

CEN briefing: frequently asked questions

Is net zero a barrier to economic growth?

- **No. Net zero could help to increase the UK's stagnating productivity, which currently ranks below France, Germany, and the United States.** Transitioning to a net zero economy relies on innovation and improved efficiency, which will help us to produce more with less effort. For example: electric vehicles waste **five times** less energy than petrol cars, insulation helps your home to keep in up to **20% more** of the heat you pay for, and our innovations in sectors like offshore wind, greener building designs, and nuclear power are some of our strongest exports - estimated to be worth **£170 billion** by 2030. The net zero economy is also the UK's fastest-growing sector. Last year, total gross value added was **£74 billion**, the sector grew 9%, and jobs paid £10,000 more per year on average.

Will net zero lead to job losses?

- **No. It is our best chance to re-industrialise left-behind areas that are often primed for net zero investment.** The net zero economy already directly supports **765,700** jobs and it is estimated that a further **725,000** jobs could be created by 2030. Just **1%** of workers are employed in sectors that will need to phase down as a result of net zero, but more jobs will be created than lost. Coastal and ex-manufacturing communities are often well-placed for new net zero industries, as the rejuvenation of places like **Teesside**, **Anglesey**, and **Stockport** show.

Can we afford to hit net zero?

- **Yes, and the cost of inaction is higher.** New **analysis** by the University of Oxford has found that the unmitigated effects of climate change could cut GDP by 3.3% in 2050 and 7.4% in 2100. This is compared to the cost of investing in low-carbon technologies, estimated to be 0.7-1% of GDP up to 2030, or just £5-7 a week, per person. Most investments (around 80-87%) will save consumers money and 250,000 jobs in the green economy could be created by 2030.

Are environmental policies pushing up the cost of living?

- **Households can save money by adopting new low- and zero-carbon technologies and significant government grants are available to ease purchase costs.** For example, whilst the upfront cost of an electric vehicle is still higher than a petrol car, their cost is falling and they are cheaper to run. A full charge overnight at home costs around **£17** for a typical electric car,

compared to £79 for a full tank of petrol. Similarly, cavity wall insulation can reduce bills by up to £235 per year for a semi-detached house. The government's grant scheme means that the cost of a new heat pump is equivalent to a gas boiler (£1500-3000) and plans to rebalance environmental and social levies away from electricity bills will make heat pumps cheaper to run than gas boilers and protect households from fluctuations in the price of fossil fuels.

Doesn't net zero make us more reliant on imports?

- **No. Cutting our reliance on polluting gas produced abroad and sold on volatile international markets will boost our energy security.** The UK produces less than 1% of the world's gas, and we consume twice as much as we produce at home. We cannot meaningfully control the price we sell our gas at or to whom we sell it. Domestic fossil fuel production in the North Sea is in terminal decline, with reserves heavily depleted and shale gas politically contentious. Unless we boost homegrown energy production by investing in new nuclear power plants and more renewables, we will continue to rely on countries such as foreign petrostates to meet our energy needs.

What happens when the wind doesn't blow and the sun doesn't shine?

- **The UK energy grid is resilient with a range of power sources and storage options.** The UK hosts the five largest offshore wind farms in the world. It is very rare for the UK to experience no wind, and many are paid to switch off during windy periods due to a lack of storage capacity - costing hundreds of millions. To ensure a reliable energy supply from renewables, the UK needs to increase long duration energy storage (LDES) capacity and the next government should implement a revenue certainty mechanism to increase investment. Floating offshore wind turbines can be installed in areas with higher wind speeds and are helping to create a more reliable supply. The UK is predicted to have 11GW of capacity installed by 2030, and has a total of 33GW across 51 projects in the pipeline. The UK also has six interconnectors with Europe that allow us to sell excess electricity that is generated and buy non-weather-dependent renewable electricity.
- **Whilst the government is committed to decarbonising the electricity supply by 2035, this does not mean we will become completely reliant on wind or solar.** Nuclear, clean hydrogen plants, and gas-fired power stations, which will increasingly have carbon capture and storage technology, will also play an important role.

Why should the UK act when we make up just 1% of global greenhouse gas emissions?

- **The UK has led global efforts to tackle climate change. If we change course now, we risk diminishing our reputation and weakening our diplomatic power.** The UK was the first major economy to commit to reaching net zero and the first to halve emissions whilst continuing to grow the economy. Hosting the COP26 global climate summit in 2021, the UK brokered international agreements to end deforestation by 2030, phase out the use of coal, decarbonise shipping, transition to electric vehicles, and help less developed countries reach net zero.
- **There are only six countries in the world that make up more than 2% of emissions. We cannot solve climate change without countries with small emissions also acting.** The single largest global emitter is China which is responsible for 31% of global emissions but the share of global emissions from countries that individually make up less than 2% of global emissions is 36%. Without these countries acting on climate change, we will not tackle it.

What has the government done to clean up our rivers?

- **A national roll out of storm overflow monitoring software is now complete.** As of December 2023, [100%](#) of England's storm overflows are now fitted with monitors. With a roll out instigated in 2013, monitoring has increased from just 7% in 2010. In 2023, Scotland's rate was still [less than 4%](#). This data has driven public awareness and outrage about sewage discharges into waterways and also provided the government with the necessary information to take appropriate action.
- **The Environment Act 2021 placed new duties on water companies and legally-binding targets to reduce water pollutants.** Water companies now have a legal duty to progressively reduce harm from storm overflows and to provide near real time information on their operation. There are also now legally-binding [targets](#) to reduce different sources of pollution, like nitrogen and phosphorus, by 40% by 2038. The government's [Storm Overflows Discharge Reduction Plan](#) will unlock £56 billion of capital investment. By 2050 water companies will need to ensure there is no local adverse ecological impact from the use of storm overflows and discharges will not be permitted above an average of 10 rainfall events per year. The [£250,000 cap](#) on civil penalties has been removed, meaning civil *and* criminal fines imposed on water companies for environmental harm are now unlimited. The first round of the fund made £11 million available to communities, to improve water quality.

Why are water companies allowed to dump sewage?

- **Water companies are permitted to discharge sewage from storm overflows in limited circumstances but there are consequences for exceeding these permits.** Without storm overflows in place, sewage risks backing up into homes and streets during periods of heavy rainfall, so water companies are permitted to use them in limited circumstances. Water companies face civil and criminal prosecution for exceeding their permits. Civil and criminal financial penalties are both now uncapped meaning the financial penalties that can be decided are unlimited. Heavy rainfall does not affect a water company's responsibility to manage storm overflows in line with legal requirements and it is already illegal to exceed their permits for doing so. The government has also empowered [Ofwat](#) to link water company dividend pay-outs to environmental performance and place restrictions on executive bonuses. Ultimately, reducing the need to use storm overflow discharges will need money to invest in upgrading the sewer system and diverting rainwater out of the pipes, and time to deliver it.

Should we nationalise the water companies?

- **Privatisation of water companies in the 1990s has delivered higher levels of investment, lower bills, and a better service.** Water companies in England have invested [£190 billion since 1989](#). This figure is almost [250% larger](#) than the dividends that have been paid out in the same time period and, according to Ofwat, the water regulator, bills are [£120 lower](#) than they would have been otherwise. If approved by Ofwat, the water companies are intending to invest [£100 billion](#) over the next five years to improve the water system. Renationalising water companies will not guarantee any change in infrastructure investment nor outcomes for water companies, but will in the short term be disruptive, expensive, and likely require a raise in taxation in order to deliver it.

Are we prioritising the environment over food security?

- **No. The biggest threats to our food security are biodiversity loss and climate change.** A government [report](#) in 2021 found the two most serious medium- and long-term threats to the UK's food security are biodiversity loss and climate change. Extreme weather events, made [more common](#) by climate change, are pushing up the cost of groceries. Flooding this year could cut wheat harvests by [one-fifth](#) and drought last year is estimated to have pushed up household grocery bills by [£605](#). The new Environmental Land Management schemes are helping to improve farmers' resilience and restore our natural world, and are complemented by action to tackle unfairness in the food supply chain to ensure farmers get a fairer price for their produce.