encourage the uptake of new technologies and equipment in this sector.

2. Power grid sector:

- Explore opportunities of distributed energy generation;
- Promote the further development of intelligent, flexible and more reliable distribution networks, in particular smart grids.

3. Fossil fuels

a. Energy Crisis Prevention and Management:

- Establish a joint platform for managing (potential) energy supply disruptions;
- Promote mutual understanding and strategy coordination for energy crisis management.

b. Technical exchanges on the flexibility of thermal power generation and CHP;

c. Technical and policy cooperation on efficient electricity generation from clean coal and gas

4. Nuclear safety

- Exchange of ideas and experiences and cooperation among concerned actors in industry, civil society and different levels of government in the EU and China.

B. Energy Demand: Consumption

Energy demand continues to increase in the EU and China, with considerable economic, environmental and technical implications. This creates common interests in improving the management of the energy system on the consumption side, as well as in using energy more efficiently. Future cooperation related to energy demand will focus on demand side management and on increasing energy efficiency.

1. Demand side management

a. Management of the energy system:

- Share information on energy demand/supply analysis and management methods to keep the energy system in balance;
- Share calculation methodologies for determining the appropriate energy mix.

b. Management of the electric energy system:

- Explore Demand Side Management policies related to electricity;
- Grid structure design;
- Cross-border and regional power transmission infrastructure development;
- Optimisation of grid system and measures to expand the application of renewable energy.

2. Energy efficiency

a. Promote the production and consumption of energy-efficient appliances:

- Work towards harmonising energy labels of appliances, equipment and buildings.

b. Develop energy standards in consumer goods:

- Strengthen the cooperation on energy consumption standards for consumer goods, aiming at mutual recognition of existing and future schemes;
- Increase business cooperation in eco-design, systemic design and circular economy planning at the industrial level (manufacturing,

transportation, energy, food, land use).

- c. Develop a market-oriented Energy Performance Contracting (EPC) system.

C. Cross-cutting Issues

1. Energy regulation and pricing

- a. Share best practices on energy regulation:

- Build a cooperation platform on energy regulation.

- b. Enhancing coordination in regulatory policies:

- Work towards harmonising regulatory policies on grid development, including dispatching policies;
- Promote transparent regulation of oil and gas pipeline infrastructure.

- c. Reform energy supply prices and support policies:

- Share experiences on the reform of energy pricing and support policies, especially in terms of pricing policies of renewable energy, electricity market and natural gas markets.

2. Energy and the environment

- a. Promote the mobilisation of market mechanisms for environmental protection:

- Endeavour to develop market mechanisms that incite cleaner production;
- Encourage the development of a market for green goods that reduce energy consumption.

- b. Link energy conservation and environmental protection policies:

- Give priority to environmental cooperation projects, including those with a strong emphasis on energy efficiency;
- Include energy efficiency in environmental policy guidelines.

3. International cooperation

- a. Improve trade and investment conditions in the energy sector.

b. Engage in international energy institutions:

- Support China's increased involvement in international energy institutions;
- Cooperate within the framework of the Energy Charter Treaty (ECT).

Both sides envisage establishing cooperation inter alia through:

- Dialogues and policy discussions on regulatory frameworks, market developments, trade, investment and the global energy architecture, as well as an energy research platform for exchange of views on technical and technological developments;
- Business-to-business fora in the energy sector;
- Cooperation projects that develop and implement energy efficient, clean and low-carbon technologies.

Progress in the aforementioned priority areas should be reviewed no later than in 2018 on the basis of a report that will be drawn up by the relevant services.

This EU-China Roadmap on Energy Cooperation does not constitute an agreement under international law.

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