International Ministerial Conference on Nuclear Energy in the 21<sup>st</sup> Century Abu Dhabi, October 30, 2017 Mi-Ock MUN, Ph.D. Adviser to the President for Science and Technology Statement by Republic of Korea

Mr. President, Excellencies, Ladies and Gentlemen,

It is a great privilege for me to participate in the Ministerial Conference, hosted by the UAE.

I am deeply honoured to share our energy policy with you on behalf of the Korean government in this beautiful country, the UAE, where the Barakah nuclear power plants are being constructed in close cooperation with Korea.

Nuclear energy has greatly contributed to supplying a stable source of power and achieving economic growth for Korea and other countries alike.

Since entering the era of nuclear power in the 1970s, Korea has acquired outstanding technologies along with a reliable safety record, and is currently operating 24 nuclear power plants.

In doing so, Korea has spared no effort in developing related technologies and ultimately achieving technology independence.

In 2009, with the export of its nuclear power plants to the UAE, Korea joined the group of NPP exporters.

In the process, nuclear cooperation with international organizations, in particular the IAEA, has undoubtedly been a great source of support.

Yet, the global community is facing a variety of challenges and tasks to overcome.

The most critical issue, needless to say, is nuclear safety.

Nuclear power plant accidents that took place around the world have drawn the world's attention to the double-sidedness of nuclear power.

Korea is also paying close attention to nuclear safety, especially after we experienced

the biggest earthquake recorded in Korea on September 12 of last year.

As the earthquake took place in the southeastern part of our country where a number of nuclear power plants are clustered, nuclear safety has emerged as a national priority.

Nuclear safety is also a subject of social conflicts, which governments have to make their best efforts to address.

For instance, Korea recently experienced a great deal of controversy over the construction of two new nuclear power plants, Shin-Kori Unit 5 and 6, which are planned to be built in an area already clustered with multiple reactors.

Considering such controversies, the government ultimately decided to hold a public deliberation on the pros and cons of stopping the construction of Shin-Kori Unit 5 and 6.

During the deliberation, a panel of almost 500 citizens, from teenagers to seniors, carefully studied and earnestly debated the issue.

With more than 98% participation in the final opinion polling, the panel recommended to resume the construction.

It demonstrated the true essence of deliberative democracy.

The whole process of deliberation has been an opportunity to make Korea's democracy even more mature and create a new model for resolving social controversies.

To fully utilize the benefits of nuclear power while enhancing public acceptance, safety must come first.

Based on its accumulated technologies and experience, Korea is imposing more stringent safety standards on reactors in operation and expanding investment in safety.

Taking all these facts into consideration, Korea would like to encourage the IAEA member states to conduct joint research and enhance cooperation on safe operation.

For its part, Korea will share its tangible and intangible assets, such as its experience in NPP construction and operation as well as the supply chain of the nuclear industry, with others.

Korea is also willing to work together with the international community in developing and constructing small modular reactors and research reactors.

Moreover, we will lay a groundwork to enhance the safe and peaceful use of nuclear power.

The starting point of this is the Barakah project, which you saw first hand yesterday.

In the middle of the barren desert in the UAE, Korean and UAE companies are safely constructing the Barakah nuclear power plants "on budget and on time."

This clearly demonstrates how our outstanding nuclear technologies and experiences can be valuable assets to the global community.

For a well-rounded development of the nuclear industry, safe decommissioning is also critical.

In June of this year, the permanent shutdown of Kori Unit 1, the first nuclear power plant introduced in Korea, provided us an opportunity to develop related technologies to venture into the decommissioning industry.

Korea's experience in construction and decommissioning will increase our competitiveness across the entire nuclear cycle and eventually enhance cooperation with other countries in both areas.

In the long-term, increasing the use of energy sources that complement nuclear power will be critical in achieving sustainable nuclear development.

As for Korea, in addition to the 24 reactors now in operation, 4 more will be constructed and another 1 shut down, making a total of 27 reactors in operation by the end of this Administration of President Moon.

Nuclear accounts for 30% of Korea's power generation, easily surpassing the world average of about 10%, while renewable energy stands far below the OECD average of about 24%.

Against this backdrop, Korea will gradually reduce our dependence on nuclear power over a period of more than 60 years.

In doing so, we will take a long-term perspective to reinforce the advantages of

nuclear power while harmoniously implementing an energy transition policy, including the expansion of renewables.

When Korea's leading ICT is combined with our efforts to develop the renewable energy industry, it will surely create a variety of innovative businesses that will make good use of energy platforms.

Korea will also be a key player in the new industries of future energy sources, such as renewables, and closely cooperate with the global community.

I firmly believe there is a great room for cooperation among the IAEA member states in an array of areas, including safe operation and decommissioning technology.

In this light, Korea looks forward to closely working together with the IAEA member states in sharing Korea's experience in NPP operation and energy policies, such as the energy transition.

Thank you for listening.