Opening Remarks The 5th Seoul Climate-Energy Conference

Good morning! Distinguished guests, ladies and gentlemen,

It is my great pleasure to welcome all the participants of the 2018 Seoul Climate-Energy Conference on "Hothouse Earth. How to Mobilize the Change for Our Sustainable Future." Thank you for joining us.

I would like to extend my special gratitude to our distinguished participants including:

- Chairman Chang-Hee Kang of the Climate Change Center,

Former Speaker of the National Assembly and Former Minister of Science and Technology,

- Chairperson Jung-OoK Kim of the National Committee on Green Growth,
- Vice Minister of Strategy and Finance Hyung-Kwan Ko,
- Vice Minister of Environment Chun-Kyu Park,
- Climate Change Ambassador of Ministry of Foreign Affairs Yeon-Chul Yoo,
- Deputy Minister of Trade, Industry and Energy Young-Joon Joo,
- Mr. Jong-Kap Kim, CEO of Korea Electric Power Corporation,
- Dr. Frank Rijsberman, Director General of the Global Green Growth Institute,
- Dr. Kilapart Ramakrishna, Strategy Head of the Green Climate Fund,
- Mr. Finn Mortenson, Executive Director of the State Green, Denmark.

I also would like to thank and congratulate the Head of the KAIST Graduate School of Green Growth, Professor In Young- Hwan and the Chairman of the Coalition for Our Common Future, Professor Kim Sang-Hyup, for making this conference happen.

KAIST and the Coalition for Our Common Future have co-hosted this conference since 2014 to seek inclusive green growth and sustainable development. This year's conference will reflect new trajectories for climate systems aligned with financing, technological innovations, policies for the Asia Super Grid, Partnering for Green Growth and the Global Goals (P4G) Summit and our key tasks of the COP 24 in Kotowice in Poland.

Distinguished guests,

Climate change is no longer a threat, but a certainty. There are many complex global issues; however, this is the sole pending agenda which unites us. As we share the globe, we share the future together.

We passed through a record-breaking summer heat wave, wildfires, hurricanes of historic intensity, earthquakes, and rising sea levels this year. The extreme weather we experienced alerts us that our planet is entering the 'Hothouse Earth' state.

If 'Hothouse Earth' becomes a reality, it will upend the natural system of the Earth. Avoiding this fiasco requires a new direction with many trajectories for climate change including de-carbonization, behavioral changes, technological innovations, new governance, and new social values.

I look forward to hearing more on these provocative issues from today's speakers such as Dr. Katherine Richardson, Professor of Copenhagen University, one of the key authors of "Trajectories of the Earth System in the Anthropocene."

Last month, the International Panel on Climate Change (IPCC) adopted a special report on "The Global Warming of 1.5°C." in Song-Do, Korea. The report predicts that if we limit global warming to 1.5°C above pre-industrial levels compared to 2°C, we could save the lives of 10 million people.

I would like to recall the words of Professor Steve Chu, a Nobel laureate and one of our speakers today, who said, "The climate is changing. The proper political debate would be how to deal with these risks."

In that context, it is quite notable that President Moon Jae In also stressed the importance of green growth for pursuing the inclusive and innovative development of Korea while attending the P4G Summit in Denmark last month.

I hope that the Fourth Industrial Revolution will serve as opportunity to address the imbalances and inequalities that the past industrial revolutions created. In that sense, green growth and sustainable development will be another driving force for creating new economic value. I would like to stress three necessities to better respond this issue: Collaboration, Convergence, and Caring. The first is collaboration.

Climate change and energy issues involve the complex intersection of disciplines, interwoven with geopolitics and the global economy. This issue calls for global collaboration to manage the impacts and mitigate the risks.

We also need to work with partners in both the public and private sectors in developing and emerging countries around the world to put green growth at the center of their economic planning.

KAIST has collaborated with many global partners for R&D on sustainability. Researchers are making significant progress on CO₂ capture, conversion, and storage. The Graduate School of Green Growth is working closely with the Global Green Growth Institute (GGGI) and the Green Climate Fund, which are global platforms for sustainability.

The second is convergence.

Megatrend of the Fourth Industrial Revolution is characterized by hyperconnectivity, super-intelligence, and meta-convergence. New knowledge and innovation happens through the meta-convergence. Especially dealing with climate change issue, research without boundaries will make a real impact to improve the lives of the people and the globe.

In this regard, the Graduate School of EEWS (Energy, Environment, Water, and Sustainability) and the KI, a multi-and interdisciplinary research hub of KAIST, carry out innovative convergent research for green growth, sustainability, biomass, health care, and many other projects.

The most important mission of universities is to educate young people for the future. We should prepare them to adapt to the megatrends of the Fourth Industrial Revolution.

At KAIST, we attract and educate the best students from Korea and around the world. We provide them with a multidisciplinary education and a creative educational environment. Our students will have refined judgment with in-depth knowledge of the scientific and technical sides of complex problems as well as the economic, political, historical, and ethical dimensions.

The last necessity is a caring spirit.

Inclusive growth and social inclusion are keywords for this global world as well as Korea. Especially for addressing this complex global issue, the power of partnerships and a caring spirit will ensure strengthened socio-economic resilience and economic growth. For that, we should instill a driving sense of global citizenship that reinforces the fundamental truth that we all share this globe and must grow together. Without a caring spirit, we cannot achieve human prosperity.

It is my sincere hope that the expertise, visions, and contributions of the insightful leaders who are taking part in this conference will create new momentum for global action and greater resilience toward our shared future.

Let me close my speech here by wishing you all future success.

Thank you very much.

November 16, 2018

Sung-Chul Shin President of KAIST