



**5th INPRO Dialogue Forum on Global Nuclear Energy Sustainability
Long-term Prospects for Nuclear Energy in the post-Fukushima Era**

OPENING ADDRESS

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Vice Minister Cho, President Jung, Participants and Colleagues, Ladies and Gentleman,

On behalf of the International Atomic Energy Agency, I welcome you to the fifth INPRO Dialogue Forum on Global Nuclear Energy Sustainability, focusing on **Long-term Prospects for Nuclear Energy in the Post-Fukushima Era**.

It is my great pleasure to be here today. On behalf of the Agency, I wish to express our sincere appreciation to the Government of the Republic of Korea for hosting this meeting in Seoul. This is the first Dialogue Forum to be hosted by a Member State, and we hope that other countries will follow this excellent example.

I wish to convey my special thanks to Vice Minister Dr Cho and the Ministry of Education, Science and Technology, and to President Dr Jung and the Korean Atomic Energy Research Institute for this excellent arrangement and for their warm and generous hospitality.

I also express our thanks to all speakers, who have accepted our invitation, and to the participants in this meeting. We look forward to your input and active contributions to make this meeting a successful one.

Ladies and gentlemen,

The world needs to produce huge quantities of energy in the coming decades to meet the needs of a growing population and to raise the living standards of billions of people who do not have access to cheap, plentiful electricity. The production of this energy at a reasonable cost, without environmental damage and in a safe and secure manner, is one of this century's most challenging undertakings.

Nuclear energy has the potential to make a significant contribution to meeting the world's growing energy needs. To be a viable contributor to sustainable development, nuclear power must be safe. Since last year, any discussion of safety has focused largely on the accident at the Fukushima Daiichi nuclear power plant in Japan, caused by an earthquake and tsunami of unprecedented severity.

After the accident, many people thought that the growth of nuclear power would come to an end. But the factors that contributed to increased interest in nuclear power before the Fukushima

accident have not changed. They include increasing global demand for energy, concerns about climate change, rising fossil fuel prices and energy security.

The Agency's post-Fukushima projections predict that the accident will slow growth in nuclear power but not reverse it. A slight dip in the near term will be due to policy changes in some countries, but nuclear power will remain an important option for many countries in the coming decades. Most of the growth will occur in countries that already have operating nuclear power plants, such as China, India and Russia.

Most countries that had strongly indicated their intentions to introduce nuclear power are continuing as planned, except with the added step of incorporating the lessons from Fukushima in their programmes. Only a few countries have cancelled or revised their plans; others have taken a "wait and see" approach.

Nuclear safety will improve, as we work to learn these lessons from Fukushima. In September of last year, during the 55th General Conference of the Agency, all 151 Member States approved an Action Plan on Nuclear Safety.

The purpose of the Action Plan is to implement a programme of work to strengthen the global nuclear safety framework, and it includes 12 main actions, each with corresponding sub-actions. The Action Plan requires the commitment of all stakeholders. This is particularly important for the nuclear safety in all States that already have or that are embarking on a nuclear power programme. The Action Plan impacts on the activities of the Agency's Department of Nuclear Safety and Security and the Department of Nuclear Energy, as we focus our work on strengthening nuclear safety.

Ladies and gentlemen,

The International Project on Innovative Nuclear Reactors and Fuel Cycles – INPRO – has an important role to play sustainable nuclear energy development and in enhancing technical and institutional innovations through international cooperation.

INPRO provides a holistic and global view of nuclear energy systems and relevant innovations. The key focus is on achieving global nuclear sustainability. The projects and studies assist Member States to develop technical and institutional innovations that can be incorporated into a nuclear energy system to reduce the risk of severe accidents during natural disasters.

The current fleet of reactors and the once-through nuclear fuel cycle will not allow nuclear energy to reach its potential contribution to future sustainable energy supply scenarios. INPRO studies show that collaboration among countries, in particular in the area of nuclear fuel cycle, may play a crucial role in achieving sustainable nuclear energy systems within this century.

It is a pleasure to see here representatives of countries across the spectrum of nuclear energy deployment – those who are just considering an energy supply strategy that includes a nuclear energy option, those committed to establishing a nuclear energy program in the near term, and those who are expanding an existing programme which may include fast reactors and a closed fuel cycle. We all share the wish to assure that nuclear energy can play a meaningful role in sustainable energy supply throughout this century and beyond.

The Agency offers a package of integrated services for embarking countries which provides support on short term nuclear energy planning and on long range strategic planning. The services combine capacity building for energy system analysis, undertaken by the Planning and Economic Studies

Section, integrated nuclear infrastructure review missions organized by the Integrated Nuclear Infrastructure Group, and INPRO's nuclear energy system assessments using the INPRO methodology.

The INPRO Dialogue Forum was established in 2010 and since then, four successful meetings were held. This Forum in Seoul offers a unique opportunity for policy makers and all nuclear stakeholders to engage in open discussions and share information, perspectives and knowledge.

The Dialogue Forum will discuss and identify key issues concerning nuclear power deployment in this century, enhancing transparency and effectiveness of communication with all stakeholders, and addressing the role of innovation in increasing the safety of nuclear technology. We will hear many presentations by Member States on their long term national perspectives for nuclear energy, both from countries with and without nuclear energy programmes.

The presentations and discussion should guide us how to work towards ensuring the long range sustainability of nuclear energy on the national, regional and global level, in the light of lessons learned from the Fukushima accident. The outcome of this Dialogue Forum will provide an important input to INPRO's programme and assist us in further identifying areas of focus and opportunities.

Vice Minister Cho, President Jung, ladies and gentlemen,

In closing, I wish to express our sincere appreciation for the financial support from the Governments of the Republic of Korea and the United States, and the Agency's Department of Technical Cooperation, which have made this Dialogue Forum possible.

I also thank the organizing team at KAERI and the staff of the INPRO Group at the Agency for their excellent work in preparing this meeting.

The Agency will continue to support Member States in all aspects of the peaceful uses of nuclear energy. It is my firm belief that nuclear energy – when managed safely and responsibly – has a major role to play in meeting the world's energy needs sustainably.

I wish you all a successful and enjoyable meeting.

Thank you.