

#### **Conference Overview**

This international conference gathers key stakeholders from the nuclear energy sector to explore the role of nuclear power in global energy security and decarbonization. With a strong focus on Small Modular Reactors (SMRs) and the nuclear supply chain, discussions will cover policy, technology, industrial collaboration, and investment opportunities in the Netherlands and beyond.

#### **Target Audience:**

• Industry & Supply Chain: Nuclear technology providers, reactor developers, component manufacturers, engineering firms, and energy utilities

- Policy & Regulation: Government agencies, EU institutions, and nuclear regulatory bodies
- Finance & Investment: Banks, institutional investors, and energy investment funds
- Research & Innovation: Universities. think tanks, and research institutions
- End-Users: Industrial energy consumers, grid operators, and hydrogen sector players

Participants will gain networking opportunities with industry leaders, policymakers, and investors, while receiving insights into technological innovations, market trends, and regulatory frameworks.

For more information, contact us via info@sdqpowershift.com





























# Nuclear Essentials - A Beginners Guide

PRE-SESSION

Tuesday, 13 January 2026
World Forum - The Hague, The Netherlands
"Small Reactors, Big Impact"

With no previous nuclear knowledge necessary, this "crash course" aims to provide the participants with a basic nuclear vocabulary and lays the foundations on which more indepth knowledge can be built. The course is a condensed version of the NAC Nuclear Primer, a 3–4-day seminar which is being developed with nuclear newcomer countries in mind.

International

The Nuclear Primer will focus on innovative, new and future technologies and the skill sets required to make this possible, technology assessment, regulatory aspects, international supply chains and financial models.

NAC has a long track record in nuclear education and its academies and seminars are famed for their quality, content and interactive nature. The dialogue between participants and trainers, both during and between the sessions is a great networking opportunity.

Brief programme overview of the contents of Nuclear Essentials: A Beginners Guide

#### **A Brief History**

 The birth of nuclear energy, atoms for peace, non-proliferation

#### **Nuclear Reactor Fundamentals**

- Basic principles and reactor concepts
- Reactor operation and safety

#### **Nuclear Technology today and in the future**

- A review of current and future technologies
- Large NPPs versus SMRs (pros/cons)
- Financing new build projects
- Operational costs

#### **Fuel Supply**

- The fuel supply chain (Uranium, Conversion, Enrichment, Fabrication)
- Alternative fuel types

#### **Spent Fuel Management**

- Wet and Dry Storage
- Disposal Methods (Reprocessing, Geological repository, Deep Borehole)



### **DAY 1: Global Perspectives & The Strategic Role of** Nuclear

**WEDNESDAY, 14 JANUARY 2026 WORLD FORUM - THE HAGUE** 

<b>Maria van der Hoeven</b> (moderator)  Former Dutch Minister and former director IEA				
09:00 – 10:30	Session I: Opening & Keyno	te Speeches		
09:00 – 9:10	Welcome word	Floriske Deutman - Chairman SEK		
09:10 – 9:30	The Role of Nuclear Energy in the European Energy Transition	Wopke Hoekstra (TBC) - EU Commission		
09:30 – 09:50	Global Energy Security & The Case for Nuclear	Tim Gould (TBC) - IEA		
09:50 – 10:10	Advancements in Nuclear Technology & Next-Generation Reactors	Dr. Stefano Monti - ENS/AIN		
10:10 - 10:30	Fuelling the Future: SMRs and the Evolution of the Nuclear Fuel Cycle	<b>Dr. Magnus Mori</b> - Urenco		
10:30 – 11:00	Coffee break			
11:00 - 12:00	Session II: Global SMR Market & Policy Development  Keynote Presentations			
11:00 – 11:20	North American Leadership in Nuclear Innovation	Jacob DeWitte - Oklo Inc.		
11:20 – 11:40	SMR Development in China: Innovation & Scale-up	<b>Prof. Dr. Fu Li</b> - Tsinghua University		
11:40 - 12:00	Localisation of SMR Development	Martijn van Gruijthuijsen Vice-governor Noord Brabant Province		
12:00 - 13:30	Lunch			
12.00	Luncii			
13:30 - 14:45	Session III: The Future of Nuclear in	n a Net-Zero World		
		Prof. Dr. David Smeulders - TU Eindhoven		
13:30 - 14:45	Session III: The Future of Nuclear i	Prof. Dr. David Smeulders - TU		
13:30 - 14:45 13:30 - 13:45	Session III: The Future of Nuclear in The Role of Nuclear in the Energy System	<b>Prof. Dr. David Smeulders</b> - TU Eindhoven		
13:30 - 14:45 13:30 - 13:45 13:45 - 14:00	Session III: The Future of Nuclear in The Role of Nuclear in the Energy System  Building an SMR in Canada  Spent Fuel, Radioactive Waste management and	Prof. Dr. David Smeulders - TU Eindhoven Geoffrey Olynyk - OPG		
13:30 - 14:45 13:30 - 13:45 13:45 - 14:00 14:00 - 14:15	Session III: The Future of Nuclear in The Role of Nuclear in the Energy System  Building an SMR in Canada  Spent Fuel, Radioactive Waste management and Decommissioning of SMRs	Prof. Dr. David Smeulders - TU Eindhoven  Geoffrey Olynyk - OPG  Dr. Ir. Aliki van Heek - Nuclear-21		
13:30 - 14:45 13:30 - 13:45 13:45 - 14:00 14:00 - 14:15 14:15 - 14:30	Session III: The Future of Nuclear in The Role of Nuclear in the Energy System  Building an SMR in Canada  Spent Fuel, Radioactive Waste management and Decommissioning of SMRs  How Nuclear Can Drive A Sustainable Maritime Industry	Prof. Dr. David Smeulders - TU Eindhoven  Geoffrey Olynyk - OPG  Dr. Ir. Aliki van Heek - Nuclear-21  Dr. Ir. Stephanie Heerema - Allseas  Dr. Vittorio Festa		
13:30 - 14:45 13:30 - 13:45 13:45 - 14:00 14:00 - 14:15 14:15 - 14:30 14:30 - 14:45	Session III: The Future of Nuclear in The Role of Nuclear in the Energy System  Building an SMR in Canada  Spent Fuel, Radioactive Waste management and Decommissioning of SMRs  How Nuclear Can Drive A Sustainable Maritime Industry  Italian Perspectives on SMR Development	Prof. Dr. David Smeulders - TU Eindhoven  Geoffrey Olynyk - OPG  Dr. Ir. Aliki van Heek - Nuclear-21  Dr. Ir. Stephanie Heerema - Allseas  Dr. Vittorio Festa		
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13:30 - 14:45  13:30 - 13:45  13:45 - 14:00  14:00 - 14:15  14:15 - 14:30  14:30 - 14:45  14:45 - 15:15	Session III: The Future of Nuclear in The Role of Nuclear in the Energy System  Building an SMR in Canada  Spent Fuel, Radioactive Waste management and Decommissioning of SMRs  How Nuclear Can Drive A Sustainable Maritime Industry  Italian Perspectives on SMR Development  Tea Break  Panel Discussion  Dr. Simon Friederich - University of Groningen  Joost Greunsven - TenneT  Benjamin Reinke - X-Energy	Prof. Dr. David Smeulders - TU Eindhoven  Geoffrey Olynyk - OPG  Dr. Ir. Aliki van Heek - Nuclear-21  Dr. Ir. Stephanie Heerema - Allseas  Dr. Vittorio Festa Vice-president of AIRP  Hans Schoenmakers (moderator) Board Member of SEK		

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## **DAY 2: The SMR Revolution & Supply Chain Development**

**THURSDAY, 15 JANUARY 2026 WORLD FORUM - THE HAGUE** 

<b>Remco de Boer</b> (moderator) Studio Energie - e <i>nergy researcher, writer &amp; podcaster</i>				
09:00 – 10:00	Session I: Unlocking the Business Potential of SMRs			
09:00 – 9:20	Bringing SMRs to Market: Challenges and Opportunities	<b>Prof. Sukesh K. Aghara</b> University of Massachussets Lowell		
09:20 – 9:50	Deploying the Rolls-Royce SMR in NL – leveraging EU collaboration to deliver standard modular proven technology powerplants to NL and the rest of Europe	Sophie Macfarlane-Smith - Rolls Royce SMR Dirk Rabelink - ULC Energy		
10:00 – 10:30	Coffee break			
10:30 - 12:00	Breakout Sessions			
10:30 - 12:00	Financing the Future of SMR's	Christine Kampinga (moderator) Quantum Impact Investing Floris Lyppens - ABN Amro		
10:30 - 12:00	Localization Strategies for the SMR Supply Chain	Prof. Sukesh K. Aghara (moderator) University of Massachussets Lowell John Prothero - BAM Infra		
10:30 - 12:00	Global SMR Development & Project Updates	Marieke van Gemert - NRG PALLAS Fabio Nouchy - Tractebel		
12:00 - 13:00	Lunch			
13:00 - 15:00	Session II: Investment & Industrialization of SMRs			
13:00 - 13:20	The Recent Development on SMRs in the Netherlands	Titus Tielens - Tractebel		
13:20 - 13:40	Public-Private Partnerships for New Nuclear Projects	Bram-Paul Jobse - EPZ		
13:20 - 13:40 13:40 - 14:00	Public-Private Partnerships for New Nuclear Projects Current Status and Future Needs for Nuclear Fuel Supply	Bram-Paul Jobse - EPZ  Prof. Uner Colak  Istanbul Technical University		
	Current Status and Future Needs for Nuclear Fuel	Prof. Uner Colak		
13:40 - 14:00	Current Status and Future Needs for Nuclear Fuel Supply	<b>Prof. Uner Colak</b> Istanbul Technical University		
13:40 - 14:00 14:00 - 14:20	Current Status and Future Needs for Nuclear Fuel Supply Preparation for SMR deployment Industrial Energy Demand & Nuclear's Potential	Prof. Uner Colak Istanbul Technical University Bert van Renselaar - SWECO		
13:40 - 14:00 14:00 - 14:20 14:20 - 14:40	Current Status and Future Needs for Nuclear Fuel Supply Preparation for SMR deployment Industrial Energy Demand & Nuclear's Potential Contribution	Prof. Uner Colak Istanbul Technical University  Bert van Renselaar - SWECO  Andreas Tirez - Febeliec  Min. of Climate Policy & Green Growth		
13:40 - 14:00 14:00 - 14:20 14:20 - 14:40 <b>14:40 - 15:00</b>	Current Status and Future Needs for Nuclear Fuel Supply  Preparation for SMR deployment  Industrial Energy Demand & Nuclear's Potential Contribution  Tea Break  Panel Discussion  Martijn Schut - Director Nuclear Energy Program I  Dr. Ir. Anton Philipp Anthofer - Hinneburg (a Bure)  Ewoud Verhoef - COVRA	Prof. Uner Colak Istanbul Technical University  Bert van Renselaar - SWECO  Andreas Tirez - Febeliec  Min. of Climate Policy & Green Growth		

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#### **DAY 3: Future Directions & Local Interaction**

FRIDAY, 16 JANUARY 2026 SITE VISITS

## Action Plan for the Nuclear Supply Chain in the Netherlands

Site Visit Option 1: Fuel Cycle Development **URENCO Almelo** 

09:00 - 09:30	Gathering at the Meeting Point	

09:30 - 12:00	Travel to Urenco Almelo, bus transportation to the Site
03.30 12.00	Traver to oreneo Anneio, bas transportation to the site

12:00 - 15:00 Tour at **Urenco Almelo,** Gronau (bus transportation to the site, lunch included)

15:00 - 17:30 Return to World Forum, bus transportation back to the World Forum

Site Visit Option 2: Waste Management

#### **COVRA Waste management**

09:00 - 09:15	Gathering at the	Meeting Point
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09:15 - 11:30 Travel to COVRA, bus transportation to the Site

11:30 - 13:00 Networking Lunch at Landlust Nieuwdorp (Welcome by vice-governor De Bat)

13:00 - 15:30 Tour at **COVRA**, Borssele

15:30 - 18:00 Return to World Forum, bus transportation back to the World Forum

Site Visit Option 3: Research in Advanced Nuclear Reactors

#### **TU Delft Reactor Institute**

09:00 - 09:30 Gathering at the Meeting Point

09:30 - 10:15 Travel to TU Delft Reactor Institute, bus transportation to the Site

10:15 - 13:15 Tour at **TU Delft**. Delft

13:15 - 14:00 Return to World Forum, bus transportation back to the World Forum

Meeting Point Location: World Forum The Hague, Churchillplein 10, 2517 JW, The Hague

**End of Conference** 



Urenco Almelo



**COVRA Waste** Management



TU Delft Reactor Institute

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