

New in nuclear - financing the transition in Central and Eastern Europe

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While Germany is proceeding with its final phase-out of nuclear power, in Central and Eastern Europe (CEE), interest in building new nuclear plants continues to grow. Particularly in Poland, which currently does not have any reactors producing electricity, but also countries like Czechia, which proposes to increase the share of nuclear power in its energy mix from the current 36 to 56 per cent by 2050.

In CEE countries, new nuclear is considered a path to energy security (with Putin's war in Ukraine sharpening this view) and a route to move away from coal and to net zero in power generation. In addition, political and public opinion generally takes a more positive view of nuclear compared to EU states such as Austria and Luxembourg.

What nuclear reactor vendors and investors will be looking at is, primarily, the political and public policy debates around prospective financing models for new build projects and, to some extent, tendering procedures. What are the expected timeframes? How can investments be de-risked? How can financing models be tailored to the local nuclear market, while complying with EU rules? And which are the political or policy risks that could potentially cause delays?

Poland seems to be the most ambitious country in the region - the government intends to build multiple conventional large-scale plants plus numerous small modular reactors (SMRs) by 2038. Poland has also shifted from its previous 2014 policy of proposing to work with only "one technological partner" to a position of wanting to work with a number from the US, South Korea and, possibly, France. However, the current timeframe - the first plant would be commissioned by 2033 - looks unrealistic, primarily because there is no clarity on what kind of public policy framework will be adopted to address the issue of high upfront capital costs with nuclear new build.

To tackle this, the government is now considering adopting the so-called SaHo model. Under this model, the state acts as an early investor but gradually sells its shares to private companies, particularly companies that have offtake agreements for the plant's electricity. In addition, the Polish government would take on the investor's costs if a project gets cancelled, among other risks. This seems to be different from the so-called Mankala model used to develop Finland's new Olkiluoto plant, which began regular output a few weeks ago, as investment risks are shared between limited liability companies, not with the state. A decision on the financing model is to be made in 2026 at the latest, when the construction of the first reactor will commence, but possibly earlier in 2024.

On some of the big “state” projects, the government has not indicated whether the preferred supplier will be Westinghouse, KHNP or EDF, with the decision expected after October’s general elections. However, even if the opposition were to come to power, the overall direction is unlikely to change - with Westinghouse certain to be commissioned several major projects. Moreover, President Andrzej Duda seems to be personally determined to continue balancing closer US cooperation with European partnerships on building new reactors. This approach is expected to last beyond Poland’s EU presidency in 2025.

Meanwhile, Czechia still seems to be a step behind Poland on SMRs, with no targets set. To catch up, the Industry Ministry has created a special interdepartmental working group to decide on a renewed nuclear strategy, with first documents to be presented in the autumn and a final strategy drafted next year.

In the background, there are similar concerns about increasing capital costs for larger plants. But in contrast to Poland, the government is opting - at least for the planned new units of the Dukovany NPP - for a type of Contract for Difference (CfD), whereby it agrees to buy power from the plant, once it is operational, at a pre-determined price. A government-controlled dedicated trading company will resell this energy on the market. If it generates losses, it will be able to receive compensation from the state budget (this has not yet been approved by the European Commission).

While reassuring for investors, this model will apparently not be applied to future nuclear projects. Whatever financing model(s) will be chosen, investors will be nervously eyeing the politicised debates around nuclear and the green transition. More specifically, if the ANO party of former prime minister Andrej Babiš gains the upper hand in the next general elections in (or before) 2025, new meddling in or delays around tendering procedures, as already seen during Babiš’s tenure in 2018, could be expected.

Looking at the region more broadly, policymakers are facing similar dilemmas. In Slovakia, the government intends to build new plants and has expressed interest in SMRs - but any decisions on financing and tenders will likely have to wait until after September’s general elections. Political support for nuclear and a perceived stable policy environment for the long term are essential for enabling private financing - investors should thus keep a close eye on the political and legislative cycles in Poland, Czechia and beyond.

On the European level, it will be interesting to see whether the CEE countries nuclear “alliance” with France will eventually shift the balance in the Council and, as a result, unlock EU funds necessary to boost new nuclear.

	Financing type	Plant(s) in question	To watch
Poland	SaHo	Choczewo, Konin, with more potential locations yet to be determined	Change of policy following general elections in October 2023 - low risk

Czechia	CfDs (apparently not replicated for future projects)	Dukovany NPP	Change of policy following general elections in 2025 - medium risk
Slovakia	To be determined	To be determined	Contact GC's CEE team for more info
Hungary	To be determined	Paks II	
Romania	CFDs	Doicești (SMRs), Cernavodă NPP	
Bulgaria	To be determined, but CfDs and power purchase agreements (PPAs) seem to be ruled out	Kozloduy NPP, Belene NPP	