

Atoms for Peace and Development

الوكالة الدولية للطاقة الذرية 国际原子能机构 International Atomic Energy Agency Agence internationale de l'énergie atomique Международное агентство по атомной энергии Organismo Internacional de Energía Atómica

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In reply please refer to: EVT1904486 Dial directly to extension: (+43 1) 2600-22822

The Secretariat of the International Atomic Energy Agency (IAEA) presents its compliments to the IAEA's Member States and has the honour to draw their attention to the **Technical Meeting on Assessing Technologies that Enable Nuclear Power to Produce Hydrogen** (hereinafter referred to as "event") to be held at the IAEA's Headquarters in Vienna, Austria, from 22 to 24 June 2020.

The purpose of the event is to assess the technical maturity of technologies enabling nuclear power to produce hydrogen; to discuss the key challenges to the commercialization of such technologies as well as the related costs and uncertainties around cost estimates; to analyse technology challenges and timescales for commercialization; and to keep abreast of the opportunities of nuclear hydrogen production using advanced near-term nuclear systems.

The attached Information Sheet provides further details of the event.

The event will be held in English.

Member States are invited to designate one or more participants to represent the Government at this event. Member States are strongly encouraged to identify suitable women 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 at the time of designating the participant participant(s) using the attached Grant Application Form (Form C).

It should be noted that compensation is not payable by the IAEA for any damage to or loss of personal property. The IAEA also does not provide health insurance coverage for participants in IAEA events. Arrangements for private insurance coverage on an individual basis should therefore be made. The IAEA will, however, provide insurance coverage for accidents and illnesses that clearly result from any work performed for the IAEA.

Designations should be submitted to the IAEA through the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) not later than 22 April 2020 using the attached Participation Form (Form A). Completed and authorized Participation Forms should be sent either by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Copies should be sent by email to the Scientific Secretary of the event, Mr Ibrahim Khamis, Division of Nuclear Power, Department of Nuclear Energy (Email: I.Khamis@iaea.org), and to the Administrative Secretary, Ms Mercedes Nicole Córdova Jurak (Email: M.Cordova-Jurak@iaea.org). The Scientific Secretary of the event will liaise with the participants directly concerning further arrangements, including travel details, as appropriate, once the official designations have been received.

Should Governments wish, in addition, to appoint one or more observers to assist and advise the designated participants, they are kindly requested to inform the IAEA of the names and contact details of any such observers by the above date. In accordance with the established rules, Governments are expected to bear the cost of attendance of any observers they may send to IAEA events. Compensation is not payable by the IAEA for any damage to or loss of observers' personal property or for illness, injury or death occurring while travelling to or in connection with their attendance at IAEA events.

The Secretariat of the International Atomic Energy Agency avails itself of this opportunity to renew to the IAEA's Member States the assurances of its highest consideration.



2020-02-25

Enclosures: Information Sheet

Participation Form (Form A)

Grant Application Form (Form C)



Technical Meeting on Assessing Technologies that Enable Nuclear Power to Produce Hydrogen

IAEA Headquarters Vienna, Austria

22-24 June 2020

Ref. No.: EVT1904486

Information Sheet

Introduction

Hydrogen has the potential to deliver broad-sector decarbonization, thereby mitigating the impact of transportation and industrial sectors (e.g. in the areas of industrial feedstocks, thermal and electric power production, and energy storage) on greenhouse gas emissions without negatively impacting the global economy. The potential for nuclear power plants to produce hydrogen is rapidly evolving, with three active demonstration projects underway in the United States of America, and one in the United Kingdom. The direct production of hydrogen involves processes that require a higher temperature output than that of today's commercial plants (<350°C). Some of the advanced high temperature reactors being developed could support the high temperature requirements of these processes. Moreover, the use of conventional electrolysis for hydrogen production using nuclear-generated electricity can readily be implemented. As noted above, several ongoing projects are underway to demonstrate the integration of this technology with currently operating power plants to allow more flexible plant operation as well as

increase the profitability of operating the nuclear power plant at times when an increasing number of operating plants are threatened by more competitive electricity generation technologies.

Nuclear hydrogen production will continue to face challenges, including the scale-up of nuclear hydrogen production plants, the safety and licensing consideration for coupling, and the business model for operating a commercial hydrogen production facility. The deployment of hydrogen requires not only the ability to produce hydrogen economically and sustainably on a large scale, but also to demonstrate strategies and methods for storage and distribution, have legal and regulatory frameworks for coupling, and obtain political and public acceptance.

This event aims at identifying and analysing the key points that can facilitate and accelerate the deployment of nuclear hydrogen production projects.

Objectives

The purpose of the event is to assess the technical maturity of technologies enabling nuclear power to produce hydrogen; to discuss the key challenges to the commercialization of such technologies as well as the related costs and uncertainties around cost estimates; to analyse technology challenges and timescales for commercialization; and to keep abreast of the opportunities of nuclear hydrogen production using advanced near-term nuclear systems.

Working Language(s)

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

Expected Outputs

The expected output of this event is a generic draft report, covering the current status of large-scale hydrogen production technologies that can be coupled to nuclear power plants and their potential for near-term deployment; and summarizing the relevant discussions conducted during the event.

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, participants are requested to send the **Participation Form (Form A)** to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) for onward transmission to the IAEA by **22 April 2020**. Participants who are members of an organization invited to attend are requested to send the **Participation Form (Form A)** through their organization to the IAEA by the above deadline.

For Member States receiving technical cooperation assistance, applications for financial support should be made at the time of designating the participant.

Designating Governments will be informed in due course of the names of the selected candidates and will at that time be given full details of the procedures to be followed with regard to administrative and financial matters.

Please note that the IAEA is in a transition phase to manage the entire registration process for all regular programme events electronically through the new InTouch+ (https://intouchplus.iaea.org) facility, which is the improved and expanded successor to the InTouch platform that has been used in recent years for the IAEA's technical cooperation events. Through InTouch+, prospective participants will be able to apply for events and submit all required documents online. National authorities will be able to use InTouch+ to review and approve these applications. Interested parties that would like to use this new facility should write to: InTouchPlus.Contact-Point@iaea.org.

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 using the **Grant Application Form (Form C)**, which has to be stamped, signed and submitted by the competent national authority to the IAEA together with the **Participation Form (Form A)** by **22 April 2020**.

Venue

The event will be held at the Vienna International Centre (VIC), where the IAEA's Headquarters are located. Exact details of the venue will follow in direct correspondence between the IAEA organizers and the participants. Participants must make their own travel and accommodation arrangements.

General information on the VIC and other practical details, such as a list of hotels offering a reduced rate for IAEA participants, are listed on the following IAEA web page: http://www-pub.iaea.org/iaeaevents/GeneralInfo/Guide/VIC.

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.

Visas

Participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria at least 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.

IAEA Contacts

Scientific Secretaries:

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Administrative Secretary:

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



Participation Form

Technical Meeting on Assessing Technologies that Enable Nuclear Power to Produce Hydrogen

IAEA Headquarters, Vienna, Austria

22-24 June 2020

To be completed by the participant and sent to the competent national 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) either by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Please also send a copy by email to the Scientific Secretary I.Khamis@iaea.org and to the Administrative Secretary M.Cordova-Jurak@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: 22 April 2020

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Family name(s): (same as in	n passport)	First name(s): (same	as in passport)	Mr/Ms	
Institution:					
Full address:					
Tel. (Fax):					
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Nationality:	Representing following Member State/non-Member State/entity or invited organization:				
Do you intend to give a pres	sentation?	Yes 🗌	No 🗌		
Nationality: Do you intend to give a pres	invited organization	on:		ntity or	



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Deadline for receipt by	IAEA	through	n official channels: 22	April 20	20	
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