INPRO Dialogue Forum on the
Potential of Nuclear Energy to Support the
Sustainable Development Goals,
Including Climate Change Mitigation
(14th INPRO Dialogue Forum)

IAEA Headquarters
Vienna, Austria

6–8 June 2017

Ref. No.: I4-TM-54665

Information Sheet

A. Background

The International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO) was launched in the year 2000, based on resolution GC(44)/RES/21 of the International Atomic Energy Agency (IAEA) General Conference. The objective of INPRO is to help ensure that nuclear energy is available in the twenty-first century in a sustainable manner. Moreover, INPRO seeks to bring together all interested Member States, including technology holders and users, so that they can jointly consider actions for achieving the desired innovations.

Potential of Nuclear Energy to Support the Sustainable Development Goals, Including Climate Change Mitigation is the 14th INPRO Dialogue Forum.

Additional details on the INPRO project are available on the INPRO website: www.iaea.org/INPRO.

Since the 1992 United Nations Conference on Environment and Development held in Rio de Janeiro, the international community has pursued achieving the goals of sustainable development. In the process of these efforts, countries adopted the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs). In addition, at the 21st session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21) held in Paris in December 2015, the Paris Climate Change Agreement was adopted. Information on the SDGs may be found at: http://www.un.org/sustainabledevelopment and information on the 2015 Paris Agreement may be found at: http://unfccc.int/paris_agreement/items/9485.php.

On 4 November 2016, the Paris Agreement officially entered into force, addressing the need to limit the rise of global temperatures and requiring the States Parties to the Agreement to take action, while recognizing their differing situations and circumstances. Most countries had officially submitted their own intended nationally determined contributions before the negotiations for the Paris Agreement, and they now have an obligation to implement these plans. Furthermore, the countries are obliged to submit new nationally determined contributions every five years as of 2020. This historic Agreement provides an opportunity for countries to strengthen the global response to the threat of climate change by keeping the increase in global average temperature this century to well below 2°C, and to pursue efforts to limit the temperature increase even further to 1.5°C above pre-industrial times.

After the adoption of the SDGs and the Paris Climate Change Agreement, the development of sustainable and low carbon energy has become a key issue, and nuclear energy could play a significant role in realizing the objectives of these initiatives.

The IAEA plays an active part in helping the international community achieve the 17 SDGs. It helps countries to use nuclear and isotopic techniques and thereby contribute directly to attaining nine of the 17 Goals. Additional details on the IAEA’s SDG-related activities are available on the IAEA website: https://www.iaea.org/about/overview/sustainable-development-goals-sdgs.

Also in this connection, the IAEA held in 2016 a Scientific Forum with the theme “Nuclear Technology for the Sustainable Development Goals”. During the Scientific Forum, panellists agreed that combatting climate change would be difficult without the expansion of nuclear energy. They also emphasized the large scale demand for low carbon electricity, and that nuclear power capacity had to be increased to meet this demand. Additional details on the Scientific Forum are available on the IAEA website: https://www.iaea.org/about/policy/gc/gc60/scientific-forum/programme.

For these reasons, the INPRO Steering Committee, at its 25th meeting in November 2016, endorsed the organization of an INPRO Dialogue Forum on the Potential of Nuclear Energy to Support the Sustainable Development Goals, Including Climate Change Mitigation to be held in 2017.

The INPRO Dialogue Forums offer a platform for technology holders, technology users and other stakeholders to share information, perspectives and knowledge on issues related to the development of sustainable nuclear energy. The Dialogue Forums focus on topics and issues relevant to global nuclear energy sustainability in the twenty-first century, long term nuclear energy strategies and the role of nuclear technology innovations. Information on the Dialogue Forums may be found at: http://www.iaea.org/INPRO/DFs/index.html.

The international community agreed, at the 22nd session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP22) held in Marrakech, Morocco, in November 2016, on a common policy and effective implementation plan to establish the new cooperation system under the Paris Climate Change Agreement. The 14th INPRO Dialogue Forum will be a good opportunity to discuss what role nuclear power currently plays, how nuclear power may
contribute in the future, and how to form a broader consensus on the role of nuclear power in meeting the SDGs, including climate change mitigation.

The INPRO Dialogue Forum on the Potential of Nuclear Energy to Support the Sustainable Development Goals, Including Climate Change Mitigation, which is the 14th INPRO Dialogue Forum, will be held from 6 to 8 June 2017 at the IAEA’s Headquarters in Vienna, Austria. About 70 participants are expected. The Dialogue Forum is being organized by the INPRO Section in partnership with the Planning and Economic Studies Section of the Division of Planning, Information and Knowledge Management in the Department of Nuclear Energy. Moreover, the Nuclear Infrastructure Development Section, the Nuclear Power Engineering Section and the Nuclear Power Technology Development Section of the Division of Nuclear Power in the Department of Nuclear Energy will also play important roles at this event. The Dialogue Forum will include keynote speeches, lectures and presentations by the invited participants, and discussions among participants representing interested Member States.

B. Objectives

The objectives of the 14th INPRO Dialogue Forum are as follows:

- To familiarize Member States with the role of nuclear energy systems in achieving the United Nations SDGs, including support for actions to mitigate climate change;

- To emphasize the importance of the existing nuclear power fleet as the second largest source of low carbon electricity (with the second lowest life cycle carbon emissions per kilowatt-hour), and to examine the issues involved in the proper, safe and secure life cycle management of these critical energy assets;

- To consider the possibility of an increased role of evolutionary nuclear power systems (advanced water cooled reactors), small modular reactors, nuclear cogeneration, and next generation nuclear power systems, as well as associated advanced fuel cycles;

- To review approaches for enhancing public acceptance of nuclear power as a significant contributor to sustainable development and climate change mitigation;

- To familiarize Member States with the IAEA’s present activities and services directly related to these objectives, such as plant life management models and services, the Integrated Nuclear Infrastructure Review service, construction review service, Nuclear Energy System Assessments using the INPRO methodology, energy planning tools, technology support tools, etc.;

- To identify the Member States’ interests in potential IAEA actions to support them in developing their national programmes to achieve the SDGs and address the challenges of mitigating climate change; and

- To enable technology holders and countries to exchange information on national and international nuclear energy system related programmes relevant to the SDGs and climate change mitigation.
C. Expected Output

The expected outputs of the Dialogue Forum are:

- Enhanced understanding of the present and future role of nuclear power in helping to achieve the SDGs, including climate change mitigation;
- Enhanced understanding of the increased role of evolutionary nuclear systems in achieving the SDGs;
- Enhanced understanding of the services that the IAEA can offer to Member States in the area of nuclear energy systems;
- Identification and analysis of Member States’ demands for coping with climate change; and
- Identification of IAEA actions necessary to help Member States achieve the SDGs.

D. Expected Participation

The INPRO Dialogue Forum is open to participants from the following IAEA Member States:

Algeria, Argentina, Armenia, Australia, Austria, Bangladesh, Belarus, Belgium, Brazil, Bulgaria, Canada, Chile, China, Croatia, Czech Republic, Egypt, Estonia, Finland, France, Germany, Ghana, Hungary, India, Indonesia, Israel, Italy, Japan, Jordan, Kazakhstan, Kenya, Republic of Korea, Latvia, Lithuania, Malaysia, Mexico, Netherlands, Nigeria, Pakistan, Philippines, Poland, Romania, Russian Federation, Saudi Arabia, Serbia, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Thailand, Tunisia, Turkey, Ukraine, United Arab Emirates, United Kingdom, United States of America, Bolivarian Republic of Venezuela, and Viet Nam,

as well as from the following organizations:

- the European Atomic Forum (FORATOM), the European Commission (EC), the Generation IV International Forum (GIF), the International Framework for Nuclear Energy Cooperation (IFNEC), the Multinational Design Evaluation Programme (MDEP), the Nuclear Energy Agency of the Organisation for Economic Co-operation and Development (OECD/NEA), the Western European Nuclear Regulators Association (WENRA), the World Association of Nuclear Operators (WANO), and the World Nuclear Association (WNA).

All persons wishing to participate in the Dialogue Forum are required to complete the attached Participation Form (Form A). Designations by a formal letter with the completed Participation Form attached should be submitted to the IAEA through the established official channels (e.g. Ministry of Foreign Affairs or National Atomic Energy Authority; or by an organization invited to participate), indicating as a reference number: **I4-TM-54665**. Designations should be submitted for the attention of the Scientific Secretaries of the Dialogue Forum, Mr Kyungwon Rho and Mr Alexey Grigoriev (please see their contact details in Section H below). The full names and complete contact details (including postal address, telephone/fax numbers, and email address) of designated participants should be provided. The designations with the completed Participation Forms attached should reach the IAEA not later than **19 May 2017**. They should be sent to the Scientific Secretaries of the Dialogue Forum by email to: K.Rho@iaea.org and A.Grigoriev@iaea.org, with a copy to: L.Tagani@iaea.org. When completing the Participation Form please indicate whether you are planning to give a presentation, state the topic(s) that would be addressed in your presentation, and provide a brief explanation (about five to seven lines) of the content of the proposed presentation. The Scientific Secretaries may contact...
participants to discuss the content of their presentations. Also, in accordance with the IAEA’s policy, all presentations and other files should be uploaded on a computer used at a meeting room in advance. Therefore, the presentations and any other supplementary files should be sent to the Scientific Secretaries by email not later than 26 May 2017 (Microsoft PowerPoint files are preferable, although PDF format may also be used). When submitting the files electronically, please note that the size of a message should not exceed 5 MB.

The Dialogue Forum is, in principle, open to all officially designated persons. The IAEA, however, reserves the right to limit participation should this become necessary due to limitations imposed by the available seating capacity. It is therefore recommended that interested persons take the necessary steps to obtain their official designation as early as possible.

E. Working Language

The working language of the Dialogue Forum will be English with no interpretation provided. All communications, abstracts and papers must be submitted in this language.

F. Venue

The Dialogue Forum will commence at 9.30 a.m. on Tuesday, 6 June 2017, in Board Room C on the Fourth Floor of the C Building at the Vienna International Centre (VIC). Participants are requested to arrive at Checkpoint 1/Gate 1 of the VIC one hour before the start of the Dialogue Forum on the first day, in order to allow sufficient time for issuing of grounds passes, which are necessary for official visitors to the VIC.

G. Visas

Participants who need a visa for entering Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria as early as possible.
H. Organization

Official correspondence with regard to the technical aspects of the Dialogue Forum should be addressed to the Scientific Secretaries:

**Mr Kyungwon Rho**
INPRO Section  
Division of Nuclear Power  
Department of Nuclear Energy  
International Atomic Energy Agency  
Vienna International Centre  
PO Box 100  
1400 VIENNA  
AUSTRIA

Tel.: +43 1 2600 22818  
Fax: +43 1 26007  
Email: K.Rho@iaea.org

**Mr Alexey Grigoriev**
INPRO Section  
Division of Nuclear Power  
Department of Nuclear Energy  
International Atomic Energy Agency  
Vienna International Centre  
PO Box 100  
1400 VIENNA  
AUSTRIA

Tel.: +43 1 2600 24235  
Fax: +43 1 26007  
Email: A.Grigoriev@iaea.org

Official correspondence with regard to administrative issues should be addressed to the Administrative Secretary:

**Ms Lorena Tagani**
INPRO Section  
Division of Nuclear Power  
Department of Nuclear Energy  
International Atomic Energy Agency  
Vienna International Centre  
PO Box 100  
1400 VIENNA  
AUSTRIA

Tel.: +43 1 2600 26423  
Fax: +43 1 26007  
Email: L.Tagani@iaea.org
# Participation Form

**INPRO Dialogue Forum on the Potential of Nuclear Energy to Support the Sustainable Development Goals, Including Climate Change Mitigation**

**IAEA Headquarters, Vienna, Austria**

6–8 June 2017

To be completed by the participant and sent to the competent official authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA, or National Atomic Energy Authority) of his/her country for subsequent transmission to the International Atomic Energy Agency (IAEA), Vienna International Centre, PO Box 100, 1400 Vienna, Austria, either electronically by email to: [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org) or by fax to: +43 1 26007 (no hard copies needed). (Kindly send also a copy per email to: [K.Rho@iaea.org](mailto:K.Rho@iaea.org), [A.Grigoriev@iaea.org](mailto:A.Grigoriev@iaea.org) and [L.Tagani@iaea.org](mailto:L.Tagani@iaea.org)).

Participants who are members of an invited organization can submit this form to their organization for subsequent transmission to the IAEA.

**Deadline for receipt by IAEA through official channels: 19 May 2017**

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Do you intend to submit a paper?  
Yes [ ]  No [ ]

Would you prefer to present your paper as a poster?  
Yes [ ]  No [ ]

Title:
Grant Application Form

INPRO Dialogue Forum on the Potential of Nuclear Energy to Support the Sustainable Development Goals, Including Climate Change Mitigation

IAEA Headquarters, Vienna, Austria

6–8 June 2017

To be completed by the applicant and sent to the competent official authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA, or National Atomic Energy Authority) of his/her country for subsequent transmission to the International Atomic Energy Agency (IAEA), Vienna International Centre, PO Box 100, 1400 Vienna, Austria, either electronically by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). (Kindly send also a copy per email to: K.Rho@iaea.org, A.Grigoriev@iaea.org and L.Tagani@iaea.org).

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2. Recent employment record (starting with your present post):

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3. Description of work performed over the last three years:

4. Institute’s/Member State’s programme in field of Dialogue Forum

Date: _____________________________

Signature of applicant: _____________________________

Date: _____________________________

Name, signature and stamp of Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority _____________________________