

2017 Seoul Climate-Energy Conference

November 24, 2017

Opening Remarks

Good morning! Distinguished guests, ladies and gentlemen,

It is my great pleasure to welcome all the participants of the 2017 Seoul Climate - Energy Conference on “Creating New Momentum for the Paris Agreement and Sustainable Future.” Thank you for joining this conference.

In particular, I would like to extend my special gratitude to the distinguished participants including Former UN Secretary General Ban Ki-Moon, Congressman Song Young-Gil, Governor of Jeju Won Hee-Ryong, Executive Director of the Green Climate Fund Howard Bamsey, Director General of the Global Green Growth Institute Frank Rijsberman, Chair of Executive Board at Renewable Energy Institute Tomas Kaberger, for taking time out of your busy schedules. I also thank renowned scholars, policy makers, business leaders and ambassadors who are with us today.

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

Particularly, I would like to extend my deepest appreciation to our keynote speaker Former UN Secretary-General Ban. His distinguished leadership and efforts to address climate change as the chief of the UN led to 195 countries signing the Paris Agreement in 2015, which took effect in November 2016. This is a landmark accord for the entire planet. He created a framework and laid out concrete steps for a low-carbon future and greater resilience to climate change.

This conference has been co-hosted by KAIST and the Coalition for Our Common Future since 2014 to seek inclusive green growth and sustainable development. This year’s conference will focus on Korea’s low-carbon energy transition and the Fourth Industrial Revolution to be aligned with green transportation and smart cities.

Leaders from both the private and public sectors will review the progress of the decisions made by the UN Framework Convention on Climate Change (UNFCCC) COP23 in Bonn, Germany. I believe that the discussions held by the insightful leaders attending this conference will lead us to create new momentum for the sustainable future of the generations to come.

Distinguished guests, ladies and gentlemen.

Climate change is one of the most pressing global issues we face. Secretary General Ban once said, “There is no Plan B as there is no Planet B.” As such, climate change poses an immediate and long-term threat to our planet. It also poses significant risks, not only to the environment, but to our society and the global economy.

It gives us a sense of urgency, even more for the young generations. According to a recent World Economic Forum survey, more than 91% of young people agree that humans are responsible for climate change. And half of them see climate change as more threatening than war.

Today’s changing climate and global warming can be attributed directly to the past three industrial revolutions. While this propelled human progress to extraordinary levels, it came at the extraordinary cost of creating peril for our environment and all living things.

This seems to be the paradox that defines the world today. And we see new challenges that we need to address. As industrialization continues, we must not make future generations pay the cost of this Fourth Industrial Revolution.

According to the International Energy Agency, the increasing use of digital technologies, urbanization, and the growth of populations will expand the global energy needs by 30% by 2040. And electricity, the most flexible type of energy essential for digital technologies, is expected to account for 40% of the increase in global final energy consumption through 2040.

This is the same share of growth that oil held for the last 25 years. With economies having an increased reliance on electricity, global investments in electricity overtook those of oil and gas for the first time in 2016.

As such, climate change and energy issues involve the complex intersection of disciplines. Energy issues are increasingly interwoven with global politics, economics, and human progress. They require global action to manage the impacts and mitigate the risks.

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 values for the new industrial revolution. To better accomplish this, I would like to emphasize three important keywords, those are, innovation, collaboration, and speed.

First, innovation is definitely a priority for future success. In this hyper-connected global era, without innovation in every sector, it is hard to retain competence. Businesses and industries should reflect innovative initiatives for advancing practical solutions and public policy, especially for this challenging global issue.

Many institutions like KAIST have made sustainability initiatives that will lead the transition to a low-carbon future. KAIST has advocated green growth and sustainability, nurturing future leaders in this field for decades.

Since the early 2000s, KAIST has been taking the lead in research projects in the fields of EEWS (Energy, Environment, Water, and Sustainability) and green mobility such as OLEV (On-Line Electric Vehicle). Research on bio mass by Professor Lee Sang-Yup, who will also be a speaker of this conference, has already made international headlines.

Next is collaboration. In this era, industries are moving beyond a single discipline. Thus, to establish collaboration with the right partners in the government, industry, or universities, beyond borders across disciplines will be critical, especially in dealing with these kinds of global issues.

We, KAIST collaborated with many global partners for R&D on sustainability. For instance, Saudi Aramco, one of the world leading energy companies, established the CO₂ Management Center at KAIST. Researchers are making significant progress in their innovative research on CO₂ capture, conversion, and storage.

The Graduate School of Green Growth, a co-host of this conference, is working closely with the GGGI (Global Green Growth Institute), which is a global platform for sustainability. We also 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.

Finally, speed is more critical than ever. The scope and speed of the new transformation will be beyond our imagination. In this dynamic global environment, all of governances should be efficient enough to respond promptly to emerging issues.

Well, before closing my speech, I would like to take this opportunity to briefly introduce KAIST for some of the participants who are not familiar with our institute.

As the first alumnus president of KAIST, I am always excited and proud to talk about KAIST. As many of you already know, KAIST is the first and top science and technology university, founded in 1971 by the government. Since then, KAIST has produced over 58,000 graduates including 12,000 Ph.D.s. Approximately 23% of our graduates are taking up leadership positions in major industries, academia, and research institutes.

Our graduates have played a critical role in Korea's economic growth and they were key players in the development of the heavy and chemical industries, and IT revolution in Korea. I can tell you proudly that behind the miraculous achievement Korea has made during last 40 years, there were KAIST graduates.

Now, in this time of the Fourth Industrial Revolution, KAIST envisions becoming a world-leading university that creates global value. We are making every effort to contribute once again to the national economy and beyond through innovation, this time in the field of green growth, along with our global partners.

I hope that the issues of sustainability and balanced growth for economic and environmental value will become a major priority for the governments of every country. It is my sincere hope that the expertise, insights, and contributions of the leaders who are participating in this conference will create new momentum for global action and greater resilience toward our shared future. Thank you once again for your attendance.

Sung-Chul Shin

President, KAIST