

Technical Meeting

of the collaborative project "Analysis Support for Enhanced Nuclear Energy Sustainability Pilot Study on Potential of Innovative Nuclear Installations to Support Multi-recycling of Fuel in a Nuclear Energy System (STEP FORWARD)

Hosted by the Government of Indonesia

through the
Universitas Gadjah Mada
and virtual participation via Cisco Webex

Yogyakarta, Indonesia 06-10 October 2025

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Information Sheet

Introduction

The International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO) launched the "Analysis Support for Enhanced Nuclear Energy Sustainability (ASENES) Pilot Study on Potential of Innovative Nuclear Installations to Support Multi-recycling of Fuel in a Nuclear Energy System" (STEP FORWARD) project based on recommendations by INPRO Member States during the 30th INPRO Steering Committee Meeting in October 2021.

The STEP FORWARD project applies the ASENES service package and national tools to the evaluation of nuclear energy system (NES) scenarios. These NESs involve deployment of an initially small number of innovative nuclear installations to support multi-recycling of spent fuel along with operating evolutionary reactors with thermal neutron spectrum. An important objective is to analyse, compare, and present various NES and evolutionary scenarios that achieve a meaningful reduction of spent nuclear fuel inventories and enhance utilisation of fissile material resources through multi-recycling of fuel. The project examines parameters, such as lead and lag times, timely availability of fuel cycle services, and absence of peaking capacities in required nuclear fuel cycle enterprises. Additional investigations are in nuclear infrastructure, particularly scenarios involving nuclear trade between technology holders that provide back-end fuel cycle services and technology users of these services. The project had a virtual preparatory consultants' meeting in February 2022, a start-up technical meeting in December 2022. This is the ninth STEP FORWARD project meeting.

As of April 2025 Bangladesh, China, Egypt, France, Ghana, Indonesia, Kenya, Pakistan, the Republic of Korea, the Russian Federation, Thailand, Türkiye, USA and Ukraine were participants of the project, and Algeria, Mexico and Viet Nam are project observers.

Objectives

The purpose of the event is to discuss and review the national case studies and the first draft of the project report by the participants in applying the ASENES service package and national or other tools relevant to the evaluation of NES and scenarios involving small numbers of innovative nuclear energy installations to enable the multi-recycling of fuel in a complete NES (STEP FORWARD project).

Target Audience

This technical meeting will pursue broad participation from INPRO members within the following groups.

- Experts participating in the STEP FORWARD Collaborative Project and familiar with INPRO ASENES service package and tools, including observes and members of the project Editorial Committee.
- Technical experts and managers working in national research laboratories and ministries, responsible for development and implementation of national programmes of innovative technology development for nuclear energy, strategic energy planning, and international cooperation (nuclear trade).
- Participants from newcomer countries, especially countries planning to become an important part
 of the regional and global NES.

Working Language(s)

The working language of the event is English. Participants must submit all communications and presentations in English.

Expected Outputs

The expected outputs of the technical meeting:

- Review of the national case studies progress (since CM April 2024);
- Review of the status, structure and the first draft of the project report, including:
 - A) The first draft of the new Chapter "Nuclear Energy Systems: Reactor and Fuel Cycle Technologies Supporting the Multi-recycling of Nuclear Materials"; including:
 - B) The first draft of the survey results Chapter, regarding Member States priorities for nuclear material recycling research;
 - C) The first draft of new Appendix "Nuclear Fuel Recycling Modelling and Performance Assessment";
- Discussion and suggestions for possible adjustments initial project documents (ToR, outlines) due to inclusion of the new project participants, its scope and additions to the structure of the final report;
- Review of the current requirements for publication activities in IAEA to be taken into account when preparing case studies by the authors;
- Updated Scope and Schedule of Work;
- Draft meeting report.

Structure

The general outline of the meeting will be project status to date and presentations by participants on their national case studies. Secretariat will present status of the project, including first draft of the project report.

After the presentations there will be discussions and brainstorming to formulate the findings and preliminary conclusions for the project report.

The meeting will conclude with an update to the scope and schedule of work, particularly for the drafting the project report for publishing in accordance with IAEA requirements.

Participants will contribute to drafting the meeting report.

Participation and Registration

All persons wishing to participate in the event have to be designated by an IAEA Member State or should be members of organizations that have been invited to attend.

In order to be designated by an IAEA Member State or invited organization, participants are requested to submit their application via the InTouch+ platform (https://intouchplus.iaea.org) to the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) or organization for onward transmission to the IAEA by **5 July 2025**, following the registration procedure in InTouch+:

- 1. Access the InTouch+ platform (https://intouchplus.iaea.org):
 - Persons with an existing NUCLEUS account can sign in to the platform with their username and password;
 - Persons without an existing NUCLEUS account can register <u>here.</u>
- 2. Once signed in, prospective participants can use the InTouch+ platform to:
 - Complete or update their personal details under 'Complete Profile' and upload the relevant supporting documents;
 - Search for the relevant event under the 'My Eligible Events' tab;
 - Select the Member State or invited organization they want to represent from the drop-down menu entitled 'Designating Authority' (if an invited organization is not listed, please contact InTouchPlus.Contact-Point@iaea.org);
 - If applicable, indicate whether financial support is requested and complete the relevant information (this is not applicable to participants from invited organizations);
 - Based on the data input, the InTouch+ platform will automatically generate the Participation Form (Form A) and/or the Grant Application Form (Form C);
 - Submit their application.

Once submitted through the InTouch+ platform, the application, together with the auto-generated form(s), will be transmitted automatically to the required authority for approval. If approved, the application, together with the applicable form(s), will automatically be sent to the IAEA through the online platform.

NOTE: The application for financial support should be made, together with the submission of the application, by 5 July 2025.

For additional information on how to apply for an event, please refer to the <u>InTouch+ Help</u> page. Any other issues or queries related to InTouch+ can be sent to <u>InTouchPlus.Contact-Point@iaea.org</u>.

Selected participants will be informed in due course on the procedures to be followed with regard to administrative and financial matters.

Participants are hereby informed that the personal data they submit will be processed in line with the Agency's Personal Data and Privacy Policy and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required. The IAEA may also use the contact details of Applicants to inform them of the IAEA's scientific and technical publications, or the latest employment opportunities and current open vacancies at the IAEA. These secondary purposes are consistent with the IAEA's mandate. Further information can be found in the Data Processing Notice concerning IAEA InTouch+ platform.

Presentations and Papers

The meeting will include presentations from IAEA Secretariat, project participants, representatives of the host country, invited experts and observers.

Project participants should deliver presentations highlighting case studies, including scope of work, findings and results. Participants should submit a proposal of the case studies results for inclusion in the main chapters of the project report.

Expenditures and Grants

No registration fee is charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of participants in the event. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain participants. Upon specific request, such assistance may be offered to normally one participant per country, provided that, in the IAEA's view, the participant will make an important contribution to the event.

The application for financial support should be made, together with the submission of the application, by 5 July 2025.

Venue

The event will be held at the Universitas Gadjah Mada, Jl. Grafika 2, Yogyakarta 55281, Indonesia. Participants must make their own travel and accommodation arrangements.

The host organization will provide information on the meeting venue and logistics details including hotel accommodation offering reduced rates for attendees. The logistical information will be sent with the invitation letters.

Working sessions will be in person with support for virtual participation via Cisco Webex.

Visas

Participants who need a visa for entering Indonesia should submit the necessary application to the nearest diplomatic or consular representative of Indonesia, along with the invitation letter from the Agency.

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Subsequent correspondence on scientific matters should be sent to the Secretaries and correspondence on other matters related to the event to the Administrative Secretary.