

CEN briefing note: renewables

- **The Government has set a target to decarbonise the power sector by 2035.** This will be crucial to reaching net zero by 2050 and reducing our dependence on foreign imports of oil and gas. Increased low carbon electricity generation will also be necessary to meet increasing demand from electric vehicles and heat pumps.
- **This Government has supported the transition to low carbon energy.** The Government has put mechanisms in place to support private investment in this transition, such as Contracts for Difference (CfD). Since 2010, **£80 billion** has been allocated in levy funding to support renewable energy. CfDs alone have facilitated investments in **29.4GW** of renewable energy.
- **The energy transition could create up to 725,000 jobs and unlock up to £70 billion of economic value.** Up to **100,000** of these jobs could be in offshore wind alone. These jobs are also 1.7 times more productive, generating almost **£50,000** in extra value for every ‘green’ employee. Meanwhile, much of the economic value could be in traditionally ‘left behind’ former industrial areas. Investment is already being unlocked in such areas, for example in Blyth where there has been **£130 million** investment in an offshore cable factory and the **£186 million** investment by Siemens for a wind turbine blade factory in Hull.
- **CfDs provide price stability via long-term guaranteed contracts.** They guarantee generators a price per megawatt hour of electricity produced for fifteen years (the ‘strike price’). The price is determined by sealed bids at auction so energy producers compete to reach the lowest price. These auctions are now held every year, with the competition being used to drive down the price of projects. Renewables’ CfDs usually last 15 years, which provides long-term certainty to investors, while Hinkley Point C’s nuclear CfD will last for 35 years. If strike prices are below the wholesale price, developers pay back the difference to reduce consumer bills.
- **Around 60% of electricity now comes from low carbon sources with gas accounting for the remaining 40%.** To meet the Government’s target, they will need to encourage more investment in a suite of low carbon generation technologies, including offshore and onshore wind, solar, nuclear, hydrogen, gas with carbon capture and storage (CCS) and energy storage. CfDs are a critical policy tool for winning this investment and lowering financing costs.
- **Renewables mitigated bill rises during the recent energy price spike caused by Russia’s illegal invasion of Ukraine.** An **11-fold** increase in UK wholesale gas prices since 2019 explains **96%** of the increase in household energy bills in 2022, which cost Britons an extra **£94 per household**. Even prior to the gas crisis, renewables had already saved consumers over **£6.1 billion** on their bills

(equivalent to £221 per household) in 2021 by displacing gas. Renewables helped the UK avoid the need to buy nearly [£12.5 billion of gas in 2022](#), during the peak of the energy price crisis.

- **Prices for new offshore wind projects have fallen by 75–80% in little over a decade.** New offshore wind farms coming online within the next 2–3 years will be paid around £37/MWh in 2012 prices (or £45/MWh in current prices). This is half (or less than) the wholesale [power price of £90–100/MWh](#) that is forecast until at least the end of this decade. For context, the wholesale gas price reached £114 per MWh in early 2023.
- **Whilst the cost of renewables is rising due to increased financing and supply chain costs, these are temporary factors.** Interest rates have increased [ten times](#), from 0.5% in 2022 to 5.25% today. This makes it more expensive to finance loans for renewables projects, which are capital-intensive. Higher financing rates, combined with rising supply chain costs, mean that some projects agreed in previous CfD auction rounds are not viable on current contract terms. The Government has offered some support, with businesses now able to deduct the cost of any eligible investment from their corporation tax bills straight away, rather than over several years. This means for every £1 invested in qualifying expenditure, companies can save up to 25p on their tax bill. The Government has also listened to industry feedback, raising the Administrative Strike Price for offshore wind projects by [66%](#).