# UK commits £14.2 billion to Sizewell C as Small Modular Reactors shape future energy mix



The United Kingdom is embarking on a transformative journey in its energy landscape, marked by a substantial £14.2 billion investment in the Sizewell C nuclear power station, as unveiled by the Department for Energy Security and Net Zero. This ambitious initiative is poised to provide electricity to approximately six million households and create around 10,000 jobs during its construction phase. This project is not merely an infrastructural investment; it represents a strategic pivot towards energy autonomy, a reduction in dependence on imported fossil fuels, and a reaffirmation of the UK’s commitment to climate objectives.

The funding allocated for Sizewell C is one of the largest in British nuclear history, following the troubled Hinkley Point C project, which has faced significant delays and cost overruns. Sizewell C is now primarily government-owned, with an 83.8 percent stake, while EDF retains a minority share. This reassessment of the UK’s energy policy comes in the context of rising energy prices and geopolitical disruptions, particularly those stemming from the Russia-Ukraine conflict. European leaders, including Commission President Ursula von der Leyen, have echoed the need for an expansion of nuclear capacity, underscoring a broader continental shift towards low-carbon energy sources.

The focus on nuclear energy aligns with a growing desire for energy sovereignty within the UK. As Miliband, the Minister for Energy, articulated, nuclear power is crucial for forging “a golden age of clean energy abundance”, aimed at lowering household energy costs while enhancing national control over resources. The theoretical framework surrounding energy dependence, as noted by scholars, affirms that reliance on imported energy restricts national autonomy. Therefore, the UK’s nuclear strategy also includes a significant £2.5 billion allocation for Small Modular Reactors (SMRs), which are anticipated to offer a more nimble, scalable complement to traditional nuclear plants.

The construction of Sizewell C is projected to employ around 10,000 workers, reflecting the UK’s broader industrial strategy to rejuvenate engineering capabilities and stimulate regional economic growth. This initiative is not just about generating power; it is expected to generate ancillary growth in manufacturing and related supply chains, as evidenced by historical trends associating large infrastructure projects with industrial renewal. Supporting this vision, the SMR programme aims to decentralise nuclear production, enhancing local skills and fostering home-grown expertise in advanced reactor technologies.

However, the path forward is not devoid of challenges or criticisms. Skeptics have raised concerns regarding the viability of financing models and the opportunity costs inherent in favouring nuclear technology over other renewables. The £2.5 billion budget for SMRs was drawn from an initial £8.3 billion earmarked for a wider array of clean energy initiatives, including wind and solar power. This shift in focus to a single SMR vendor, Rolls-Royce, rather than fostering competition, has also been met with criticism. Experts warn that the heavy investment in nuclear might detract from other rapidly deployable renewable solutions.

Nuclear energy is often touted for its low carbon emissions and reliability, offering a significant counterbalance to intermittent renewable sources. The UK government has positioned nuclear as a cornerstone of its climate strategy, a view supported by leading climate mitigation experts. Nonetheless, the challenges surrounding nuclear projects, such as safety, construction timelines, and waste management, remain significant hurdles. The need for transparent governance and public trust in these technologies is imperative, especially as public sentiment may lean towards environmental concerns.

In the realm of innovation, SMRs appear as a promising avenue for safe, scalable, and cost-effective energy solutions. The planned factory production of these smaller reactors aims to mitigate on-site construction risks and offers a more versatile alternative to traditional nuclear models. The UK has selected Rolls-Royce’s SMR design for its capacity and potential flexibility, amid aspirations to establish a robust domestic manufacturing base. Yet, the realisation of these technologies requires an enabling regulatory environment and supportive public policy measures.

Britain’s renewed focus on nuclear energy seems to resonate with a broader European context where nations are reassessing their energy strategies in light of recent geopolitical upheavals. Countries like Germany and Finland have navigated similar transitions, spotlighting the necessity of aligning industrial strategies with energy security. The ongoing evolution of nuclear policy across Europe underscores the complexity of balancing energy needs, market dynamics, and environmental implications.

The expansion of nuclear capacity inevitably raises discussions concerning non-proliferation protocols. The UK’s investments in Sizewell C and SMRs will necessitate stringent safeguards in compliance with International Atomic Energy Agency regulations. The integration of the UK into European nuclear discussions post-Brexit will likely play a vital role in ensuring effective governance of nuclear technologies.

As plans progress, no definitive timeline or total cost has been assigned to the Sizewell C project, though its completion is anticipated around the early 2030s. Simultaneously, the development of SMRs is expected to align closely with these timelines. As the UK addresses key bottlenecks related to regulatory approvals, financing mechanisms, and skilled labour, it reflects a broader commitment to reshaping its energy architecture. This dual investment signifies a strategic turn toward nuclear power, not only as a means to combat energy volatility and enhance domestic capabilities but also as a crucial element of the UK’s climate strategy.

Amid fiscal strains and pressing environmental considerations, the success of these initiatives is heavily contingent upon transparent governance, public engagement, and continued innovation in financing mechanisms. As the UK looks to invigorate its nuclear energy sector, it remains to be seen whether this bold pivot will ultimately deliver the anticipated benefits of energy security and climate sustainability, striking a balance between traditional power generation and the promise of new technologies.

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* Paragraph 1 – [[1]](https://www.eurasiareview.com/12062025-a-nuclear-renaissance-in-britain-financing-sizewell-c-and-small-modular-reactors-analysis/), [[3]](https://elpais.com/economia/2025-06-10/el-reino-unido-apuesta-por-la-energia-nuclear-con-una-inversion-publica-de-casi-14000-millones-de-euros.html)
* Paragraph 2 – [[1]](https://www.eurasiareview.com/12062025-a-nuclear-renaissance-in-britain-financing-sizewell-c-and-small-modular-reactors-analysis/), [[5]](https://apnews.com/article/27e13197344cf96b5b76c4503e5a8b9e), [[6]](https://www.reuters.com/sustainability/boards-policy-regulation/britain-invest-142-billion-pounds-sizewell-c-nuclear-project-2025-06-09/)
* Paragraph 3 – [[2]](https://www.ft.com/content/d80b68ec-3da8-42ea-82ee-4cab22b31a69), [[4]](https://www.ft.com/content/81d6ed9d-a1a0-4b53-a9da-6d895c9d1e6d), [[6]](https://www.reuters.com/sustainability/boards-policy-regulation/britain-invest-142-billion-pounds-sizewell-c-nuclear-project-2025-06-09/)
* Paragraph 4 – [[3]](https://elpais.com/economia/2025-06-10/el-reino-unido-apuesta-por-la-energia-nuclear-con-una-inversion-publica-de-casi-14000-millones-de-euros.html), [[5]](https://apnews.com/article/27e13197344cf96b5b76c4503e5a8b9e), [[7]](https://www.ft.com/content/6879daa8-4163-4474-afd2-7e8afbd8cf71)
* Paragraph 5 – [[1]](https://www.eurasiareview.com/12062025-a-nuclear-renaissance-in-britain-financing-sizewell-c-and-small-modular-reactors-analysis/), [[2]](https://www.ft.com/content/d80b68ec-3da8-42ea-82ee-4cab22b31a69), [[4]](https://www.ft.com/content/81d6ed9d-a1a0-4b53-a9da-6d895c9d1e6d)
* Paragraph 6 – [[1]](https://www.eurasiareview.com/12062025-a-nuclear-renaissance-in-britain-financing-sizewell-c-and-small-modular-reactors-analysis/),
* Paragraph 7 – [[3]](https://elpais.com/economia/2025-06-10/el-reino-unido-apuesta-por-la-energia-nuclear-con-una-inversion-publica-de-casi-14000-millones-de-euros.html), [[6]](https://www.reuters.com/sustainability/boards-policy-regulation/britain-invest-142-billion-pounds-sizewell-c-nuclear-project-2025-06-09/), [[7]](https://www.ft.com/content/6879daa8-4163-4474-afd2-7e8afbd8cf71)
* Paragraph 8 – [[1]](https://www.eurasiareview.com/12062025-a-nuclear-renaissance-in-britain-financing-sizewell-c-and-small-modular-reactors-analysis/), [[2]](https://www.ft.com/content/d80b68ec-3da8-42ea-82ee-4cab22b31a69), [[6]](https://www.reuters.com/sustainability/boards-policy-regulation/britain-invest-142-billion-pounds-sizewell-c-nuclear-project-2025-06-09/)
* Paragraph 9 – [[1]](https://www.eurasiareview.com/12062025-a-nuclear-renaissance-in-britain-financing-sizewell-c-and-small-modular-reactors-analysis/), [[3]](https://elpais.com/economia/2025-06-10/el-reino-unido-apuesta-por-la-energia-nuclear-con-una-inversion-publica-de-casi-14000-millones-de-euros.html), [[6]](https://www.reuters.com/sustainability/boards-policy-regulation/britain-invest-142-billion-pounds-sizewell-c-nuclear-project-2025-06-09/)
* Paragraph 10 – [[1]](https://www.eurasiareview.com/12062025-a-nuclear-renaissance-in-britain-financing-sizewell-c-and-small-modular-reactors-analysis/), [[4]](https://www.ft.com/content/81d6ed9d-a1a0-4b53-a9da-6d895c9d1e6d), [[5]](https://apnews.com/article/27e13197344cf96b5b76c4503e5a8b9e)
* Paragraph 11 – [[1]](https://www.eurasiareview.com/12062025-a-nuclear-renaissance-in-britain-financing-sizewell-c-and-small-modular-reactors-analysis/), [[3]](https://elpais.com/economia/2025-06-10/el-reino-unido-apuesta-por-la-energia-nuclear-con-una-inversion-publica-de-casi-14000-millones-de-euros.html)

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## Bibliography

1. <https://www.eurasiareview.com/12062025-a-nuclear-renaissance-in-britain-financing-sizewell-c-and-small-modular-reactors-analysis/> - Please view link - unable to able to access data
2. <https://www.ft.com/content/d80b68ec-3da8-42ea-82ee-4cab22b31a69> - The World Bank has lifted its longstanding ban on financing nuclear energy, marking a significant policy shift aimed at promoting low-emission electricity in developing nations. President Ajay Banga announced plans to collaborate with the International Atomic Energy Agency to support existing reactors, upgrade electrical grids, and potentially facilitate the adoption of small modular reactors. This decision aligns with global strategies to meet the projected doubling of electricity demand by 2035 and complements investments in other renewable energy sources like solar, wind, geothermal, hydro, and natural gas.
3. <https://elpais.com/economia/2025-06-10/el-reino-unido-apuesta-por-la-energia-nuclear-con-una-inversion-publica-de-casi-14000-millones-de-euros.html> - Under Prime Minister Keir Starmer's leadership, the UK has announced a public investment of €13.6 billion for the development of the Sizewell C nuclear power plant in Suffolk. This initiative is part of an ambitious plan to revitalise the economy and ensure energy security. Chancellor Rachel Reeves justified the decision as a pragmatic response to international energy dependence and rising energy prices. The project is expected to generate 10,000 new jobs and provide a generation capacity of 3.2 gigawatts, sufficient to power six million homes. The French company EDF holds a 15% stake, and private investment discussions are ongoing. Additionally, the government is investing in emerging technologies like Small Modular Reactors (SMRs), with Rolls-Royce leading their development, and allocating nearly €3 billion to nuclear fusion projects. This marks the first new nuclear power plant since 1995, with an estimated completion time of 9 to 12 years. The government views these investments as crucial for job creation, reducing energy risks, and combating climate change.
4. <https://www.ft.com/content/81d6ed9d-a1a0-4b53-a9da-6d895c9d1e6d> - The UK government has selected a consortium led by Rolls-Royce as the sole preferred bidder to develop the country’s first small modular nuclear reactors (SMRs), marking a milestone in advancing this emerging technology. Although the government had initially hoped to fund two projects, fiscal constraints limited support to one. Rolls-Royce's SMRs, each capable of generating 480 megawatts, will collectively supply about 1.5 gigawatts—enough to power 1.5 million homes. The consortium has invested £280 million and received £210 million in UK government funding to aid in regulatory approvals. The company's backers include ČEZ Group, BNF Resources, Constellation, and the Qatar Investment Authority. The initial agreement covers three units, with expectations to build more domestically and abroad, including deals in the Czech Republic and potential contracts in Sweden. Rolls-Royce plans to establish an SMR factory in the UK but will source some components, like turbines from Siemens in Germany, to address supply chain challenges. The UK government also announced £11.5 billion for the larger Sizewell C nuclear plant and pledged £2.5 billion for SMR development over the next three years, aiming to revitalise nuclear power in the country.
5. <https://apnews.com/article/27e13197344cf96b5b76c4503e5a8b9e> - The UK government has announced a £14.2 billion ($19 billion) investment to construct the Sizewell C nuclear power plant in Suffolk, marking the country’s first major nuclear project since Sizewell B in 1995. Expected to become operational in the 2030s, the plant will supply low-carbon electricity to 6 million homes, aligning with Britain's goal to decarbonise its electricity grid by 2030 and reduce reliance on volatile international fossil fuel markets, especially post-Russia’s invasion of Ukraine. Prime Minister Keir Starmer emphasised the energy security and price control benefits of domestic power generation. The project will also generate 10,000 jobs. Additionally, Rolls-Royce has been selected as the preferred bidder to develop small modular reactors to support energy-intensive industries. However, critics argue nuclear is costlier and slower to build than renewable sources like wind and solar. Environmental groups have raised concerns about the ecological impact on local wildlife, with about 300 people recently protesting the Sizewell C development, doubting its timely contribution to the UK’s 2030 net-zero targets. This new investment builds on the £3.7 billion already committed by the government.
6. <https://www.reuters.com/sustainability/boards-policy-regulation/britain-invest-142-billion-pounds-sizewell-c-nuclear-project-2025-06-09/> - The British government announced an additional investment of £14.2 billion ($19.25 billion) in the Sizewell C nuclear power project in Suffolk, raising its total commitment to £17.8 billion. This move is part of a broader spending review aimed at enhancing energy security, meeting climate targets, and generating employment. Sizewell C, expected to generate enough electricity for six million homes and create about 10,000 jobs during its construction peak, represents the largest nuclear initiative in a generation according to Chancellor Rachel Reeves. Although further private investors are being sought, none were mentioned in the announcement, and key project details such as total cost and completion date remain undisclosed. The plant would be only the second new nuclear development in over 20 years, following EDF’s Hinkley Point C, which has faced delays and rising costs. EDF, with an 83.8% government stake and 16.2% EDF stake as of December, welcomed the investment, highlighting the project’s strategic importance. Sizewell C was once a joint venture with China's General Nuclear Power Group, but the UK government assumed full ownership in 2022 due to national security concerns. Critics continue to question the project's cost transparency and public value.
7. <https://www.ft.com/content/6879daa8-4163-4474-afd2-7e8afbd8cf71> - Despite concerns over high costs, the UK's decision to proceed with the Sizewell C nuclear project is justified when considering the long-term energy strategy. While nuclear plants like Hinkley Point C have experienced delays and rising costs — with Hinkley's projected build cost reaching £46bn — nuclear power offers unique advantages over renewable energy. Estimated to cost £40bn, Sizewell C's electricity could range from £170 to £186 per megawatt hour, far higher than the £89/MWh price for offshore wind. However, nuclear energy provides consistent, reliable power and can be built near demand centres, reducing the need for grid infrastructure and storage solutions associated with intermittent renewable sources. Aurora Energy suggests a nuclear-heavy energy model, with costs comparable to successful Finnish projects, could prove cheaper overall than a renewable-dominated grid. Diversifying energy sources also enhances system resilience. While the government is absorbing investor risk to attract funding—potentially raising consumer bills—this strategic investment is seen as preferable to further stagnation in the UK's nuclear energy sector.