



IAEA

International Atomic Energy Agency

Atoms for Peace and Development

**International Conference on the Safety of
Radioactive Waste Management, Decommissioning,
Environmental Protection and Remediation:
Ensuring Safety and Enabling Sustainability**

IAEA Headquarters

Vienna, Austria

6–10 November 2023

Organized by the

International Atomic Energy Agency (IAEA)

In cooperation with the

European Commission (EC)

European Bank for Reconstruction and Development

International Commission on Radiological Protection (ICRP)

OECD Nuclear Energy Agency (NEA)

Announcement and Call for Papers

A. Background

The International Atomic Energy Agency (IAEA) is an autonomous international organization within the United Nations system and is a global forum for scientific and technical co-operation in the peaceful uses of nuclear technologies. The IAEA develops, adopts, and provides for the application of safety standards, which serve as a global reference for protecting people and the environment from the harmful effects of ionising radiation and contribute to a harmonized high level of safety worldwide.

In line with its ‘Atoms for Peace and Development’ mandate, the IAEA also supports Member States in their efforts to achieve the Sustainable Development Goals¹. The 17 SDGs² are at the heart of the 2030 Agenda for Sustainable Development, which was adopted by all 193 countries of the UN General Assembly in September 2015. The UN SDGs represent a blueprint for sustainable development and a call for urgent action on the major issues humanity is facing. Many countries use nuclear science and technology to contribute to and meet their development objectives in areas including energy, human health, food production, water management and environmental protection. The use of these technologies contributes directly to nine of the 17 SDGs as shown in Figure 1.

Sustainable development in all its forms takes us towards the long-term goal of sustainability in all three dimensions: economic, social and environmental sustainability.

For the use of nuclear science and technology to be sustainable, it is necessary that its use is safe throughout its lifetime. This includes the safe management of radioactive waste (including spent nuclear fuel), environmental protection (including control of radioactive releases), the safe decommissioning of nuclear facilities, and the remediation of contaminated areas. Safe management of radioactive waste, environmental releases, decommissioning and remediation may also contribute to SDGs in their own right; protecting life on land, life below water and contributing to recycling and reuse of materials, objects and sites, as depicted in Figure 1.

¹ See, <https://iaea.org/about/overview/sustainable-development-goals>

² See, <https://sdgs.un.org/goals>



Figure 1: Schematic figure on how the safe management of radioactive waste, environmental releases, decommissioning, and remediation address the Sustainable Development Goals (UN SDGs).

Safety is a key component of sustainability; however, safety on its own might not be sufficient to enable sustainability. For example, the radiation protection principles of optimization of protection and safety set out in the IAEA General Safety Requirements Part 3³ take account of economic, societal, and environmental factors. These factors mirror the three pillars of sustainability, and it is necessary to integrate them with safety aspects in a holistic way in the decision-making process.

This conference will be an opportunity to present and discuss in an international forum the interrelationships between safety and sustainability and the progress made for the safe management of radioactive waste (including spent fuel management), environmental protection (including control of radioactive releases), decommissioning of nuclear facilities and remediation of contaminated areas.

At the same time, the conference is envisioned to help Member States recognize practical approaches for integrating the factors that contribute to environmental, societal, and economic sustainability, including safety. For example, how do governments ensure that policies for radioactive waste management enable sustainable use of nuclear technology; how do regulators accommodate a graded approach for the control of environmental releases to enable sustainable use of nuclear technology without compromising safety; and how do operators identify a safe and sustainable end state for decommissioning so that an installation can be released from regulatory control.

The conference will bring together safety and sustainability communities to share real examples of enhancing the synergies and managing the trade-off between conflicting factors.

B. Purpose and Objectives

The purpose of the event is to provide a forum for exchanging information, experiences, and anticipated future developments for keeping the highest levels of standards on safety and managing the

³ See, https://www-pub.iaea.org/MTCD/Publications/PDF/Pub1578_web-57265295.pdf

interrelationships between safety and sustainability, in the context of the themes and topics of the conference. The event will be focused on safety and on the existing interrelationships between safety and sustainability, will consider how these can be addressed in an integrated way and will identify pragmatic approaches for managing such interrelationships in practice.

While the conference will focus on presenting the progress made towards more sustainable approaches in the safe management of radioactive waste, decommissioning, environmental protection and remediation and their common aspects of safety, it will ultimately seek to:

- **Initiate and assist** the necessary dialogue between the safety and sustainability communities to assess and benefit from a holistic understanding of safety and sustainability.
- **Consider how to address** the relevant interrelationships in an integrated way.
- **Identify practical approaches** to managing the interrelationships in decision-making, from policymaking to implementation.

Previous IAEA conferences have addressed safety and sustainability of radioactive waste management, decommissioning, environmental protection, and remediation but this is the first conference conceived to address the relationship between the two and to explore the steps necessary for ensuring safety and enabling sustainability.

The conference will not address Security and Safeguards of nuclear materials, nor the interrelationships between these two fields.

C. Themes and Topics

Consistent with the objectives defined in Section B above, the conference will consider the themes and topics described below. These will be addressed by keynote speakers, invited presentations, topical oral and poster presentations.

The conference will discuss current experiences and potential for advances in integrating safety and sustainability in the context of managing radioactive waste (including spent fuel), decommissioning, environmental protection and remediation of contaminated areas. The themes and topics will include:

1. Introducing the overarching concepts of ensuring safety and enabling sustainability

Exchanging views on the key concepts and principles that define the interrelationships between safety and sustainability – for example on the one hand exploring the role of safety in achieving the UN SDGs by 2030, and on the other hand exploring “how safe is safe enough” to enable sustainability.

Topics of interest may include but are not limited to:

- The concepts of sustainability and sustainable development in a safety context, and vice-versa.
- Overarching principles of safety and sustainability and the synergies between them.
- Overview of potentially conflicting factors between safety and sustainability.

2. Managing the interrelationships in policy, strategy, legislation, and regulation

Exchanging experiences in the management of radioactive waste, environmental protection, decommissioning and remediation as an integral part of establishing policy, legislation, and regulation to enable the sustainable use of nuclear science and technology; and considering the impact of sustainability within the policies, the strategies, and the programmes.

Topics of interest may include but are not limited to:

- Legislative framework taking into account safety and sustainability aspects of emerging technologies and nuclear applications.

- Practical steps, including challenges and prospects, in managing the interrelationships between safety and sustainability in policy, strategy, and regulation.
- Regulations that can ensure safety and consider other factors that enable sustainability.
- Taking a risk-informed/graded approach to set the controls required by regulation in order to enable sustainability.
- Consideration of sustainability in the pre-licensing and licensing processes.

3. Managing the interrelationships between safety and sustainability in decision-making

Exchanging information and experiences on approaches and tools for integrating safety and sustainability in decision-making. Exploring ways in which existing safety concepts and principles (e.g., justification, optimisation, tolerability of risk, defence in depth, best available techniques, application of a graded approach) can help the identification of sustainable solutions.

Topics of interest may include but are not limited to:

- The role of Safety Assessment and Safety Case to support both safety and sustainability in decision-making.
- Sustainable management of risks and uncertainties in decision-making.
- Emerging tools, approaches, and methodologies for combining safety and sustainability to support decision-making.

4. Integrating the views of society into decision-making considering technical, environmental, social, and economic factors

Exploring the extent to which views of society influence the optimisation of protection and safety. Exchanging experiences and lessons learned on engaging interested parties throughout different stages of implementation of nuclear technologies to help identify solutions that ensure safety while enabling sustainability.

Topics of interest may include but are not limited to:

- Roles and responsibilities of various interested parties in influencing safety decisions during the different stages of implementing nuclear technologies.
- Sustainability and circular economy principles in the context of radioactive waste management, decommissioning and remediation.
- Challenges and opportunities of integrating the views of interested parties into decision making.
- Addressing competing priorities with finite resources in ensuring safety while enabling sustainability.

5. Practical experiences in integrating safety and sustainability

Sharing experience of integrating safety and sustainability in practice for example using novel approaches, innovative technologies and taking a lifecycle approach. Examples and learning from other industries are welcomed.

Topics of interest may include but are not limited to:

- Operating experiences, achievements, and lessons learned (including in policy and legislation, and regulation) in incorporating sustainability aspects in national programmes and projects.
- Examples and experiences in demonstrating safety and sustainability in all the different stages of implementation of radioactive waste management, decommissioning, environmental protection and remediation.

- Understanding responsibilities, when wider social, environmental, and economic considerations are taken into account for funding and financing long term liabilities to ensure safety and sustainability of activities at post-operation stage.
- Future scenarios on how safety and sustainability may be impacted by long term external changes.

6. Building capacity for ensuring safety and enabling sustainability

Exchanging information and ideas for promoting cross-sectoral learning; attracting, developing, and retaining professional resources to integrate safety and sustainability; integrating sustainability in the leadership, management, and culture for safety.

Topics of interest may include but are not limited to:

- Initiatives on mutual learning, and knowledge and experience transfer.
- Instruments on developing integrated and comprehensive planning for education and training in managing long term liabilities.
- Strategies for maintaining capacity in the long term to ensure that there are organizations with responsibilities and capacity to properly manage long term liabilities.

7. Regional and international cooperation for ensuring safety and enabling sustainability

Exchanging information on international and regional initiatives, legal instruments and guidance that do or could improve the integration of safety and sustainability.

Topics of interest may include but are not limited to:

- Role of international cooperation in improving integration of safety and sustainability.
- Lessons learned through the IAEA peer review services, advisory missions, and Review Meetings of Contracting Parties to the Joint Convention⁴.
- Future role of international guidance and legal instruments in ensuring safety and enabling sustainability.
- International networks, infrastructure, and collaborative mechanisms for ensuring safety and enabling sustainability.

D. Structure

The conference programme will consist of an opening session, plenary sessions, topical sessions, poster and interactive content sessions, exhibitions, and a closing session. The opening session will include opening statements delivered by the Conference Chair and the IAEA, and presentations from invited speakers and experts.

The plenary sessions will include a combination of invited keynote presentations and submitted papers addressing the themes and topics of the conference.

Each topical session will include presentations and panel discussions delivered by participants who will be selected based on abstracts submitted. The conference will also include an interactive poster session. There will be questions and answers sessions to discuss and interact with the participants.

The final plenary session on the last day will be dedicated to elaborate conclusions and recommendations from the conference.

⁴ [Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management | IAEA](#)

The closing session will include a summary of the main conclusions of the conference, delivered by the Conference Chair, and closing remarks from the IAEA.

E. Expected Outcomes

Consistent with the objectives of the conference, the main outcomes are:

- Increased awareness that ensuring safety is fundamental to sustainability, and that safety on its own might not be sufficient to enable sustainability.
- Member States have shared practical approaches to balancing the many factors that contribute to sustainability including safety.
- Safety and sustainability communities actively engaged in comprehensive discussions on interrelationships between safety and sustainability in the context of radioactive waste management (including spent fuel management), environmental protection (including control of radioactive releases), the safe decommissioning of nuclear facilities, and the remediation of contaminated areas.
- First steps in exploring whether it could be useful and desirable to describe the relationship between sustainability and safety to strengthen governance of the use of nuclear technologies.
- Recommendations for helping to address these interrelationships in an integrated way by the Safety and Sustainability Communities, such as:
 - A ‘call for action’ to the IAEA and/or Member States, or partner organizations.
 - A strategy and work plan.
 - New documents and/or revisions to existing IAEA documents.
 - Establishment of a new Community/Network to further develop the dialogue between the safety and sustainability communities.

F. Target Audience

The conference aims to bring together the safety and sustainability communities, with a focus on those involved in radioactive waste management (including spent fuel management), decommissioning, environmental protection and remediation. The conference objective is to also engage with a broad representation of government officials, regulators, industry, and civil society, including non-governmental organisations and academic institutions.

Since the outreach to the sustainability community is essential, Member States are encouraged to extend the designation for this conference to other bodies with specialized expertise in sustainability and sustainable development.

The IAEA welcomes and encourages the participation of women, early career professionals and individuals from developing countries.

G. Call for Papers

Contributions on the topics listed in Section C are welcome as oral or poster presentations. All submissions, apart from invited papers, must present original work, which has not been published elsewhere.

G.1. Submission of Abstracts

Abstracts (approximately 150 to 200 words on one printed A4 page, may contain any charts, graphs, figures and references) should give enough information on the content of the proposed paper to enable the Programme Committee to evaluate it. Anyone wishing to present at the conference must submit an abstract in electronic format using the conference's file submission system ([IAEA-INDICO](#)), which is accessible from the conference web page (see Section Q). The abstract can be submitted through this system from **16 January 2023** until **30 April 2023**. Specifications for the layout will be available on IAEA-INDICO. The system for electronic submission of abstracts, IAEA-INDICO, is the sole mechanism for submission of contributed abstracts. Authors are encouraged to submit abstracts as early as possible. The IAEA will not accept submissions via email.

In addition, authors must register online using the InTouch+ platform (see Section H). The online registration together with the auto-generated Participation Form (Form A) and Form for Submission of a Paper (Form B) must reach the IAEA no later than **30 April 2023**.

IMPORTANT: The Programme Committee will consider uploaded abstracts only if these two forms have been received by the IAEA through the established official channels (see Section H).

G.2. Acceptance of Abstracts

The Secretariat reserves the right to exclude abstracts that do not comply with its technical or scientific quality standards and that do not apply to one of the topics listed in Section C.

Authors will be informed by **24 June 2023** as to whether their submission has been accepted, either orally or as a poster, for presentation at the conference. Accepted abstracts will also be reproduced in an unedited electronic compilation of abstracts which will be made available to all registered participants of the conference.

Authors will be asked to provide their full papers (4 to 8 pages) by **26 August 2023**. Longer manuscripts will only be accepted at the discretion of the Secretariat and only in exceptional cases. Guidelines and a template for the preparation and submission of the full papers will be available on the Conference web page and IAEA-INDICO. The papers will be available to all participants on the IAEA Meetings and Conferences app and on the conference web page.

G.3 Proceedings

Following the conference, the IAEA will publish a summary report. The proceedings will be made available to read online.

H. Participation and Registration

All persons wishing to participate in the event must be designated by an IAEA Member State or should be member of an organization that has been invited to attend. The list of IAEA Member States and invited organizations is available on the event web page (see Section Q).

Registration through the InTouch+ platform:

1. Access the InTouch+ platform (<https://intouchplus.iaea.org>):

- Persons with an existing NUCLEUS account can [sign in here](#) with their username and password;
- Persons without an existing NUCLEUS account can [register here](#).

2. Once signed in, prospective participants can use the InTouch+ platform to:

- Complete or update their personal details under ‘Basic Profile’ (if no financial support is requested) or under ‘Complete Profile’ (if financial support is requested) and upload the relevant supporting documents;
- Search for the relevant event (EVT 2102343) 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 Conference.Contact-Point@iaea.org);
- If applicable, indicate whether a paper is being submitted and complete the relevant information;
- 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 Participation Form (Form A), Form for Submission of a Paper (Form B) and/or 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 form(s) will automatically be sent to the IAEA through the online platform.

NOTE: Should prospective participants wish to submit a paper or request financial support, the application needs to be submitted by the specified deadlines (see section O).

For additional information on how to apply for an event, please refer to the [InTouch+ Help](#) page. Any other issues or queries related to InTouch+ can be sent to InTouchPlus.Contact-Point@iaea.org.

If it is not possible to submit the application through the InTouch+ platform, prospective participants are requested to contact the IAEA’s Conference Services Section via email: Conference.Contact-Point@iaea.org.

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. Further information can be found in the [Data Processing Notice](#) concerning IAEA InTouch+ platform.

I. 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 conference. The IAEA has, however, limited funds at its disposal to help cover 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 conference.

If participants wish to apply for a grant, they should submit applications to the IAEA using the InTouch+ platform through their competent national authority (see Section H). Participants should ensure that applications for grants are:

1. Submitted by **30 April 2023**.
2. Accompanied by Grant Application Form (Form C); and
3. Accompanied by Participation Form (Form A).

Applications that do not comply with the above conditions cannot be considered.

Approved grants will be issued in the form of a lump sum payment that usually covers **only part of the cost of attendance**.

J. Distribution of Documents

A preliminary and final programme will be made available on the conference web page (see Section Q) prior to the start of the conference. The electronic compilation of abstracts will be accessible free of charge to participants registered for the conference.

K. Exhibitions

A limited amount of space will be available for commercial vendors' displays/exhibits during the conference. Interested parties should contact the Scientific Secretariat by email ICWEDR2023@iaea.org by **30 April 2023**.

L. Working Language

The working language of the conference will be English. All communications must be sent to the IAEA in English.

M. Venue and Accommodation

The conference will be held at the Vienna International Centre (VIC), where the IAEA's Headquarters are located. Participants are advised to arrive at Checkpoint 1/Gate 1 of the VIC one hour before the start of the event on the first day in order to allow for timely registration. Participants will need to present an official photo identification document in order to be admitted to the VIC premises.

Participants must make their own travel and accommodation arrangements. Hotels offering a reduced rate for participants are listed on <https://www.iaea.org/events>. Please note that the IAEA is not in a position to assist participants with hotel bookings, nor can the IAEA assume responsibility for paying fees for cancellations, re-bookings and no-shows.

N. Visas

Participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria as early as three months but not later than four weeks before they travel to Austria. Since Austria is a Schengen State, persons requiring a visa will have to apply for a Schengen visa. In States where Austria has no diplomatic mission, visas can be obtained from the consular authority of a Schengen Partner State representing Austria in the country in question.

For more information, please see the Austria Visa Information document available on <https://www.iaea.org/events>.

O. Key Deadlines and Dates

Submission of abstracts through IAEA-INDICO	30 April 2023
Submission of Form B (together with Form A) through the InTouch+ platform	30 April 2023
Submission of Form C (together with Form A) through the InTouch+ platform	30 April 2023
Notification of acceptance of abstracts for oral or poster presentation	24 June 2023
Electronic submission of full papers through IAEA-INDICO	26 August 2023
Notification of review of full paper, if applicable	16 September 2023
Submission of Form A only (no paper submission, no grant request) through the InTouch+ platform	No deadline

P. Conference Secretariat

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Subsequent correspondence on scientific matters should be sent to the Scientific Secretaries and correspondence on administrative matters to the IAEA's Conference Services Section.

Q. Conference Web Page

Please visit the IAEA conference <https://www.iaea.org/events/icwedr2023> regularly for new information regarding this conference.