Our plan for water

Sizewell C has a sustainable plan to deliver its water needs. This plan will not affect public water supplies, but will protect the environment and help to build a more resilient water supply for the East of England.

Overall aims

Sizewell C's sustainable plan for use of potable-grade water (i.e. drinking water) is to minimise demand, maximise re-use and ensure that demand is met in ways that don't affect supplies to local communities and that protect the environment.

Seawater will be used responsibly to protect the marine environment, including fish.

Construction

Sizewell C's demand for potable water will go up and down depending on the types of construction activities being undertaken.

We have set ourselves ambitious re-use targets of up to 70% to minimise water demand. At peak levels of construction activity, our demand will reach 4 million litres of potable-grade water per day, although it will be less than this for most of the time.

Our construction demand will be met by a new temporary desalination plant that we will provide, powered by low-carbon electricity. This plant will only supply us, so it won't be connected to the local public water distribution network.

We are in negotiations with Anglian Venture Holdings to build and operate this plant on our behalf. It will be one of the first things to be installed. Water will be tankered in from outside the local area until it's available for use.

Seawater

During construction of Sizewell C, up to 10 million litres of seawater per day will be abstracted from 485m offshore to supply the temporary desalination plant. The intake will be fitted with a fine screen to prevent fish being drawn in.

Up to six million litres of slightly saltier water per day will be discharged back into the sea approximately 385m offshore. The outfall will be fitted with a diffuser to ensure the discharge water mixes with seawater to protect marine life on the seabed.

99% of the water used to operate Sizewell C will be seawater which is used to cool the steam produced from generating electricity. It will be abstracted 3km offshore and immediately discharged back into the sea after it has done its job. A 'fish recovery and return system' will be used to help protect the fish.

Long-term operational water supply

Sizewell C's long-term supply will be provided by Essex and Suffolk Water (part of Northumbrian Water). In December 2022, they published their draft Water Resource Management Plan 2024 for consultation. This explains how they propose to meet the predicted future increase in demand for water and their plans take account of Sizewell C.

The new power station's demand of 2.2 million litres of potable-grade water a day will be a relatively small part of total daily demand and Essex & Suffolk Water are confident they will be able to supply the local area. Their plans will protect the environment by reducing the amount of water they extract from the ground and local rivers.

They are looking at two options to increase supplies in Suffolk to meet forecast demand from customers and businesses, including from Sizewell C, and are confident either can be delivered before the end of Sizewell C construction in the early 2030s.

Sustainability

Sustainability is at the heart of our project. Measures to protect the environment are embedded in our design and construction methods.

Sizewell C will play a key role in providing cleaner energy for the UK, supplying 6 million homes with reliable low-carbon electricity and helping lower carbon emissions to reach Net Zero by 2050. Our water plans are consistent with our commitment to doing "The power of good for Britain" by lowering carbon emissions, increasing biodiversity, boosting jobs and prosperity and delivering a better future for our country.

Sizewell C
The power of **good for Britain**