nuclearеurope
Supporting a sustainable future

FINANCING NUCLEAR

COMBINING A LONG-TERM POLICY VISION WITH AN INCLUSIVE APPROACH

NUCLEAR

- IS A LOW-CARBON ENERGY SOURCE
- ENSURES SECURITY OF SUPPLY
- IS ENVIRONMENTALLY, ECONOMICALLY AND SOCIALLY SUSTAINABLE

EU NUCLEAR INDUSTRY IN NUMBERS

- ACCOUNTS FOR **25%** OF ELECTRICITY
- ALMOST **50%** OF LOW-CARBON ELECTRICITY
- SUPPORTS AROUND **1Mn** JOBS
- TURNOVER OF **100bn** PER YEAR

March 2025

Nuclear is a net zero technology with a significant supply chain in Europe. As a result, it can support Europe on its path to net zero whilst at the same time ensuring access to affordable energy 24/7 and, most importantly, energy sovereignty.

The nuclear sector is facing challenges in terms of raising funds for projects including the lifetime extension of the existing nuclear fleet, the construction of new nuclear reactors (both large and small) and the development of the supply chain (both fuel and components). Both the investment rating and the ability to attract debt for new projects have a central role to play in the financing of such projects.

Both can be negatively affected if policymakers do not put in place a long-term vision, providing investment certainty, particularly given the significant number of new nuclear projects foreseen for the coming years.

In a nutshell

Policymakers play a key role in leveraging public and private investment. Implementing a long-term vision that will provide investors with the certainty that they need for long-term projects is the first step. But this must be accompanied by non-discriminatory policies, funds and financing mechanisms which focus on supporting all technologies capable of tackling the challenges which Europe is facing:

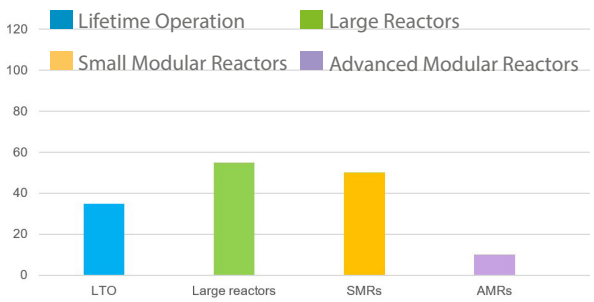
- Reducing emissions & achieving net zero
- Ensuring energy sovereignty & security of supply
- Strengthening Europe's competitiveness & access to affordable energy
- Supporting a circular economy

Nuclear is important to Europe's competitiveness as, not only does it create jobs and growth in Europe, it also ensures energy security and stability, affordability, and reduces emissions. Therefore, access to EU funds and financing must be made more accessible to nuclear as follows

- Development and implementation of clear and understandable financing and guarantee mechanisms
- Ensuring equal access to all EU funds and financing guarantee mechanisms for net zero technologies (including justified criteria)
- Reflecting on how to streamline and accelerate the State Aid process.

Why does it matter?

In 2023, the Nuclear Alliance of EU Member states set an ambitious target of having 150GW of installed nuclear capacity in the EU by 2050. Nuclear related investments usually have significant capital requirements and they are financed with combination of equity and debt, while the ratio between these two varies between projects. Private investors could finance the project by providing equity or debt, but, as a result of the risk profiles of nuclear related investments, private financing could be more expensive for the project. As in any capital intensive investment, the financing cost is one of the key drivers impacting the total cost of the project. Public financing, via lending or guarantees from the Member States or the EU, could reduce the financing costs and the total cost of a project, and ultimately reduce costs for consumers. Having clear and understandable mechanisms to access public loan guarantees and public lending would enable the project developers and owners to commit to



new investments. In addition, access to public financing support would also help attract private investors to participate in the projects.

The EIB could play a role in financing of nuclear related investments. The EIB'sparticipation in debt-financing would further reduce the financing costs and thus reduce the total costs of a project.

When it comes to new nuclear particularly in certain EU energy markets, a project cannot be justified by market revenues alone, and therefore revenue contracts which are agreed in advance are required. Having a pre-agreed revenue contract (e.g. a PPA, or state aid market mechanism) to secure this revenue is critical for enabling projects. Such contracts would provide predictable, long-term revenue for the project, while ensuring sustainable return levels for the project owners. Contracts for Difference are one of the State Aid market mechanisms that are being considered in various member states, and these are well suited for this purpose. Also, public guarantees for Power Purchase Agreements (PPAs) could be useful. The financing mechanism and market mechanism are connected – the lower the cost of finance, the lower the required compensation from the market mechanism.

Our recommendations

Based on the points raised above, nucleareurope recommends implementing the following policies and instruments in order to encourage greater investment in nuclear projects.

Establishment of a long-term, technology neutral policy framework

In order to provide investors with predictability, the EU needs to put forward a concrete long-term vision accompanied by non-discriminatory policies which provide support to all technologies which will help the EU achieve its goals. It is therefore essential that nuclear be treated on an equal footing.

Positive steps forward have already been undertaken under the Clean industrial Deal and the Affordable energy Action Plan published on 26 February 2025. Additional policy proposals where equal treatment of nuclear will be essential include the following:

- Dedicated Clean Energy Investment Strategy for Europe
- Clean Technology Investment plan
- European Competitiveness Fund

This applies not just to nuclear as a technology in its own right, but also to its other applications, such as hydrogen production and thermal heat produced from nuclear for both households and industry. In order to ensure fair competition for hydrogen produced by different net zero energy sources, all forms of net zero electricity should be supported as this will ultimately bring greater benefits in terms of cost and security of supply. Nuclear can also play a crucial role in decarbonising heat produced in Europe. To unlock this potential, the right conditions must be established to incentivise the decarbonisation of heat, including the use of nuclear technology.

Ensure a non-discriminatory approach to EU funds & financing mechanisms

Several existing EU funds are due to be reviewed to take into account recent policy developments.

Those funds with articles which expressly exclude nuclear power (such as the Just Transition Fund and InvestEU) must be reviewed and such exclusions removed, in order to bring them in line with the Sustainable Finance Taxonomy and the Net Zero Industry Act (NZIA). In addition, overly restrictive and unjustified criteria should be avoided.

This should also apply to the next Multiannual Financial Framework (MFF). Any new fund being envisaged under the next MFF (or the roll over of existing funds) should be technology neutral, and thus not include articles which lead to the exclusion of nuclear projects.
One example of the inconsistency which exists today between policy and EU funding mechanisms is the different existing EU funds which form the basis of the Strategic Technologies for Europe Platform (STEP). Although nuclear technologies are included alongside renewables under the NZIA, the vast majority of the funds covered exclude

nuclear. This inconsistency clearly goes against the principle of technology neutrality. Another example is the EU ETS Innovation Fund, where although nuclear projects are eligible on paper, the criteria are so stringent very few projects will have access in practice[1].

Furthermore, under the European Investment Bank (EIB) and European Bank for Reconstruction and Development (EBRD), the financing of nuclear projects (e.g. life-time extension of existing nuclear plants, new build projects and the nuclear fuel supply chain) should be supported.

Grant more funds under the Euratom Programme to nuclear fission

Although the budget allocated to Euratom increased under the last MFF, the share allocated to nuclear fission activities actually decreased. Given that nuclear fission technologies are already contributing to the goals outlined above this situation should be reversed, and funding for fission increased. This increase should apply to all nuclear technologies, including both large and small reactors.

Furthermore, greater synergies should be envisaged with other EU programmes (eg Horizon Europe) to leverage an increase in funds for nuclear activities. This should apply to skills, digital and non-power applications.

Scope of Important Projects of Common European Interest (IPCEIs) to cover all nuclear

It is good to see that the EU is open to allowing IPCEIs to be used for nuclear. In this respect, a wide scope which covers a broad range of nuclear projects (such as large reactors, non-electric applications of nuclear and the fuel cycle) could bring significant benefits.

Work towards streamlining and accelerating the State Aid process

The nuclear industry recognises that up until now, only a very limited number of nuclear projects have been the subject of a State Aid approval process and that the European Commission has been very thorough in its assessment of these projects to ensure their robustness. Now that there are significant plans for the roll out of new nuclear projects across the EU, this provides an opportunity to identify ways in which the process can be streamlined and accelerated to avoid unnecessary delays.

Conclusion

The key areas which the nuclear sector has identified for improvement can therefore be summarised as follows:

- Technology neutral approach to policy
- Ensuring EU involvement in enabling affordable and accessible financing for nuclear investments
- Removal of discriminatory articles (nuclear exclusions) from existing EU funds (e.g. European Regional Development Fund, Cohesion Fund and Just Transition Fund)
- Inclusion of nuclear in all funds under the next Multiannual Financial Framework, with appropriate evaluation criteria
- Increasing the Euratom budget and allocating a much greater share to nuclear fission
- Leveraging EU financial support – including the European Investment Bank - for the deployment the supply chain in the EU (including components and the nuclear fuel cycle), as well as supporting nuclear skills
- Streamlining & acceleration of the State Aid process

[1]While nuclear technologies are not explicitly excluded from the Innovation Fund (IF) regulatory framework and a recent Q&A related to the IF 2024 NetZero/Battery call states that projects including nuclear technologies are eligible, nuclear is not explicitly listed alongside other technologies which are eligible under the IF (namely utilization of waste heat, electrification and energy efficiency within industrial processes and energy systems, carbon capture and utilisation, products that substitute carbon-intensive ones in sectors listed under Annex I of the EU Emissions Trading Directive, carbon capture and storage and innovative renewable energy and energy storage technologies). Furthermore, in order to be eligible under the IF, a project should reach its financial close within 48 months which is very challenging for innovative nuclear technologies given the time required for permitting and qualification processes.

About us

nucleareurope is the Brussels-based trade association for the nuclear energy industry in Europe. The membership of nucleareurope is made up of 15 national nuclear associations and through these associations, nucleareurope represents nearly 3,000 European companies working in the industry and supporting around 1.1 million jobs.

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