Sizewell C and the environment

A net gain in biodiversity
A new Environmental Trust
Continuing a great track record
The biggest challenge facing wildlife is climate change. We cannot address the climate crisis without nuclear power.

Sizewell C will boost local biodiversity

Sizewell C is the proposed new nuclear power station in Suffolk which could supply around six million homes with low carbon electricity for at least 60 years.

Like Sizewell B, the new power station will be located within the Suffolk Coast and Heaths AONB and close to RSPB Minsmere, an area rightly regarded as a jewel in the crown of UK wildlife sites.

Nuclear power and wildlife have co-existed in this area of Suffolk since the 1960s. We understand how precious this part of the coastline is and we have a great track record in looking after our 600-hectare estate. That’s why Sizewell C will not be built at the expense of nature.

While we will use some SSSI land for construction, we have identified up to ten times more land elsewhere which could be used to create replacement habitats. Other measures we are taking to protect and enhance the local environment are predicted to lead to a 19% increase in biodiversity*.

The biggest challenge facing wildlife is climate change. We cannot address the climate crisis without nuclear power.

*The biodiversity net gain has been assessed using the latest Natural England Biodiversity Metric (2.0). It does not include replacement habitat for the six ha of SSSI needed for construction. The assessment was carried out by consultants on behalf of Sizewell C and was independently peer-reviewed.
Our track record

Sizewell’s nuclear power stations have operated in harmony with the Suffolk countryside since the 1960s. The nuclear industry has helped to protect many rare species in the area, including antlions, bats, butterflies, natterjack toads and water voles. We will continue our great track record in the years to come.

Since 2015, we’ve taken low-grade agricultural land on the Sizewell estate and used it to create rich new habitats for wildlife.

This includes 150ha which have been transformed into acid grassland and heathland. These new grassland areas have already been colonised by valued invertebrates, including a large population of grayling butterflies, a priority species listed in the Suffolk Biodiversity Action Plan.

2015

Other sites

EDF’s existing power stations demonstrate how nuclear and nature can exist happily side by side. By implementing a Biodiversity Management System and Biodiversity Action Plan, we’ve been able to conserve and enhance hundreds of rare and notable species.

Dungeness

Dungeness B power station sits in a unique location in the middle of Dungeness National Nature Reserve in Kent. Its diverse landscape is home to many unique plants, animals and birds - one third of all UK plant species are found at Dungeness.

At Dungeness, EDF helped to conserve what was, for a long time, the only known colony of Sussex Emerald moths in the UK, as well as the critically endangered red hemp-nettle.

Hinkley Point C

At Hinkley Point C, a team of site ecologists continuously monitors and mitigates the impacts of construction. Ecological enhancements are already benefiting birds including barn owls and kestrels.

Oystercatchers are on the RSPB ‘birds of concern’ amber list but have been breeding at the site after measures were put in place to protect their eggs.
A new Environmental Trust

Today, the Sizewell estate is more than 600ha in size and is carefully managed in cooperation with Suffolk Wildlife Trust.

With the inclusion of new land to mitigate any effects on wildlife, our land ownership after construction will increase substantially to around 800ha (almost the size of 1,000 football pitches).

To make sure that our whole estate continues to enhance the area’s rich landscape, we will establish an independent Environmental Trust to support rewilding and promote further biodiversity. Its work will go beyond the ecological mitigation and landscape measures set out in our application for planning permission.

RSPB Minsmere

Sizewell C will not be building on any land owned by RSPB Minsmere. Fig. 1 shows the boundary line of the temporary construction area for the project.

At the northernmost point, where a small part of the boundary meets RSPB land, we are creating a new area of wetland which includes open water, reedbeds and wet woodland. This will allow wildlife to thrive, while helping to reduce any impacts from flooding.

Species which live on the RSPB reserve, including bats and rare birds such as marsh harriers, will be protected. We will limit construction when necessary to reduce noise and we will minimise light spillage by using directional and low-level lighting. We are already planting trees along the northern boundary to reinforce the existing woodland which separates our land from the reserve.

We will create 47ha of new habitats for foraging marsh harriers to the north of the construction site. We have worked with the RSPB, Suffolk Wildlife Trust and Natural England over many years to develop these boundary treatments and controls.

We are confident our plans will not have an impact on this internationally important nature reserve and valued neighbour.
Since 2012, we have been carrying out wide-ranging assessments to understand the effects of construction on the local environment.

These have included detailed surveys of plants, habitats, invertebrates, fish, amphibians, reptiles, birds, bats and terrestrial mammals. Our assessments use methods that are dictated by legislation and their scope is set out by the Planning Inspectorate.

By creating new habitats and, where necessary, translocating species to new areas, we can protect local wildlife.

There is only one bat species (Barbastelle) and one plant species (Deptford Pink) for which mitigation measures still need to be finalised. We are confident we can protect the Barbastelle by strengthening its existing flight corridors and further reducing the impact of light. We are translocating the Deptford Pink to a site close to Sizewell B and will carry out regular surveys to monitor progress.

47 ha of new habitats for marsh harriers

150 indigenous trees are being planted on the northern boundary of the estate to substantially increase the woodland screen next to Minsmere.
Once Sizewell C is constructed, the nuclear licensed area will amount to 69ha – that’s less than 0.2% of the total area of the 156 square miles of the Suffolk Coast and Heaths AONB.

Nuclear is needed for our low carbon energy future and its land footprint is much smaller than for renewable technologies. It produces 1,000 times more energy per acre than solar, and 3,000 times more energy per acre than onshore wind.

Land at three sites will allow us to create at least nine times the amount of fen meadow we are using for construction. This is in line with the requirements of Natural England. We will use the same sites to replace the wet woodland needed for construction.

In 2015, we established Aldhurst Farm, a 67-hectare habitat creation scheme with six hectares of new wetland including open water, ditches, and reedbeds. Marsh harriers already forage at Aldhurst Farm and it also a habitat for bats, water voles and otters.

Sizewell C will require the use of 6.52 hectares of SSSI* land, but we have identified 65 hectares elsewhere which have the potential to provide replacement habitats. This includes new areas of fen meadow and wet woodland.

*Site of Special Scientific Interest
Continuing dialogue

In response to feedback from wildlife organisations and others, we have recently made changes to our proposals which will reduce the amount of SSSI land needed for the power station.

We will continue our discussions with key environmental organisations so that they can shape our proposals for further mitigation measures.

We are developing plans for a fund to compensate the RSPB and National Trust if visitors are deterred from visiting Minsmere or Dunwich Heath.

Marine life

As part of the normal operation of the power station, a very small amount of chemicals will be discharged into the sea. These will be in such low concentrations that they will disperse harmlessly in the water.

Discharge of fish into the sea through the power station cooling system will not cause harm to the environment. The fish return system deliberately returns matter to the sea where it is available for consumption by birds and other marine life. This is no different from the existing situation at Sizewell B.

Sizewell C will require an environmental permit from the Environment Agency to authorise the release of any chemicals or potentially polluting matter into the marine environment. No such permit would be granted if the Environment Agency considered that they would cause harm.
Building the green economy

Sizewell C will meet the biodiversity crisis and climate crisis head-on while helping the Suffolk economy bounce back after the COVID pandemic.

The project will support around 70,000 jobs nationally and create 1,500 apprenticeships. 70% of the construction value will go to UK suppliers with around 2,500 companies across the country set to benefit.

In December 2020, the UK Prime Minister identified nuclear as one of the pillars of his ten-point plan for a Green Industrial Revolution.

If planning permission is granted, Sizewell C will deliver thousands of jobs, increase local biodiversity and help the UK fight climate change.