

#### Meeting of the Nuclear Alliance in Paris on 16 May

- Member states participating: France, Belgium, Bulgaria, Croatia, Estonia, Finland, Hungary, Netherlands, Poland, Czech Republic, Romania, Slovenia, Slovakia and Sweden.
- ➤ Italy participated as observer and UK as invited country.
- During the meeting, a <u>statement</u> has been released.
- ➤ Ministers discussed the positive impact of nuclear energy on the European economy: they acknowledged that nuclear power may provide up to 150 GW of electricity capacity by 2050 to the European Union (vs roughly 100 GW today)



Photo by @Paul Messad @EURACTIV FR



#### An increased ambition for a European nuclear future

The latest EC scenarios updates from the projected share of nuclear show a steady decrease despite the obvious benefits that a significantly higher scenario provides to the EU system in a deep decarbonization scenario.

# Based on this, nucleareurope promotes an upscaled scenario of at least 150 GW\* capacity in 2050

This scenario requires:

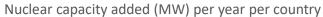
- The current share of 25% electricity production to be maintained in the EU.
- Part of the needs from hard-to-abate heavy industries in terms of decarbonized heat, hydrogen, etc. to be covered by SMRs (from early 2030s) and AMRs later on (from 2040s).
- Mobilization of industry and decisionmakers both at EU & national levels

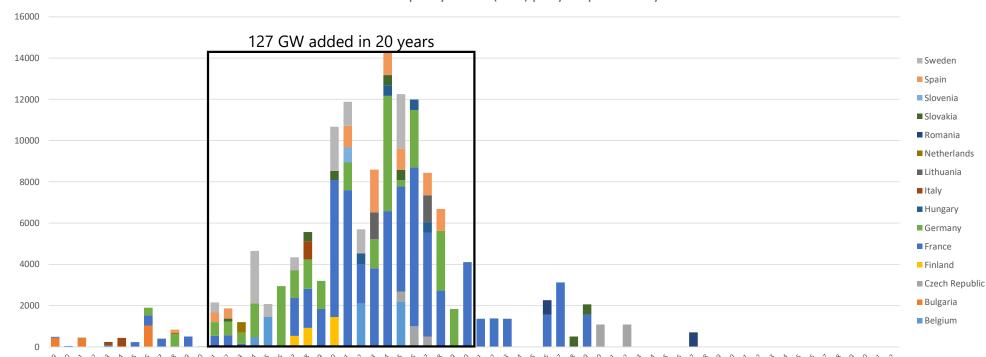




\*Aggregated figure based on recent national intentions / declarations

#### History of EU's nuclear fleet deployment





nucleareurope chart based on **IAEA PRIS** database



## Industry Declaration at Nuclear Energy Summit

"(...) for industry to do its part to deliver on these ambitions, governments must:

"Ensure ready access to **national and international climate finance mechanisms** for nuclear development,

"Ensure that **multilateral financial institutions** include nuclear energy in their investment portfolios, (...)"



#### Financing Mechanisms

Investments in nuclear are programmed over a longer period with operating lifetimes of 60 years or more as compared to 25-35 years for renewables.

There is no single approach to the financing of a nuclear project.

OECD-NEA (2020) distinguishes between **three models**:

- Government financing model (Sovereign model): funded directly through the state budget or via indirect forms of public borrowing.
- (**Private**) corporate model: Utilities with a strong balance sheet can finance large projects by raising equity and borrowing money (debt). Creditors may claim their loan against the company's assets as a whole.
- (Private) project finance model: A project company is created which establishes a legal separation between the project and the sponsors' other assets. Hence, lenders have limited recourse beyond the revenues and/ or assets of the project. As the debt remains in a project company, it is accounted in the form of an "off the balance sheet" engagement.

Source: <u>nucleareurope's Investment Framework Task Force Report</u>



#### Financing Models

- **Mankala model:** used in Finland, involving collaboration between municipalities, industry, and power producers. Shareholders receive electricity instead of dividends, leading to taxation uncertainties. Complexity arises from multiple owners affecting decision-making.
- Regulated Asset Base model: used in the UK, citing advantages during construction, certainty of cash flow, and government willingness to mitigate risks for consumers and taxpayers. The RAB model is not excluding CFDs (Contracts For Difference) that can be used at different project phases.
- **Contracts for Difference:** used in the UK and in the Czech Republic. Contract between the energy producer and a government body or other public entity to stabilize the revenues of energy producers by shielding them from fluctuations in the market price of electricity.
- Power Purchase Agreement: long-term contract between an electricity generator and a purchaser (often a utility company, government entity, or large corporation) for the sale and purchase of electricity.



#### Conclusions from nucleareurope's Investment Framework TF Report

Both the **investment rating** and the **ability to attract debt** for new projects have a central role to play in the financing of new nuclear projects.

Multiple financing mechanisms are required to access a variety of sources of capital.

A stable and long-term investment policy framework for nuclear optimizes the distribution and allocation of risks for the sake of the community of stakeholders with a view to ensure consumer value for money. Targeted actions may also need to be developed by policymakers so as to enable a comprehensive investment framework.

An industrial management framework for nuclear new build projects at the level of project development and ownership level is a key success factor in managing risk.

An investment policy planning for low-carbon technologies such as nuclear power is critical in driving investments and achieving the climate neutrality goals as embedded in the EU Green Deal.

Source: <u>nucleareurope's Investment Framework Task Force Report</u>



### Financing nuclear... a new ambition needs to materialize

#### **Taxonomy\***

#### **InvestEU**

Just Transition Fund

# **Euratom** research

EIB

#### **Nuclear is in** but:

- Transitional
- No equal treatment (<100g CO2 – no threshold for RES)
- Technical criteria very strigent
- Sunset clauses 2040-45 for LTO/Gen III

Annex V, B (11)
"Excluded
activities"decom
missioning,
operation,
adaptation or
construction of

nuclear power

stations

Article 9
"Exclusion from
the scope" (a) The
JTF shall not
support the
decommissioning
or the construction
of nuclear power
stations

- In last MFF, Euratom research is 1.98 b€ (7.59b incl. ITER) compared to 96.9b€ Horizon Europe research.
- Since FP4 [1994-1998] nuclear research budget has decreased from 10.3% down to 7.8% of total research
- Nuclear fission research has gone down from 1.5% to 0.27% of total EU research budget

Nuclear projects remain eligible to EIB funds
However, organisations do not apply in case certain EIB members block their projects for political reasons leading to a de facto 'no funding' for nuclear,

Next revision 2025

Door opened for revision end 2024

Possible revision mid-2025

To be rediscussed for MFF 2028-33

Test cases to be envisaged

<sup>\*</sup> These are only examples of EU financing policies that could evolve more positively.



