

## The new Grimsby to Walpole line will increase the capability of the network to carry clean, green energy between the north of England and the Midlands, and between the Midlands and the South.

This reinforcement is one of several network upgrades that need to be accelerated to help meet increased government targets for offshore wind.

The electricity transmission network is limited to the north and south of this area, where it was largely built in the 1960s.

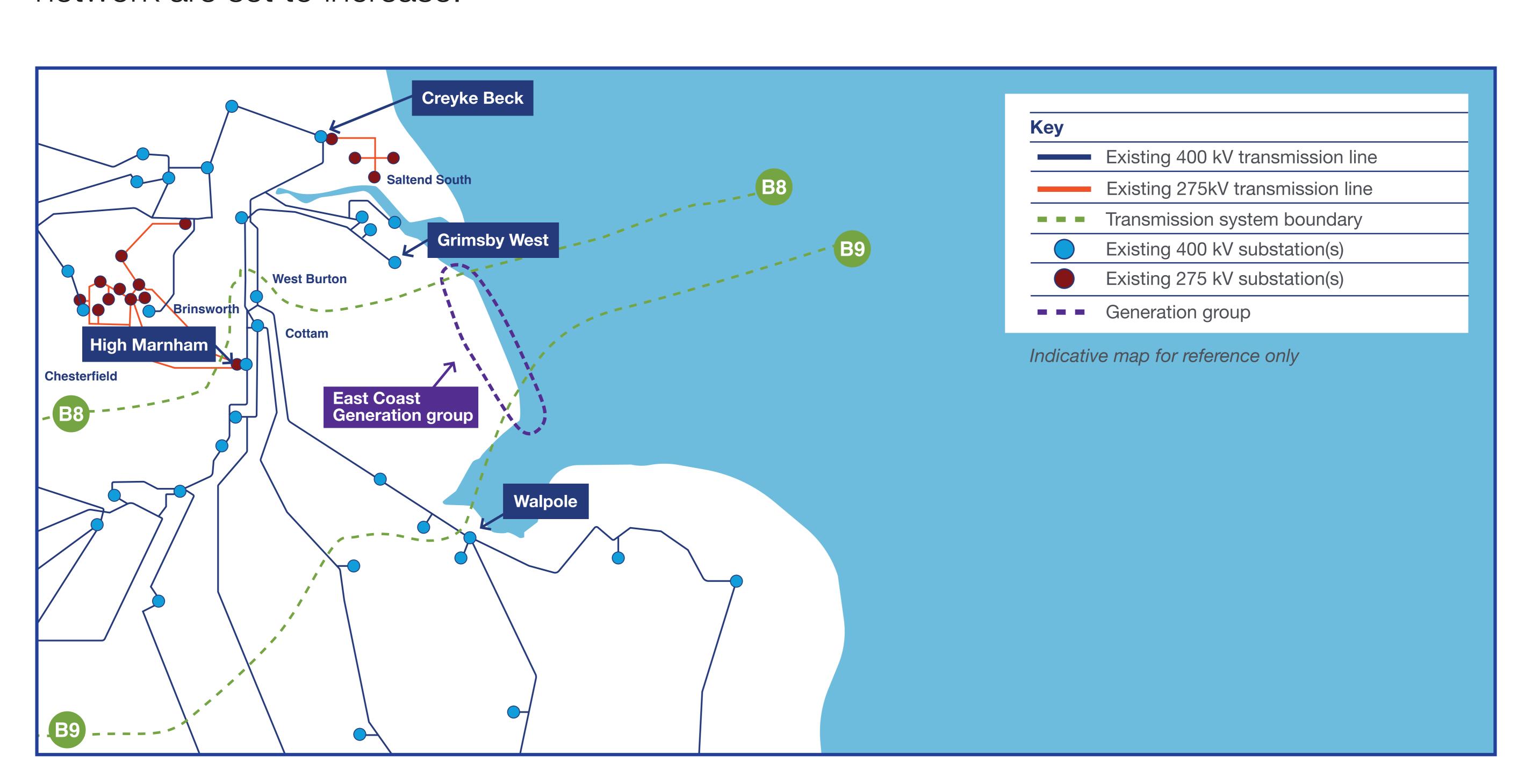
In North East Lincolnshire, the network was initially developed to supply demand in and around Grimsby and the South Humber Bank, with the network extending into the area from Keadby in the Trent Valley to Grimsby West.

In south Lincolnshire, a new substation was built at Bicker Fen in the 1990s to meet increased demand on the local distribution network.

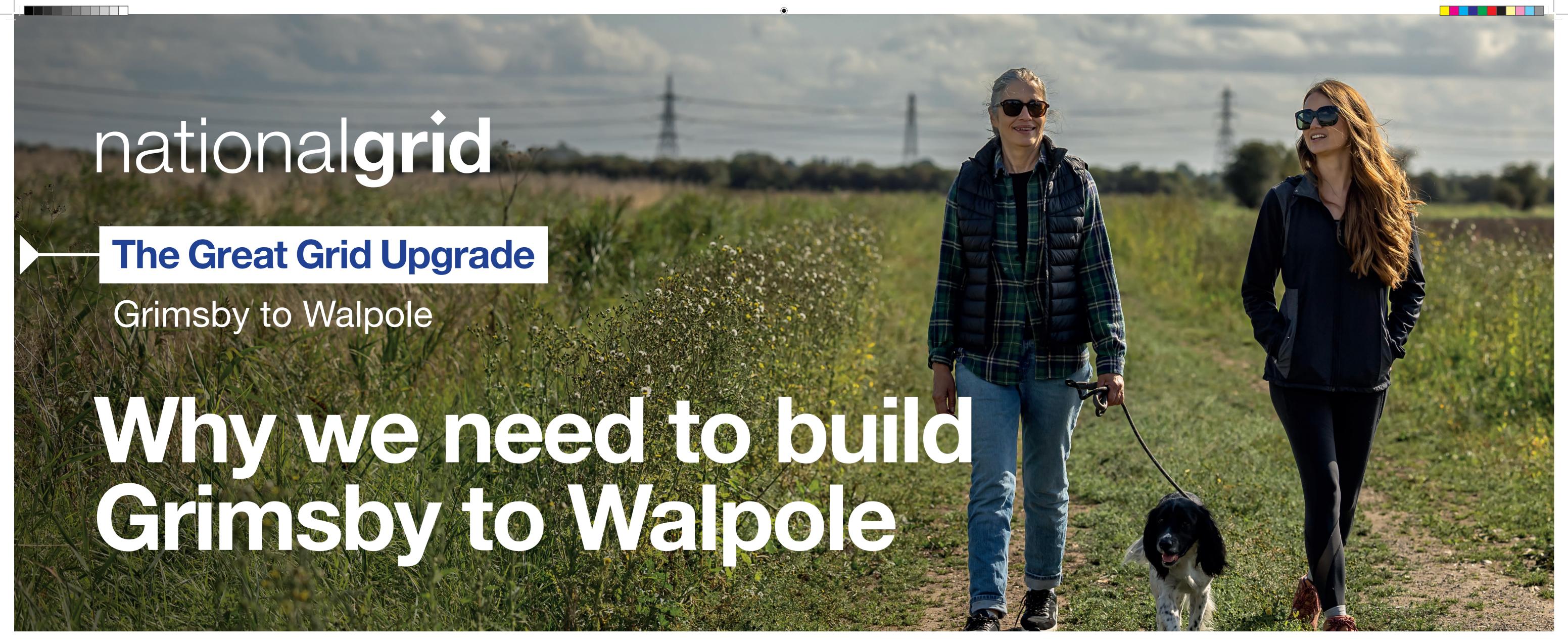
With growing offshore wind and interconnectors with Europe, an anticipated tripling of wind generation connected across the Scottish networks by 2030 and the UK Government's increased ambition to connect 50 GW of offshore wind by 2030, north—south power flows on the electricity network are set to increase.

The ESO anticipates, in the Electricity Ten Year Statement, that the network between the North and the Midlands needs to be capable of transferring around 25.9 GW of electricity by 2033, compared with the 11.6 GW that it can transfer today, while remaining compliant with the standards the network is operated to. Similarly, the network between the Midlands and the South needs to be capable of transferring about 22.4 GW of electricity by 2033, compared with 12.5 GW today.

Before building new lines, where we can, we first carry out work to get more capability from the existing network. In the first part of the next decade, we are doing just that. But this work will only increase network transfer capability to about 14 GW between the North and the Midlands and to around 15.6 GW between the Midlands and the South – falling short of what is needed by 2033. We therefore need to add to the network to deliver the capability that is required.



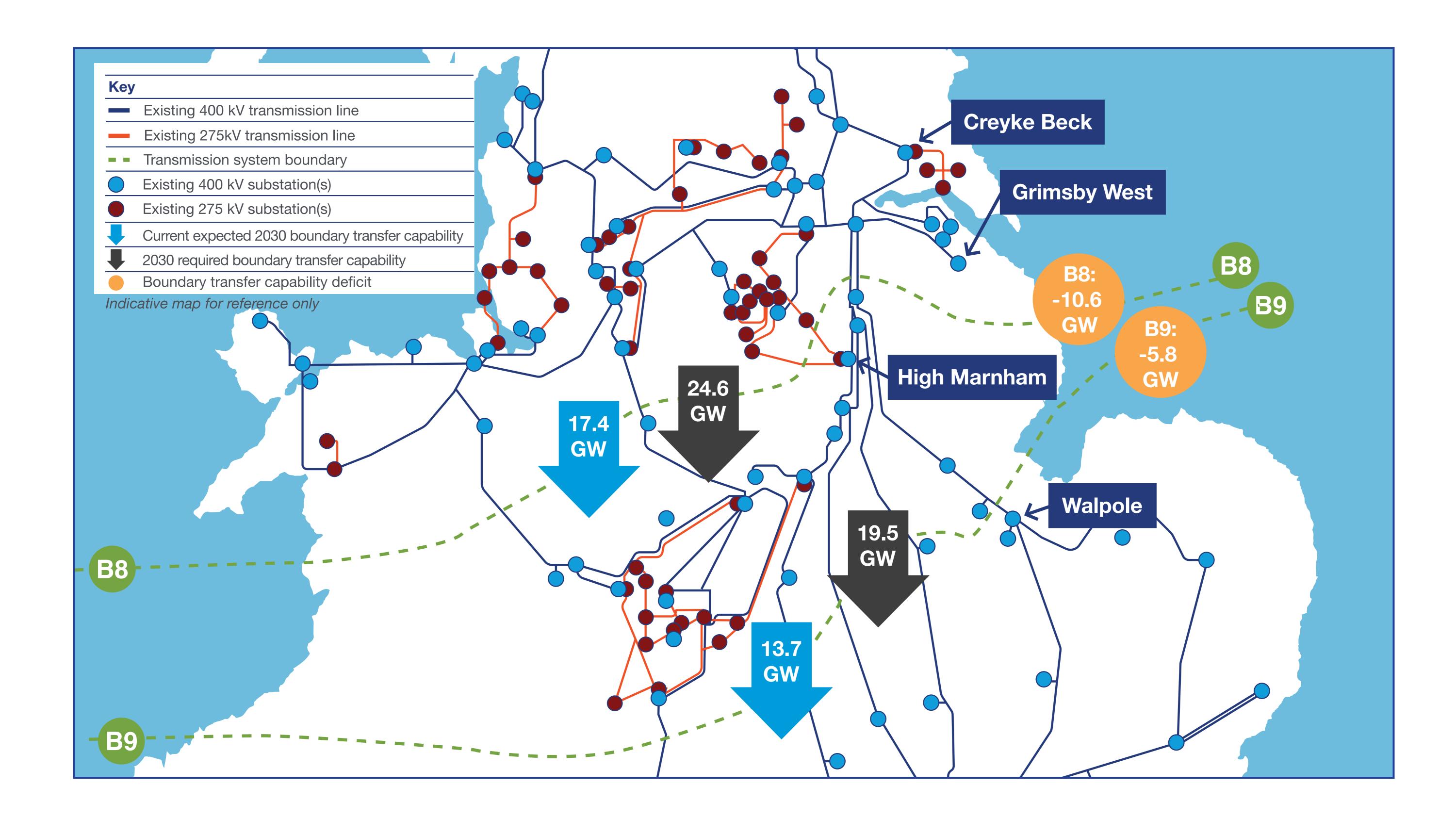
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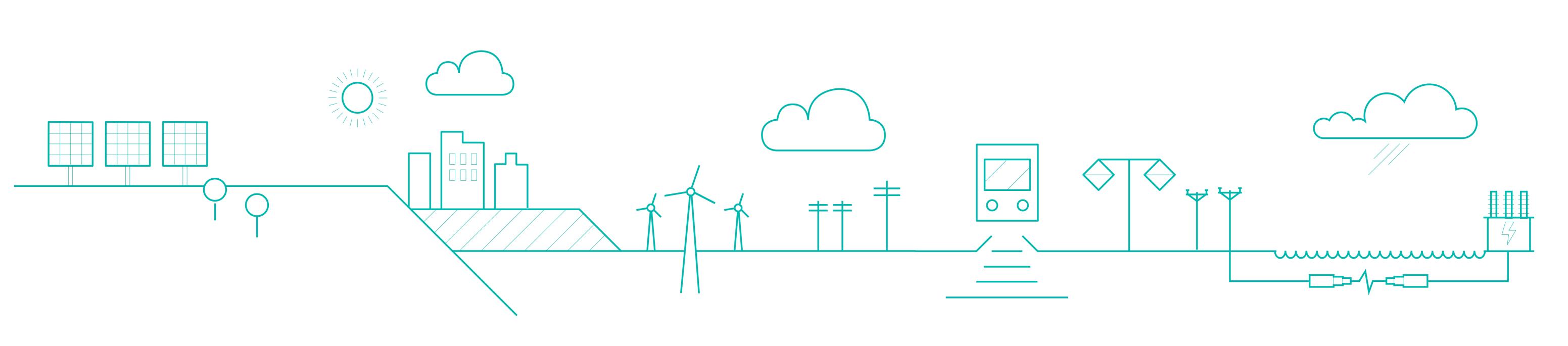


Up to 18 GW of new sources of electricity – proposed offshore wind, interconnectors and solar/ battery storage – are planned to connect in the region area by the mid-2030s.

Some 9.7 GW of this is contracted to connect to the transmission system in a location where the existing network does not extend today.

We therefore need to build a new electricity transmission line which adds capability between the North and the Midlands and between the Midlands and the South, and enables the connection of clean, green energy along the East coast.





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