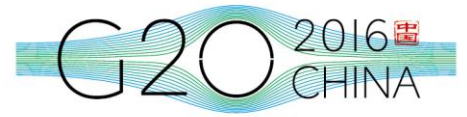


Discussion Paper for 2016 First G20
Energy Sustainability Working Group Meeting

28 January 2016, Xiamen, CHINA



Introduction

Year 2015 would be marked as a turning point in the history of world energy development. The UN Summit in September adopted *the 2030 Agenda for Sustainable Development* with one of its Goals to “Ensure access to affordable, reliable, sustainable and modern energy for all”. The Paris COP 21 succeeded in making a new international commitment on tackling climate change with the development of renewable energy and promotion of energy efficiency as key elements. As we search for solutions to address the urgent challenges that face all humankind, the importance of energy for people’s livelihood and social economic development has risen to an all time high, calling out strongly for immediate, collective and wise actions from all countries and stakeholders.

With its members as major producers and consumers of energy, the G20 can and must play a bigger role in international energy cooperation and governance. The success of the first G20 Energy Ministers Meeting under the Turkish presidency in 2015 reflected the interest of both members and relevant international organizations to use the G20 as a more important platform to discuss global energy issues. Taking the baton of G20 presidency in 2016, China stands ready to work closely with all members and related IOs to build on previous achievements and move forward the G20 energy agenda.

Objectives

As the first step of a series of energy meetings under G20 framework in 2016, we hope to achieve the following objectives during the first ESWG meeting in Xiamen:

- Agreeing on the working plan of the ESWG during 2016
- Drawing out an outline of possible outcomes of the G20 Energy Ministerial Meeting in 2016
- Preliminary discussion on laid-out issues

Issues for discussion

Taking into account previous G20 discussions on energy, particularly the G20 Principles on Energy Collaboration agreed in 2014, the outcomes of the first G20 Energy Ministerial Meeting in 2015, and the latest global energy developments, we could try to achieve more progress on the following issues in 2016:

Energy Access

Energy access is a critical factor to achieve better quality of life, overcome poverty and improve global economic performance. This issue has been discussed profoundly during the Turkish G20 Presidency, and the G20 Energy Ministers adopted the G20 Energy Access Action Plan: Voluntary Collaboration on Energy Access, the first phase of which focuses on enhancing electricity access in Sub-Saharan Africa where this problem is most acute. While continuing our effort in Sub-Saharan countries, we may probe into the possibility of expanding our focus areas to also include the Asia-Pacific region where the situation is also dire, and meanwhile take more concrete actions to help the countries in need. Specific elements may include:

Discussion on the relation between energy access and poverty elimination, especially proposing a target of reduction numbers or reduction rates of population without access to electricity.

- Attempting to formulate and to implement joint action to help mitigate energy inaccessibility in Sub-Saharan African and Asia-Pacific countries. The role of PPP (Public-Private Partnership) could be further explored within the joint action.
- Enhancing the capacity of G20 to promote best practice sharing, capacity building and technological exchange on the issue of energy access.

Clean Energy

The COP 21 in Paris laid out a green development path for the world, and also added a big amount of urgency on the development of clean energy. Renewable energy utilization is expected to expand drastically in the next decades, while market,

technology and policy aspects on implementing such development differ by country. In 2015 G20 historically specified the importance of renewables and adopted G20 Toolkit of Voluntary Options on Renewable Energy Deployment. The next steps of joint action will be critical. Meanwhile, nuclear power, natural gas and clean utilization of coal are important options for countries with different energy realities, and will also play a significant role in shaping a low-carbon sustainable future. Specific elements may include:

- Formulating target commitment, implementing joint action plan on increasing renewable energy utilization.
- Focusing on key issues including prospect and challenges on hydro power, safety of nuclear power, technology progress and cost reduction of wind and solar power, efficiency and emission reduction of coal utilization, the role of natural gas in energy transition.
- Cooperation programs for promoting research, development, demonstration and deployment of innovative technologies including smart grid, electric vehicle and advanced storage.
- Eliminating international trade and investment barriers for clean energy by eliminating institutional barriers globally.
- Institutionalization of sustained and coordinated G20 clean energy cooperation to contribute to energy transformation.
- Raising public awareness and participation of clean energy development.

Energy Efficiency

Improving energy efficiency is vital for countries to strengthen energy security, raise economic competitiveness, improve environmental outcomes and tackle climate change. Fully recognizing the importance of improving energy efficiency, G20 published the G20 Energy Efficiency Action Plan (the Action Plan) in 2014, specifying six areas for voluntary cooperation on energy efficiency. In 2015, G20 once again highlighted the progress made by participating countries in taking forward our collaboration on energy efficiency. The Paris Agreement adopted at COP 21 made arrangements for the means and elements of future global efforts against climate change and set long-term goals of the global response. Among all the

measures to fight climate change, improving energy efficiency plays a vital role, and G20 should spearhead the global efforts to improve energy efficiency and tackle climate change. Specific elements may include:

- With a view to leading and driving global energy efficiency improvement, the G20 could set a medium to long-term energy efficiency goal and encourage its members to develop on a voluntary basis more ambitious targets for energy efficiency.
- Exploring energy efficiency improvement in key areas. It is necessary to continue and deepen efforts in the six priority areas outlined in the Action Plan and may well explore additional areas.
- G20 members could further their cooperation in energy efficiency, lay down principles on such cooperation and build up synergy to drive global energy efficiency improvement.
- The G20 needs to improve its coordination mechanism on energy efficiency, better utilizes the role of IPEEC.

Global Energy Governance

Acknowledging the room for improvement in the existing energy governance structure to match the current international energy development landscape, the G20 Principles on Energy Collaboration pointed out the need to innovate, and the G20 Energy Ministerial Meeting in 2015 stressed the contribution of the G20 itself to furthering coordination and cooperation among international energy organizations. With G20 becoming a more effective platform for discussions of global energy issues due to its strong coordination ability among stakeholders and its inherent integration capability with interdisciplinary issues under energy governance, we could expect more contributions from G20 itself in terms of global energy governance. Specific elements may include:

- Considering establishing a high-level energy dialogue and coordination platform under the G20 framework, which could strengthen the relation and dialogue between major energy-related organizations and energy think tanks of member countries, so as to promote mutual understanding on important energy issues and

provide support for G20 ESWG and Energy Ministerial Meeting.

- Discussing the way of deepening involvement of emerging and developing economies and modernization process of existing international energy institutes towards a more inclusive, open and effective global energy governance.

Inefficient Fossil Fuels Subsidies

The G20 Energy Ministerial Meeting in 2015 welcomed the progress being made by a number of countries to rationalize and phase-out inefficient fossil fuel subsidies that encourage wasteful consumption, and encouraged more G20 countries to join the peer review process. Recently there has been some positive progress in this regard, and we can explore ways to continue this momentum. Specific elements may include:

- Discussing the progress and improvement of G20 IFFS peer review framework. The results of the US-China voluntary peer reviews and the progress of Germany, Mexico and Indonesia peer reviews could be updated.