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Session Sketches

Plenary III

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Plenary 3: Korean Strategy of North-East Asia Super Grid

Date / Time: 2018.11.16 / 14:10~15:20

Moderator: Sohn, Byoung Kwon (Professor, Chung-Ang University)

Speaker: Jang, Gilsoo (Professor, Korea University),

Lee, Sang Joon (Professor, Kookmin University)

Song, Doug Ho (Professor, Sungkyunkwan University)

Keywords: North-East Asia, Super Grid, Consensus, Long-term, Organization

Plenary Session 3, titled “Korean Strategy of North-East Asia Super Grid”, started with the moderator, Professor Sohn, Byoung Kwon, emphasizing the importance of Northeast Asian

cooperation on Super Grid. Each speaker gave individual speeches under the matter of North-East Super Grid in two phases. They first diagnosed the status quo and then discussed what needs to be done.

In the first phase, Professor Jang, Gilsoo started out by saying that Super Grid in Northeast Asia means there will be an increase in efficiency of using renewable energy in the region. There is no particular technological challenge yet there are different degrees of technological advancement. Korea is far behind China and Japan in HVDC technology, so it is needed for Korea negotiate with them for their advantage, but the difficulty of this task was pointed out.

Professor Lee, Sang Joon continued, elaborating on the reasons for the need of the Asian Super Grid. Energy transition is fundamental considering that the region is currently suffering from air pollution and the East Asian super grid will be an important platform for industrial revolution. However, geopolitical risks were pointed out, including but not limited to Korea's experience with China regarding THAAD. Also, when it comes down a geographical connection, North Korea could be a potential obstacle in establishing the infrastructure.

Professor Song, Doug Ho, insisted that over the many negotiations done over the last 15 years, actual preparation is not done in terms of contractual agreements and power supplies, which must be done. Therefore, 2019 will be the critical year for this plan and will be the turning point.

In the second phase, Professor Jang, Gilsoo mentioned that there are many things to be determined, which is a matter of merit and demerit. The need for strong leadership or institution was called upon, which can take the initiative of technological development. There is little time left until 2025 to catch up with the high technology obtained by other countries.

Professor Lee, Sang Joon called for the need to establish a regional consultative organization, similar to an international organization at a smaller scale. This issue is a long-term issue and, creating a framework plan is needed. However, if a particular country has off-balance leadership or dominance in this effort, then it will work as an obstacle to getting a consensus. The connection between the East and West is necessary, and in this regard, the participation of Japan is encouraged.

Professor Song, Doug said that the talks for implementation must be made and our preparation is insufficient. However, he emphasized that regardless of the government's efforts, scattered activities of many institutions lower the endeavor. He noted the importance of consensus to create a synergy effect.

After individual speeches, there were several questions imposed by the moderator to each speaker.

Q: Who will be the participants and what kind of role will they play?

Professor Song, Doug Ho: There are two major pillars. At the national level, there is a need to make decisions. At an international level, communication and negotiation are needed. This is why a single-acting institution is needed. High-decision making must be there in a flexible manner. North East Asia Committee and government bodies can be potential bodies. All the members of the committee must have relation and autonomy. Also, the half must be composed of private sectors as there is investment needed. This project can also be done in three phases. First, a Business model will be designed. Second, based on the model, actual construction will be made. Third, there will be a single body moderating communication.

Q: We need to transmit electricity between the West and the East. How much will that be?

Professor Jang, Gilsoo: Korea's grid is operated at an optimal level. To make a connection with other countries, violation of reliability might happen, and this needs to be addressed. If Japan joins, then the amount of energy can be increased. In terms of reliability, Russia could play a role. 3 Gigawatts would be an appropriate amount from Russia. As the amount of energy gets bigger, the economic profit will enlarge as well.

Q: Which negotiation will be faster, the one between Korea and China, or the one between Korea and Russia?

Professor Lee, Sang Joon: In case of bilateral discussion, Korea and China will be faster in negotiation. Korea will be purchasing leftover electricity from China. The price differential between Korea and China is not as large, but the one between Korea and Russia is bigger, making negotiation with China more attractive.

After the panel discussion, a comment was made by an audience from the floor about the need of the establishment of globalized Super Grid for climate change and the need for action-taking.

The moderator concluded the session with two keywords: long-term perspective and the need for organization.

List

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