

UK unveils plans for 'biggest nuclear power expansion in 70 years'

January 11 2024



French company EDF is currently building a new reactor at Hinkley Point.

The UK government on Thursday announced plans for what it said was the country's "biggest expansion of nuclear power for 70 years" to bolster its energy independence and meet carbon emission targets.

The Civil Nuclear Roadmap includes exploring the construction of a major new power station, £300 million (\$382 million) of investment to produce an advanced uranium fuel and "smarter regulation".

Taken together, the measures would quadruple UK nuclear power by 2050 to 24 gigawatts, enough to provide a quarter of the UK's electricity needs.

"Nuclear is the perfect antidote to the [energy](#) challenges facing Britain—it's green, cheaper in the long-term and will ensure the UK's energy security," said Prime Minister Rishi Sunak.

"This is the right long-term decision and is the next step in our commitment to nuclear power, which puts us on course to achieve net zero by 2050 in a measured and sustainable way," he added.

The [government](#) says it is committed to the 2050 net zero target but has come under fire after announcing last summer it will issue "hundreds" of new oil and gas licenses in the North Sea.

It is also grappling with a cost-of-living crisis partly caused by the spike in oil and gas prices following Russia's invasion of Ukraine.

Energy minister Claire Coutinho said the plans would mean the UK would "never again be held to ransom over energy by tyrants like Vladimir Putin".

The government said the proposals represented "the biggest expansion of [nuclear power](#) for 70 years", adding it would "reduce electricity bills, support thousands of jobs and improve UK energy security".



Construction of another reactor is planned at the Sizewell site.

Construction

The most eye-catching proposal is the possible construction of another power station as big as Sizewell in east England, construction on which is due to begin this year, and Hinkley in west England, which is currently under construction.

Both [power stations](#) will be capable of powering six million homes each.

The UK currently has nine operational nuclear reactors on five sites but many are nearing the end of their operating lives.

Six reactors on three sites have been shut down since 2021 and will be dismantled.

However, operator EDF announced in March that it was extending the life of two British [power](#) plants—Heysham 1 and Hartlepool.

The UK intends to build up to eight new reactors by 2050.

The government said on Sunday it will invest up to £300 million into producing the HALEU fuel required for new high-tech reactors, and which currently is only commercially produced in Russia.

"The UK will lead the way from its North West production hub to provide the world with this form of uranium fuel, with the first plant aiming to be operational early in the next decade," said the government.

Regulators will also be allowed to assess projects while designs are finalized in a loosening of rules aimed at speeding along [construction](#) plans.

© 2024 AFP

Citation: UK unveils plans for 'biggest nuclear power expansion in 70 years' (2024, January 11) retrieved 8 May 2024 from

<https://techxplore.com/news/2024-01-uk-unveils-biggest-nuclear-power.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--