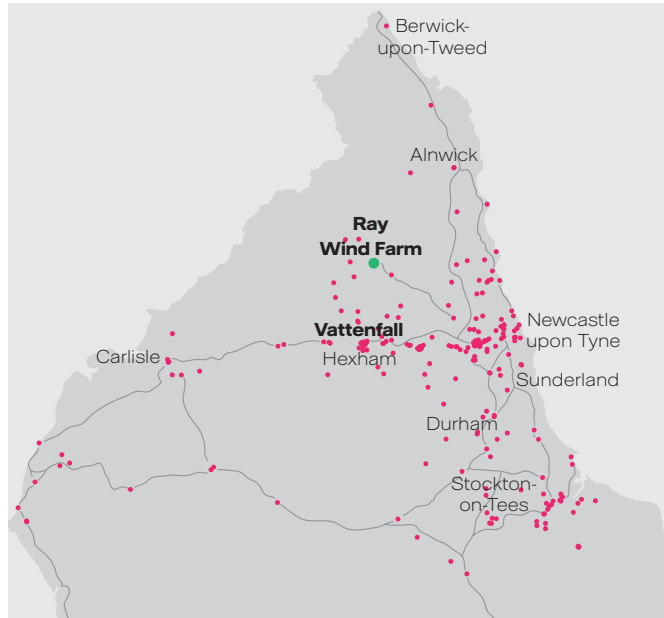


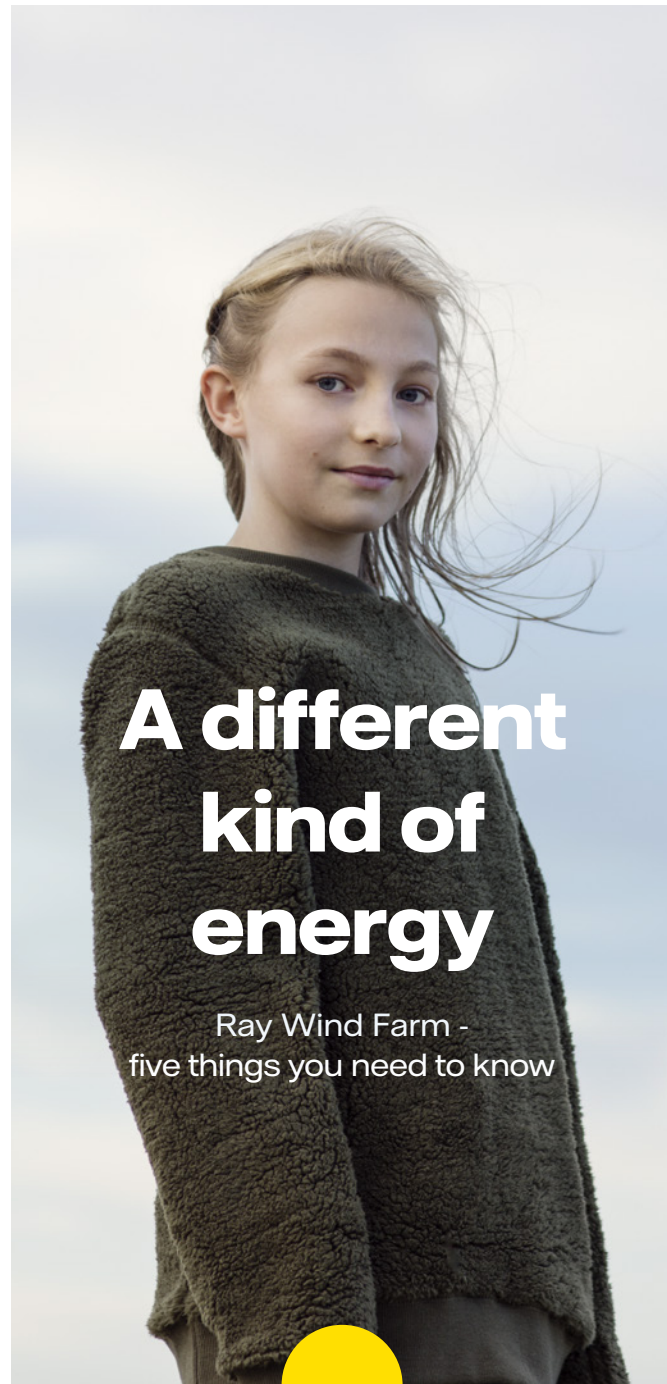
The location of Ray Wind Farm and Vattenfall's offices. Pink dots indicate suppliers used by the Ray Wind Farm across the north of England.



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A different kind of energy

Ray Wind Farm - five things you need to know



VATTENFALL



More than just a wind farm

Ray Wind Farm, which began producing electricity in 2017, is a 16 turbine wind farm near Otterburn, Northumberland, owned and operated by Vattenfall.

The wind farm not only brings homegrown electricity to local homes and businesses, it also helps reduce our reliance on fossil fuels - tackling climate change and improving the UK's energy security.

The wind farm funds investment in the future of its neighbouring communities, supports a vibrant British supply chain in building and maintaining energy projects, and boosts biodiversity through careful stewardship of the land around the turbines, which is managed for nature conservation.

Ray Wind Farm - a step on our journey towards freedom from fossil fuels.

A community taking the initiative

The Ray Wind Farm community benefit fund, a collaboration between Vattenfall and local communities, overseen by local directors, has helped revitalise village assets and supported local businesses and groups to build resilience in the face of a changing world.

£1.4million

distributed in local community 2017-22, including:



£108,000 awarded as part of Covid-19 hardship fund



Two ECG machines and four defibrillators in local community



Red Squirrel Ranger



Mountain rescue drone



£118,000 awarded to local primary schools



Community running track



Community pub buy-out and refurbishment

Powering ahead in Northumberland

The UK has some of Europe's richest wind resource and the hills of Northumberland are well-placed to benefit from this. Wind farms make an important contribution to our national energy mix, particularly as we replace ageing and polluting energy infrastructure.

At the same time, our demand for electricity is expected to double by 2050 as we switch the way we power our cars, heating and industries to electricity. Most of this will be produced by renewable energy projects located both on and offshore in and around the UK.



In an average year, Ray Wind Farm can provide about 10% of Northumberland's energy needs



Ray Wind Farm has generated enough power to drive the average electric vehicle 2.2 billion miles or nearly 9,000 times the distance between the Earth and Moon



At full output, Ray Wind Farm could power the floodlights at St James' Park 80 times over

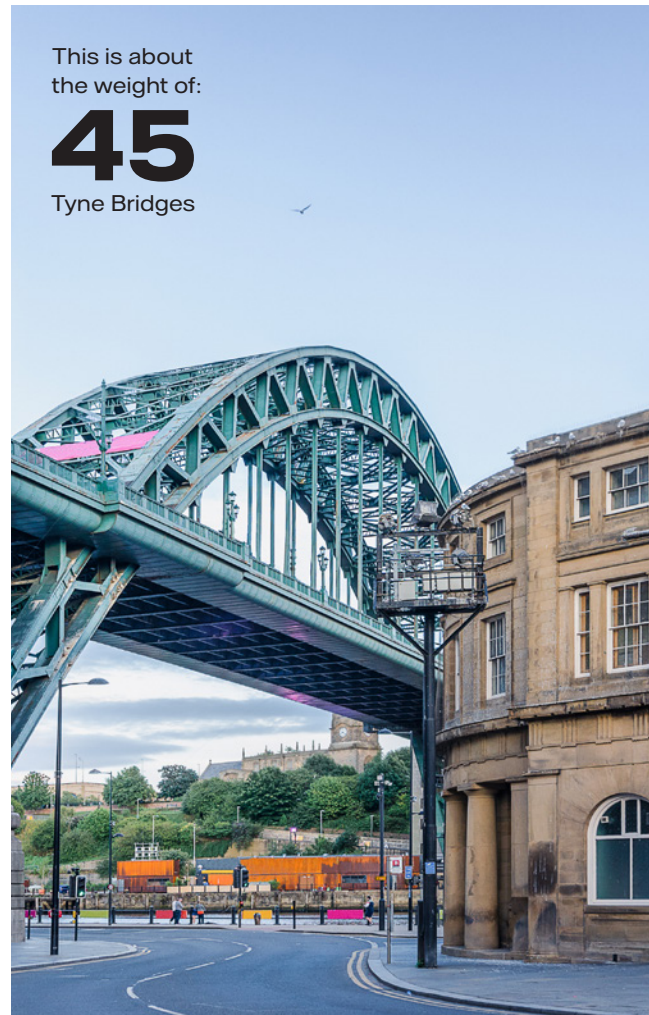


During the 2018 'Beast from the East' extreme weather event, Ray Wind Farm was generating on average each day enough electricity to power all the homes in Cramlington, Morpeth, Hexham, and Ponteland.

Reducing carbon at scale

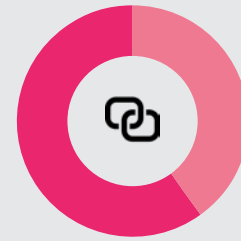
By farming the wind to generate power rather than burning coal or gas, wind farms like Ray provide the electricity our society needs without contributing to global warming. The average wind farm will 'pay back' the carbon emitted by its construction in just a few months or years.

Since the start of operation, Ray Wind Farm has prevented 317,000 tonnes of CO₂ from entering the atmosphere.



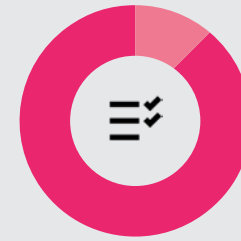
This is about the weight of:
45
Tyne Bridges

Backing a British supply chain



£90 million
construction investment

60%
spent in the UK



£60 million
estimated on operations

90%
expected to be spent in the UK



Over 250 suppliers based in the north of England have worked on Ray Wind Farm in the first five years of operation.



Did you know it's estimated that 21,500 energy jobs will be needed in the north-east alone for the UK to reach net zero?

Britain has a vibrant renewables supply chain spanning every level from major international companies down to local SMEs. Wind farms need all sorts of services throughout their lives from environmental survey, civil engineering, and turbine maintenance to communications, fencing, and snow clearance. The north-east is growing into a centre of excellence, especially in places such as Hexham, Blyth, and Newcastle.

Boosting biodiversity

130 hectares of land is under environmental management at Ray Wind Farm for moorland rewetting and heather restoration.



This is around twice the size of Disneyland, California



This is around 10% of the surface area of Kielder Water



18 merlin chicks nesting around the turbines have been ringed and fledged since the wind farm started operations

