

## THE CASE AGAINST SIZEWELL C

EDF's Sizewell C (SZC) planning application is for two EPR reactors on the fragile Suffolk Heritage Coast. They would take 10 - 12 years to build and will cost £20 billion. We contend that Sizewell C is the wrong project at the wrong time in the wrong place and will not deliver the government's objectives. Our key points are:

- A. Sizewell C does not answer this government's policy imperatives;** it cannot be justified as a means to help economic recovery; it is not the solution to net-zero, being a slow and expensive "bridge to nowhere" that would suck resources away from investment in renewables and hydrogen storage. EDF cannot say how much SZC will cost or be funded, but wants consumers to pay for it through a "nuclear tax". The location in "blue" Suffolk will not help level up the UK. Sizewell C is mired in controversy through China's involvement.
- B. Sizewell C will have destructive impacts on the local economy and internationally-protected habitats;** the economic benefits it would bring to Suffolk are questionable and it will damage Suffolk's existing local economy including tourism. The site is at risk from coastal erosion, too small for the project and threatens Internationally-renowned wildlife reserves. Toxic waste would have to remain on site for centuries.
- C. EDF's EPR has an appalling track record.** EPRs are outdated, expensive and beset by technical failings.

### A. Sizewell C does not answer this government's policy imperatives

1. **SZC cannot be justified as a means to support the UK's economic recovery:** the project is far from shovel-ready, with neither planning consent nor funding. Building a mammoth project in a protected environment must have cast-iron justification, which SZC lacks for all the reasons below. [EDF's press release](#) failed to say what SZC would cost, but claimed up to 70% construction value would go to UK companies and aim was for majority ownership by UK investors; however, this means a third of construction value and up to half of investment revenue would leave the UK. Large infrastructure projects are boom and bust, not sustainable, and do not create lasting wealth. SZC will damage Suffolk's resilient SME-based local economy for only 900 long-term jobs. There is increasing public support for a Green Recovery, in which SZC has no place. (*See also 7*).
2. **SZC is not a solution for net zero.** By 2035, when SZC *may* be completed at a cost of £20bn (see 6), the UK's energy landscape will be profoundly different, favouring cheaper renewables and green hydrogen. Nuclear is [too inflexible to fit well with renewables](#). Lord Deben, Chair of the Committee on Climate Change, [describes nuclear as a "transitional" energy source](#) whose need reduces as grid-balancing improves. The National Infrastructure Commission says the potential for other non-intermittent technologies to complement renewables ["weakened the case for committing to a new fleet of nuclear power stations"](#).
3. **SZC is not competitive and dependent on a "nuclear tax":** EDF cannot pay to build SZC and is promoting a [Regulated Asset Base](#) (RAB) model, under which households - including those on renewable tariffs - pay upfront to give investors an immediate return. RAB is widely criticised for pushing the risk of overruns and overspends onto consumers (in US [a cancelled plant is costing ratepayers \\$2.3bn](#)). Some industry figures want the government to finance SZC directly. RAB requires legislation before it could be used for new nuclear.  
**A UK energy policy vacuum:** An Energy White Paper is over a year late; exacerbated by COVID. A revised National Policy Statement for new nuclear power stations over 1GW post 2025 was also due last year.
4. **SZC will suck resources away from innovation:** Every pound invested in SZC could be spent on cheaper, faster renewables, investment in energy efficiency, storage, CCS, tidal and vital flexibility adaptations to the grid plus efficiency adaptations to our homes. EDF's speculation that Hinkley Point C (HPC) and SZC could be used to make hydrogen is clutching at straws; big nuclear remains too expensive and hydrogen could as easily be made from renewables. At this critical time we must not only count carbon, but also time and cost of delivery.
5. **SZC does nothing to "level up" the UK.** Suffolk consists of safe Conservative seats. SZC will not help this government retain "red wall" votes and will undermine its manifesto pledge on domestic energy bills. SZC faces considerable [local opposition](#), including re EDF's ["disdainful" \(Dan Poulter MP\) treatment of local people](#).
6. **EDF's controversial partner, China General Nuclear (CGN):** Like Comms giant Huawei, [CGN is blacklisted by the US for its military connections](#). Following the Prime Minister's U-turn on Huawei, he faces calls from backbenchers to do the same on CGN's involvement in the UK's nuclear build programme. There are legitimate concerns about putting our critical national infrastructure in the hands of a Chinese state-owned company.

## **B. It's the Wrong Project in the Wrong Place; destructive impacts on the local economy and protected habitats**

7. **SZC will bring limited Economic Benefits to Suffolk:** The economic benefits for Suffolk are limited by EDF's intended use of the HPC supply chain. Of EDF's workforce - increased from 5,600 to 7,900 - [almost 6,000 will need accommodation](#) (page 6), and Suffolk's low unemployment makes EDF's target of filling the remaining 2,000 construction jobs with "home-based" workers - defined as willing to commute 90 minutes each way, so hardly "local" - ambitious. Studies of Sizewell B's impact found that local employment is likely to be in lower-skilled jobs and can [result in other businesses losing staff](#). An [Oxford Economic study of Sellafield](#) found where there is a low level of specialist skills locally, direct labour costs and supply chain spend inevitably flows out of the local economy. 2,400 workers will be housed in a multi-storey complex close to Minsmere, opposed by local people; campsites (600), private rentals (1,200), tourist accommodation (800) and bought homes (880).
8. **SZC will damage Suffolk's local economy including Tourism:** The Suffolk Coast has a thriving employment economy based on family, cultural and eco-tourism. There is huge potential for this to grow, especially post-COVID. But noise, eyesores, dust, beach and footpath closures and road congestion during 10-12 years of construction drive visitors away, destroying existing jobs and preventing real and sustainable local jobs being created. The Heritage Coast, with its tranquility and dark skies, is worth more than £200 million/year in tourism revenue. A [Suffolk Coast Destination Management Organisation](#) study found that tourism could lose up to £40 million a year, with the potential loss of up to 400 jobs. **At least 8 other energy projects** are proposed for east Suffolk, dubbed - without consultation - the "Energy Coast". The cumulative impacts will be overwhelming.
9. **Traffic:** SZC will affect businesses and residents across the region; EDF has abandoned a jetty and extensive use of rail, meaning over 1,000 lorries/day at peak, plus thousands of vans, buses and cars on Suffolk's A12 and inadequate road network. EDF's limited mitigation by way of bypasses is a further source of local opposition.
10. **SZC threatens Internationally-renowned wildlife reserves:** SZC is surrounded by internationally- protected habitats, including Minsmere Reserve. Habitats for rare birds, animals and plants will be lost forever. The RSPB believes "[Sizewell is not a suitable location for a new nuclear power station](#)" and "[could be catastrophic for wildlife](#)". The Suffolk Coast & Heaths Area of Outstanding Natural Beauty will be cut in two for over a decade. The SZC site is recognised in the [National Policy Statement](#) as having significant environmental sensitivity. The 2020 Environment Bill calls for environmental 'net gain' to increase biodiversity. **The small size of the site** is a concern; [The UK Government's siting criteria](#) assume 30 hectares (ha) are required for a single-reactor nuclear station, yet EDF aims to squeeze two SZC reactors into just 32ha (compared to HPC's 45ha). Even so, EDF must move some of Sizewell B facilities, meaning the destruction of century-old Coronation Wood.
11. **Site is at risk from flooding and coastal erosion:** [New analysis raises serious questions](#) about the security of the SZC site, undermining EDF's claims that the offshore banks provide "micro-stability" for the Sizewell coast. The report warns that sea level rises could fully or partially "island" the power stations. The SZC site sits in Flood Zones 2 & 3. The [EA has warned](#) that EDF's flood compensation proposals "may not function as intended".
12. **There is no solution in sight for nuclear waste:** The spent fuel from an EPR is exceptionally hot, so fuel from SZC would have to stay on Suffolk's eroding coastal site for 140 years - potentially until at least 2235 - before it could be moved. The UK has made no progress on building a "permanent" (100,000 yrs+) waste facility.

## **C. EDF's EPR has an appalling track record.**

13. **EPRs are slow to build, expensive and impossible to accurately predict cost or completion date.** SZC's EPR reactors will be copies of those being built at Hinkley Point C (HPC), currently £2.9bn over budget and up to 15 months late. [SZC is already 3 years late](#): in 2012 when public consultations began, EDF said it wanted to start building in 2018. There are no EPRs operating outside of Taishan in China. EPR builds in France (Flamanville) and Finland (Olkiluoto) are years behind schedule and multiple times overspent. [Defective valves discovered at Olkiluoto](#) now call Taishan's operation into question and may further delay Flamanville and HPC. The EPR is a failed design, described by Paul Dorfman of UCL as "[too complex to build](#) to time and budget".
14. **Nuclear is an industry in decline:** The Moorside project (Toshiba, Cumbria) has collapsed. Wylfa (Hitachi, Anglesey) was mothballed for financial reasons; a decision on planning consent is delayed till 30 September 2020. China General Nuclear's Hualong reactor for Bradwell has yet to pass several regulatory hurdles, but public consultations have started. [Globally, the nuclear units](#) under construction have declined for the 6th year in a row, from 68 reactors in 2013, to 46 in 2019 (10 are in China). Of these at least 27 are behind schedule.