

PROGRAMME

FINANCING NUCLEAR NEW BUILD TODAY

**High-level Workshop
for Industry Experts, Finance
Executives and Policymakers**

**Prague, Czechia
13 June 2024**



Background

Increasing the contribution of nuclear energy to global production of electricity is seen by many countries as a practical pathway towards reaching ambitious net zero carbon emission targets. The value of nuclear energy as a scalable provider of dispatchable low carbon electricity while also making a significant contribution to the security of energy supplies is recognised by a majority of European Union countries. However, in advancing from general support and policy targets to working nuclear power plants, a number of technical, economic, institutional and logistical challenges need to be overcome. In this context, a particularly challenging issue is the financing of new nuclear power plants. Even if offset by comparatively low economic risks during operations, the high project and financial risks of nuclear new build during the construction phase will require de-risking provisions. Only then are private investors likely to support projects – especially in the case of first-of-a-kind designs. While the issue is, at least at an intuitive level, understood by a wide range of stakeholders, a generally accepted model for the financing of nuclear new build has yet to emerge.

At this stage of the debate, the workshop “Financing Nuclear New Build Today”, organised by the Nuclear Energy Agency (NEA) and hosted by the Ministry of Industry and Trade of Czechia, brings together leading experts in nuclear energy, electricity market design and infrastructure financing with decision makers in energy policy. The objective is to present and compare a number of recently adopted or discussed financing models to better understand the allocation they imply for construction and price risks, the degree to which those risks are socialised to be borne by ratepayers or taxpayers and to which extent they succeed in attracting third-party private investors. While nuclear energy is supported by a fully globalised industry, the focus of this workshop is primarily on financing the construction of new nuclear power plants in the European context. This includes, of course, learning from experiences in other regions, in particular North America and East Asia and, perhaps, developing valuable lessons that can be more broadly shared.

Programme

Arrival and morning coffee – 09:00-09:30

Opening remarks

- 9:30
(20 min)
- [William D. Magwood, IV](#), Director-General, Nuclear Energy Agency (NEA)
 - [Tomáš Ehler](#), Deputy Director General for Energy and Nuclear Sources, Ministry of Industry and Trade, Czechia

Impact speeches – The state of nuclear finance today

- 09:50
(60 min)
- Moderator:* [Tomáš Ehler](#), Deputy Director General for Energy and Nuclear Sources, Ministry of Industry and Trade, Czechia
- [Massimo Garribba](#), Deputy Director General, Directorate-General for Energy, European Commission
 - [Sanjoy Rajan](#), Head of Division, Energy Security, Projects Directorate, European Investment Bank
 - [Andrei Goicea](#), Policy Director, Nucleareurope

Q&A with audience.

10:50 Coffee break (30 min)

Morning session – Financing models for nuclear new build: Current experiences

This session will give leading industry experts the opportunity to present different financing arrangements for the construction of new nuclear power plants that were recently adopted, or are currently being discussed, in different countries. The session will allow for a frank assessment of the advantages and drawbacks of different financing arrangements for power plants that are already generating, are under construction or are being planned. A particular focus will be on the risk-sharing arrangements in place and the allocation of risks between ratepayers, taxpayers, operators and third-party investors.

11:20 (80 min) *Framing Presentation and Moderator:* **Michel Berthélemy**, Senior Advisor, NEA

- **Milt Caplan**, President, MZ Consulting Inc.
- **Marcin Kamiński**, Regulatory Risk Manager, Polskie Elekrownie Jądrowe (PEJ)
- **Simon Taylor**, Management Practice Professor of Finance, Judge Business School, University of Cambridge
- **Steven Vaughan**, Senior Adviser, Rothschild & Co

Panel discussion among speakers and exchange with audience.

12:40 Lunch (70 min)

Special focus on SMRs – Is financing a SMR substantially different from financing large scale reactors?

SMRs hold economic promise due to their smaller unit sizes, modularity, a higher share of offsite production of components, while certain models can also provide high-quality heat or close the nuclear fuel cycle alongside electricity generation. They also have shown to be able to leverage significant initial financing from a range of private investors. At the same time, they are still at the very beginning of the arc from initial design and regulatory approval to building demonstration projects. In order to achieve commercial production SMR manufacturers will have to achieve significant cost reductions through serial deployment to compensate for their diseconomies of scale. How do entrepreneurs and professional investors perceive this new mix of opportunities and risks from a financial perspective?

13:50 (60 min) *Moderator:* **Jan Prášil**, Director of the New Energy Technologies Department, Ministry of Industry and Trade, Czechia

- **Jean-Luc Alexandre**, Founder and CEO, Naarea
- **Alastair Evans**, Director of Corporate and Government Affairs, Rolls Royce SMR
- **Massimiliano Picciani**, Low Carbon Sector Manager, Bpifrance
- **Vasile Dascalu**, CFO, Nuclearelectrica, Romania

Panel discussion among speakers and exchange with audience.

14:50 Coffee break (30 min)

Afternoon session – What do project operators and public and private investors need in order to secure financing at low costs of capital?

This afternoon session will give the floor to decision makers in the nuclear and financial industries to spell out their requirements for financing structures and framework conditions in nuclear new build projects. Panellists will consider financing models themselves but also transaction costs, electricity market design and how to set up efficient project management structures. The focus will be on the role that policymakers can play to advance the efficient financing of nuclear new build. Special attention will be paid to the question of whether the financial commitments of private investors can be progressively phased in during the construction process as certain milestones are passed. These include a partial or full handover of the power plant from public to private investors at the date of commissioning.

15:20 (100 min) *Moderator:* [Jan Horst Keppler](#), Senior Economic Advisor, NEA

- [Charles Weymuller](#), Chief Economist, EDF Group
- [Anurag Gupta](#), Chief Risk Officer, Sequoia Investment Management Company
- [Iain Smedley](#), Global Chairman of Banking, Barclays
- [Anne Crépin](#), Head of Export Credit, SFIL

Panel discussion among speakers and exchange with audience.

Concluding roundtable

17:00 (30 min) *Moderator:* [Jan Horst Keppler](#), Senior Economic Advisor, NEA

Participants:

- [William D. Magwood, IV](#), Director-General, Nuclear Energy Agency (NEA)
- [Ladislav Havlíček](#), Director, Development of new nuclear units, Ministry of Industry and Trade, Czechia
- [Guillaume Bouyt](#), Director for Nuclear Energy, Ministry of the Economy, Finance, and Industrial and Digital Sovereignty, France
- [Carl Berglöf](#), National Nuclear Power Coordinator, Ministry of Climate and Enterprise, Sweden

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