

Tackling the Climate Crisis Means Building the Right Infrastructure in the Right Place...

... Building windfarms where the wind blows most; where there is space for development, where there is public support and a rich heritage of maritime skills from oil, gas and fisheries. This might sound self-evident, but currently public policy works against that dynamic rather than with it.

Any commodity needs transported from where it is made to where it is used; that transport has a cost. Electricity is no different, but the National Grid charging regime was developed before renewables became a reality, before climate change was an issue, and at a time when the 'dash for gas' meant that new power stations could be located almost anywhere. That charging regime – Transmission Network Use of System Charges (TNUoS for short) was intended to send a 'locational signal' to would-be generators in the newly privatised electricity system to encourage new power stations to be built close to 'load centres' – that is to say the urban conurbations in the South of Britain where demand for electricity

was heaviest, thus avoiding additional stresses on the grid. The policy and its message worked then and – unfortunately – continues to work today. Of more than 30 gas fired power stations built since the first in 1991, none were constructed in Scotland

and in 2012 the gas fired replacement for coal-fired Cockenzie (East Lothian) was abandoned. But what was appropriate in a world fired by fossil fuels is not appropriate post-Climate-Crisis when we need to transition to a world powered by renewables.

The North of Britain has tremendous renewable potential – whether on land or at sea there is space for development of renewable generation, and an excellent climatic resource. Conversely, population is concentrated in the south. But TNUoS takes no account of this. It treats Britain as a homogeneous mass of people and landscape. It makes a crude approximation by charging generators according to their distance from London. The further North, the more you pay. Since 2015, new generation projects have had to compete against each other in biannual auctions for a 'Contract for Difference' (CfD) necessary for project delivery. Projects bid for the contract on the basis of the cost of their electricity, only those bidding the lowest price per unit power generated win the contracts necessary for construction. When we won a contract for Moray East Offshore Windfarm in 2017 with a price of only £57.50/MWhr, we led the world in dramatically cutting the cost of offshore wind. Last year's auction achieved sub £40/MWhr prices.

We were able to reduce the price of power by reducing

costs at every point in design, installation, finance and the supply chain. But we could not reduce TNUoS which is ultimately set by UK Government policy. The TNUoS burden increases as we reduce the cost of power, setting up a dynamic which strengthens the locational message against development in Scotland. This is compounded because recent changes implemented by the regulator will widen the gap in future years.

Recent reforms together with the renewable price falling sub- £40/MWhr will significantly increase the TNUoS burden, making the northern Scottish project 17% more expensive than the comparable project in the south with obvious impacts on ability to compete. That gap is projected to widen through the coming decade. Scotland has tremendous natural potential; the work has been done to secure planning consent for most of the Scottish Government's 2030 8000MW offshore wind target, of which 1900MW are under construction or in operation.

If that ambition is to be realised under the auction regime, projects with planning consent must win contracts. But their competitiveness is crippled

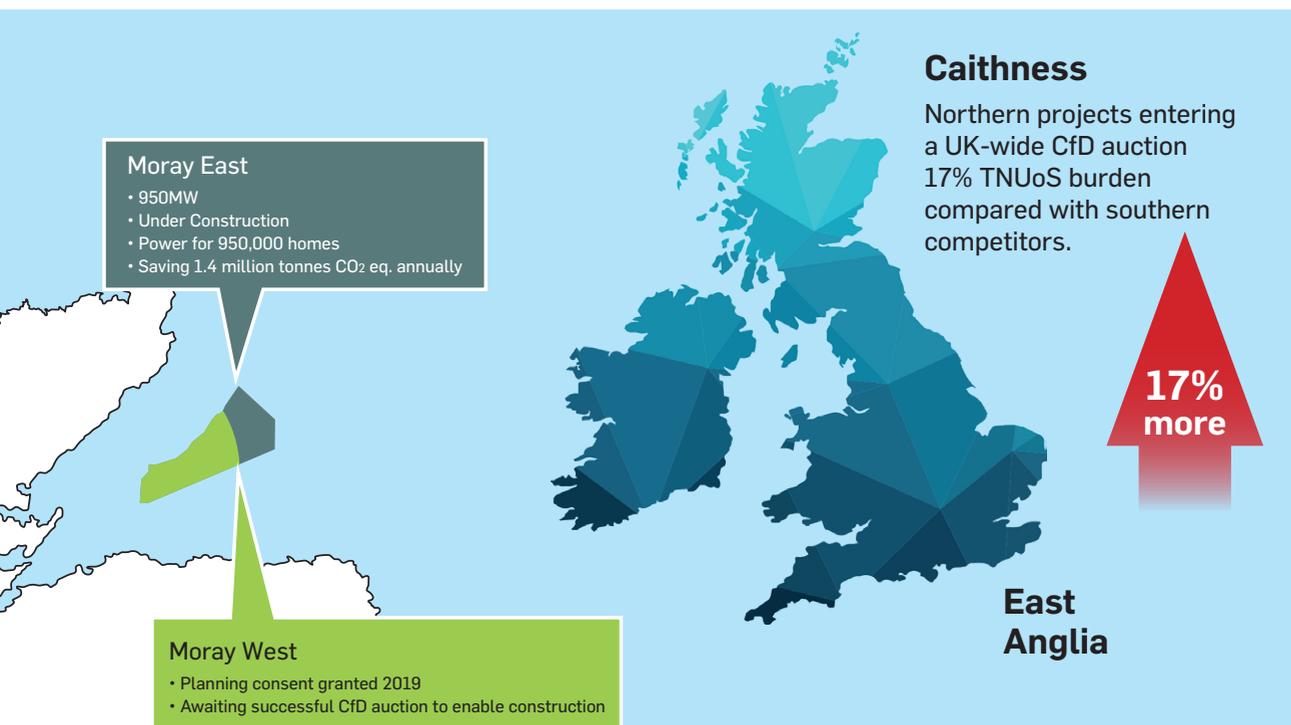


Dan Finch, MD of EDPR UK explains why, as industry reduces the cost of renewable power, Government-set prices for transporting electricity are pricing Scottish renewable generation out of the market.

by a pre-climate-crisis locational surcharge which is increasingly effective in sending the wrong locational signal.

Despite taking six long years, the last major review of TNUoS failed to stop its burden increasing for northern renewables. Urgent reform is required to stop the substantial investment in carbon-saving Scottish infrastructure projects being lost to grid charges that are out of date in today's world in which, to quote Sir David Attenborough, "The moment of crisis has come".

Dan Finch is the Managing Director of EDPR UK, one of the partners of Moray East & Moray West Offshore Windfarms



Compare a 1000MW windfarm off Caithness with a 1000MW windfarm off East Anglia:

COMPARATIVE ANNUAL TNUoS COSTS

	2019	2025	Increase
Caithness Project	£20m	£31m	£11m
East Anglia Project	£-3m*	£1m	£4m
Difference	£23m	£30m	£7m

*This figure is negative because at present, projects far enough south are paid TNUoS, rather than charged it.

