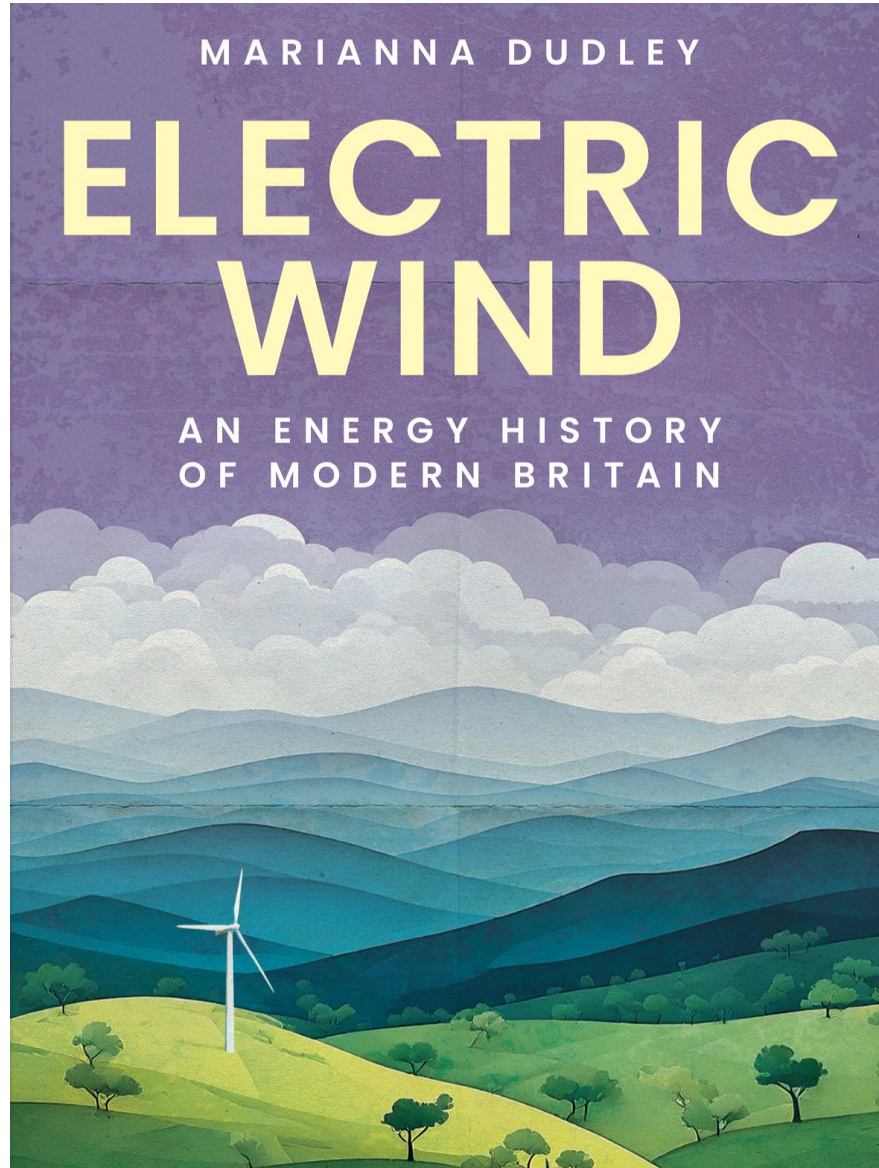




Tracing *Electric Wind* through the archives

Reflections from an energy historian
Dr Marianna Dudley, University of Bristol



Electric Wind is a rollicking read that uncovers the hidden history of wind power in Britain. Marianna Dudley masterfully illustrates that our current 'big wind' model was never a historical inevitability, but a choice. By revisiting the early 20th-century era of decentralized wind (paired even then with batteries and electric vehicles) and the first large-scale trials under public ownership, Dudley provides an invaluable mirror for today's energy leaders. For anyone in the industry trying to navigate the energy transition, this book is a timely reminder that technological development is ultimately shaped by people and places.

Dr Arthur Downing, Strategy Director at Octopus Energy, Senior Visiting Fellow at LSE, and author of *Power and the People: A History of British Energy* (forthcoming)

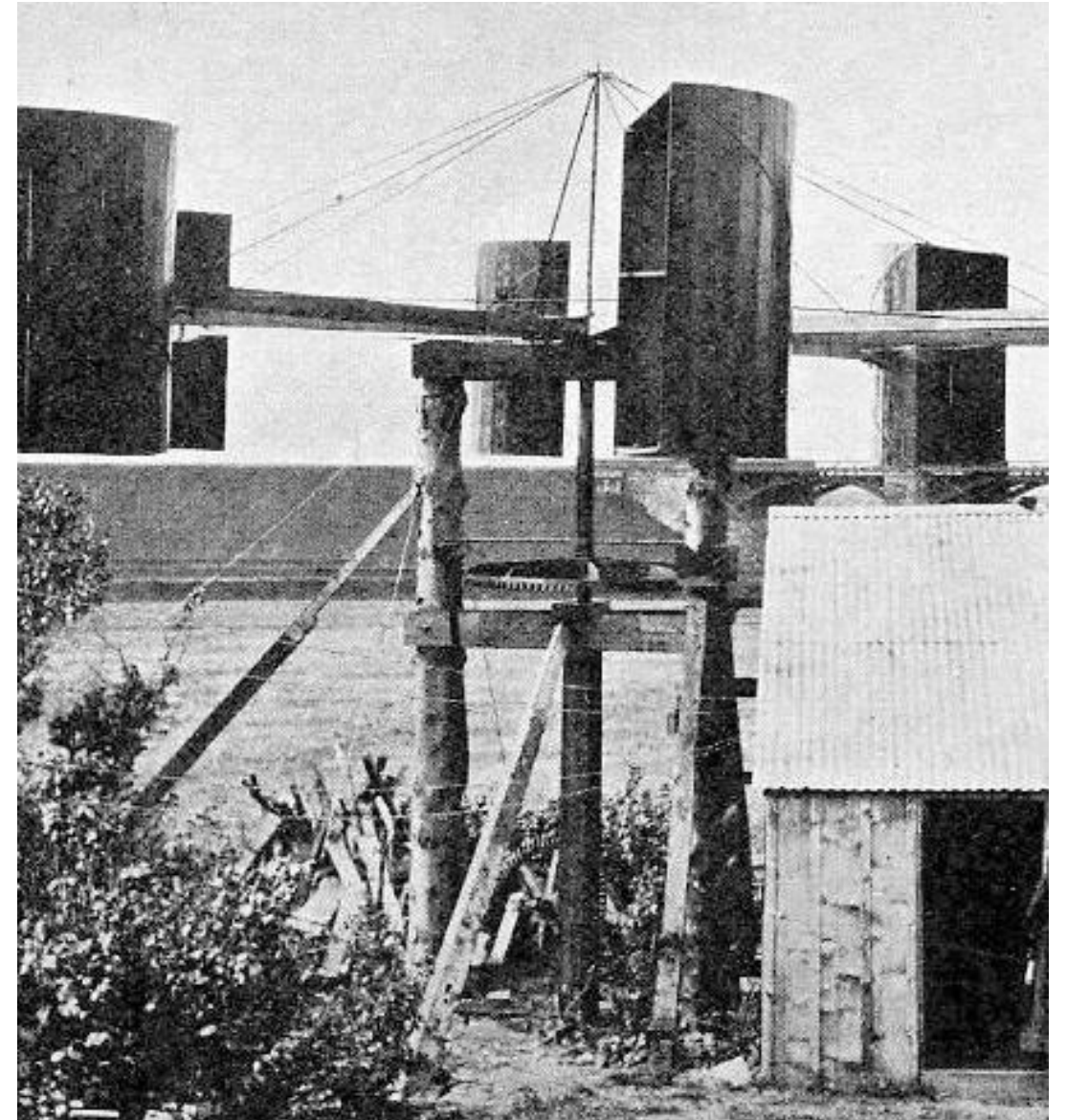
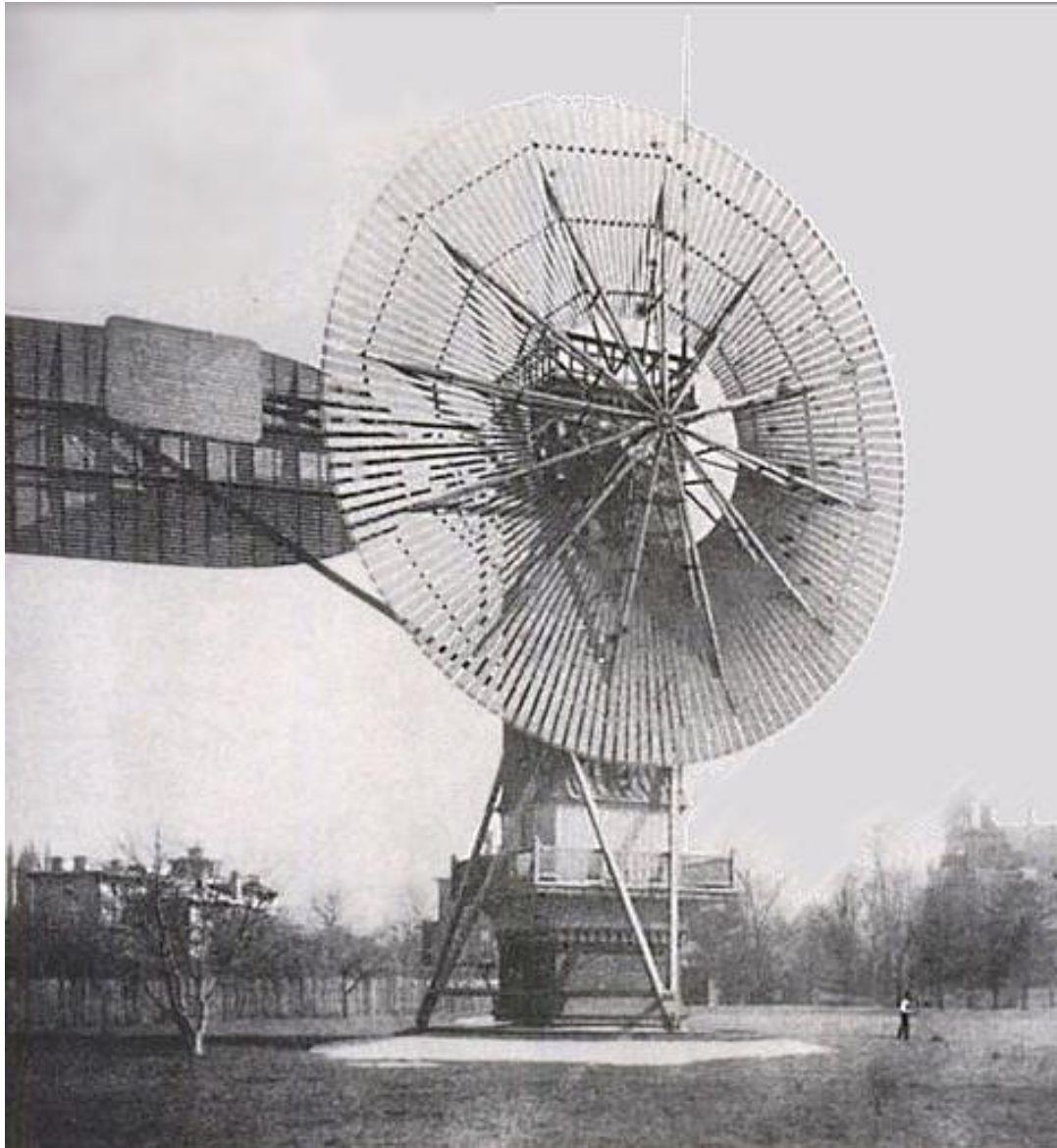
Manchester University Press, 2025.

William Thomson, Lecture to British Association for the Advancement of Science, 1881

'When the coal is all burned, or long before it is all burned...it is most probable that windmills, or wind-motors in some form, will again be in the ascendant and wind will do man's work on land at least in proportion comparable to its present doing of work at sea.'



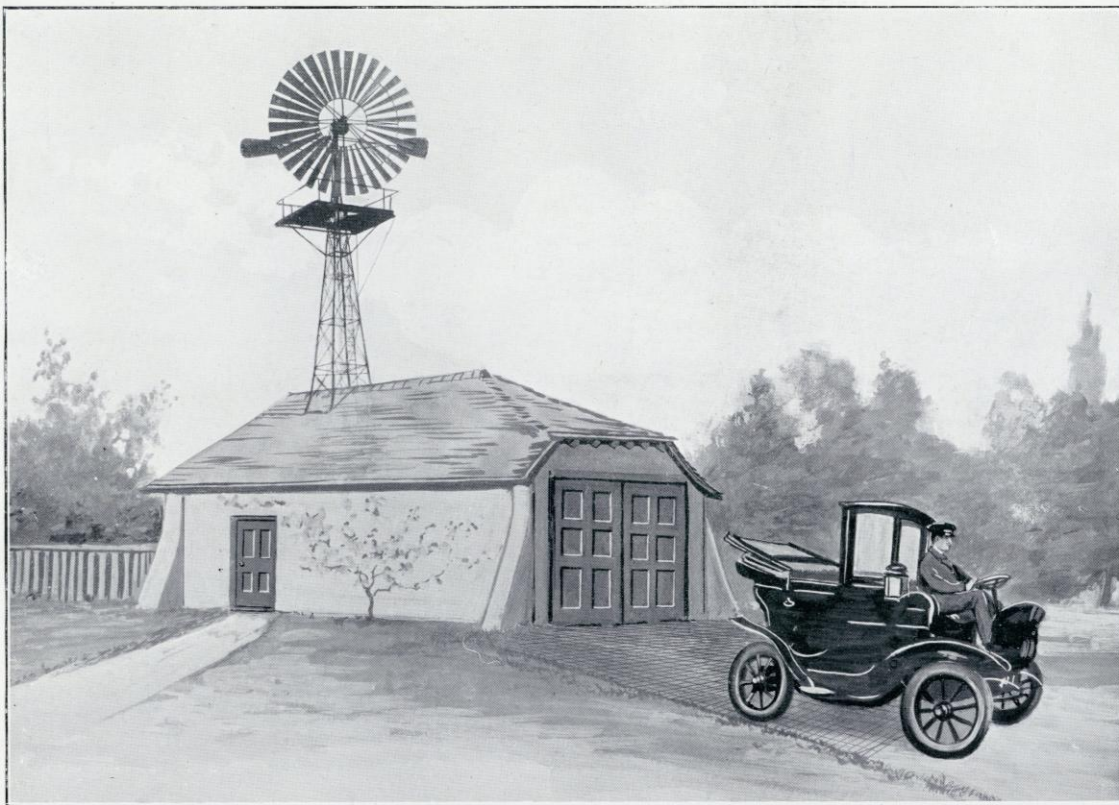
William Smith's geological map of Britain, 1815



Early electricity-producing wind turbines: by Charles Brush (USA) and James Blyth (Scotland), 1880s. Wikimedia commons/History Today

Refrigerators for food and drink are a necessity in hot climates. They are now made of all sizes—from that suitable for a household of two, and upwards. They require power of some kind to work them, however, and here again a wind-turbine plant would supply the necessary electric current.

The foregoing are merely some of the forms in which electricity may be applied to the domestic uses of a household in hot climates.



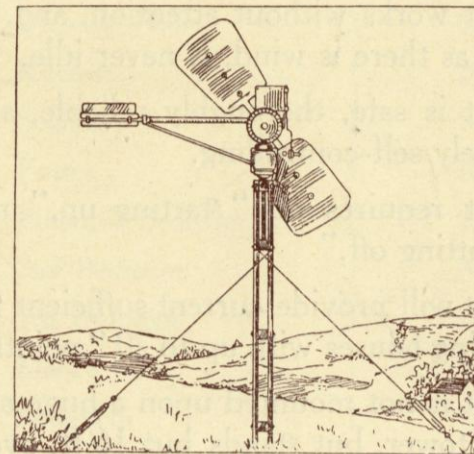
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ELECTRIC MOTOR CARS.

The convenience and cleanliness of the Electric Carriage are well known and appreciated by all who have used it. But for the cost and difficulty of obtaining a suitable supply of electric current for charging purposes, particularly in Suburban and Country districts, the use of this form of carriage would be much greater than it is at present. The wind-turbine plant removes these limitations to Electric Carriages entirely. When the chauffeur, on returning from a run, places his car in garage, he inserts the generator plugs in his battery, and any wind available will recharge it, without attention on his part. In fact, as far as recharging is affected, no further attention need be given to the car before it is required for another run. If a large supply of current is required, it will be well to have an auxiliary battery placed in the garage, which would be charged by the turbine at times when the car was either absent or fully charged. This additional battery would be available whenever the wind was insufficient for direct charging from the turbine. The automatic switching arrangements fully protect and control both the battery and the generator under all conditions of wind. We anticipate that the adoption of wind-turbine plants will greatly encourage the use of Electric Carriages.

Electric Light in your Homes

THE VENTIMOTOR



The Patent Lighting Co.,
LTD.,

FRIARS HOUSE,
NEW BROAD STREET, E.C.2.

The history of wind energy is also the history of coal, oil, electricity, gas, and nuclear power.

- History of renewable energy is intertwined with the history of fossil fuels.
- Discrete and specialist archives are rare (but brilliant)
- Researchers are often pursuing particular technologies and systems (oil, wind, gas, etc.). Flagging where relevant materials lie within bigger collections and other systems is incredibly helpful.

Form 4633.
OF TIME ANEMOGRAM

AIR MINISTRY,
METEOROLOGICAL OFFICE



Distance between zero velocity line and upper N. line = 7.6 mm.

Mb. pressure scale at 284, 401, 56.9, 69.6, 80.5, 89.9, 98.6, 113.5, 127.3, 139.4, 150.6 mm.

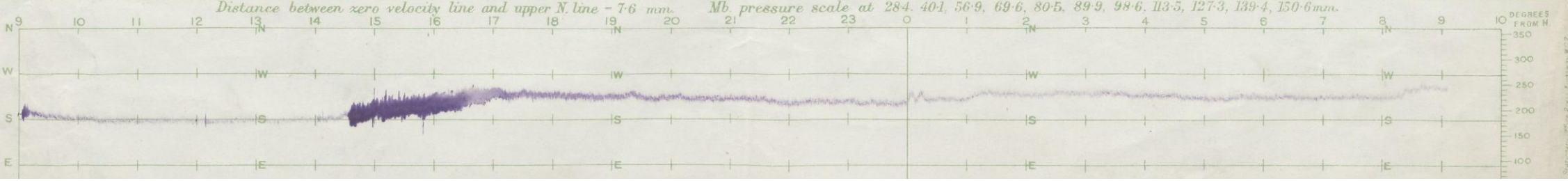




Fig. 6(a).—Hauling equipment to the site—Costa Hill, Orkney.



Fig. 6(b).—Hauling equipment to the site—Mynydd Anelog, North Wales.



Fig. 6(c).—Carrying equipment on horse-back to the site—Slieve Tooley, Co. Donegal.

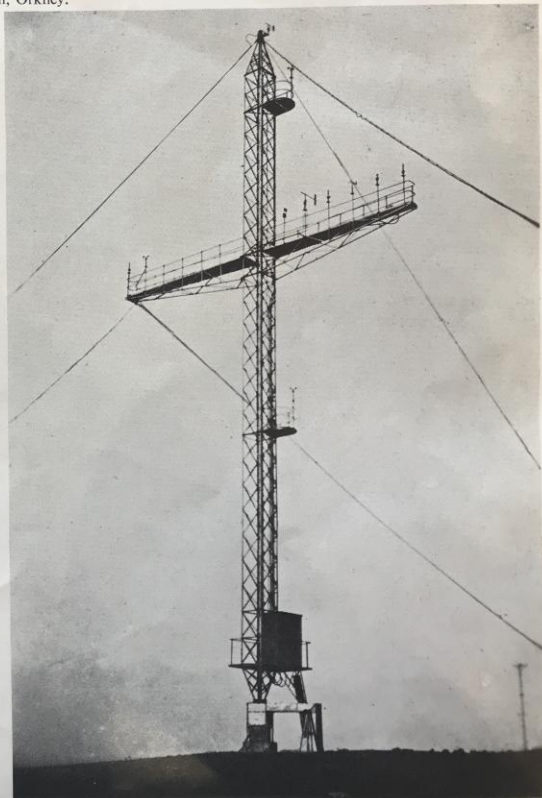


Fig. 21.—120-ft. mast—Costa Hill, Orkney



Left: photographs of anemometer installation, c. 1949. EW Golding, *The Generation of Electricity by Wind Power*.

Above: a family of crofters in Orkney. Note the 'wind gear' on the roof - and the stone slabs to withstand strong winds. Undated, Orkney Archives.

Energy history

- The history of wind energy is more than a technological and scientific story.
- It is also the history of weather, folklore and identity, activism, political shifts and changing ideas about big topics such as the welfare state, and climate change.
- Energy history and the energy humanities seek to challenge not only technocratic narratives, but also the dominant fossil fuel imaginary – the product of the fossil fuel-made world we live in.
- Energy archives can help in this work, which is one of resistance and also of creativity. How can we imagine new energy futures beyond fossil fuels? What materials do we need to do so?

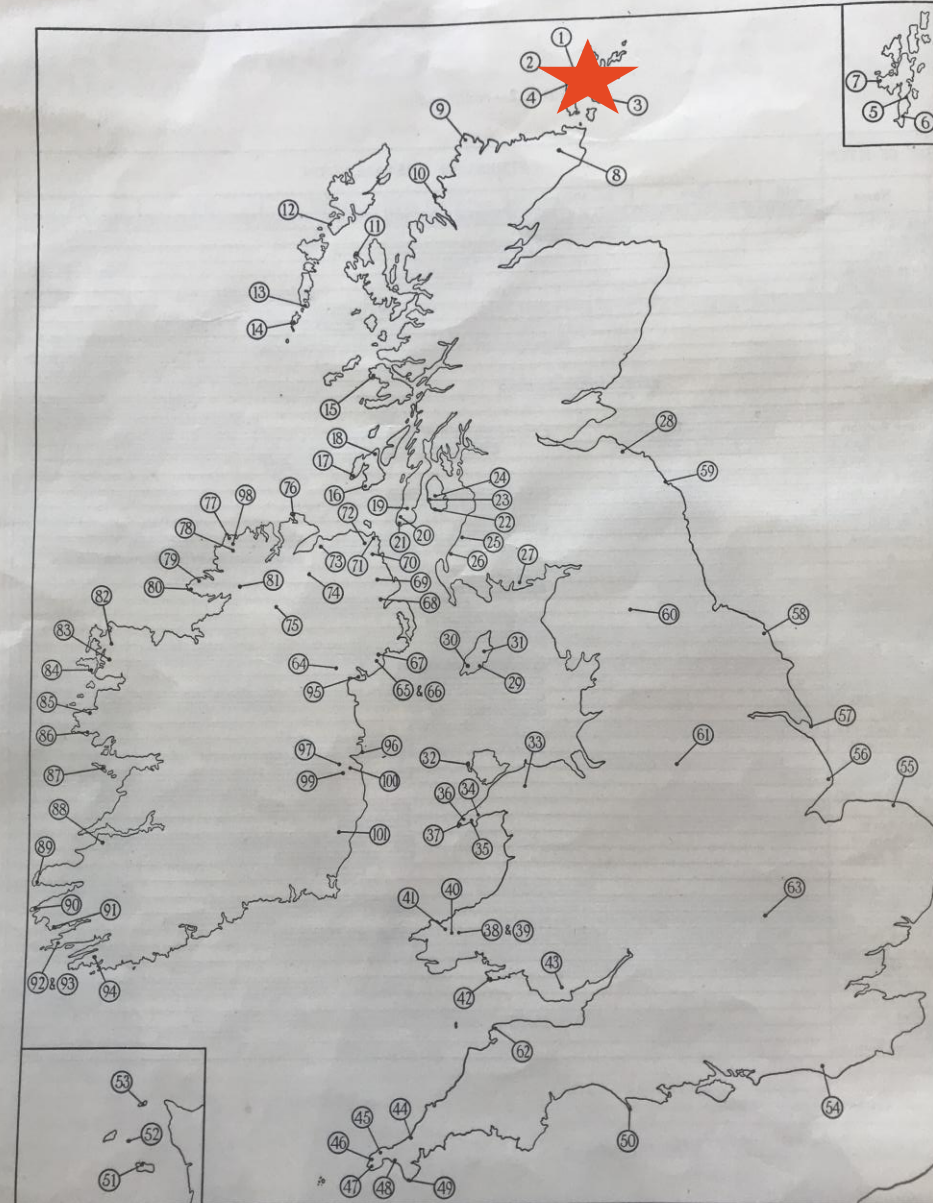


Fig. 1.—E.R.A. wind survey sites.

The numbers against each site correspond to the characteristic numbers given in Tables 1 and 2, etc.

A map of the sites for the first national wind survey, conducted by the British Electrical and Allied Industries Research Association (ERA), 1947-55.

The survey was done with a view to developing a wind industry: where did the wind blow strongest, and where should a test turbine be located?

The answer to both questions: Orkney. Britain's first wind turbine connected to a power grid was installed in Orkney in 1951.

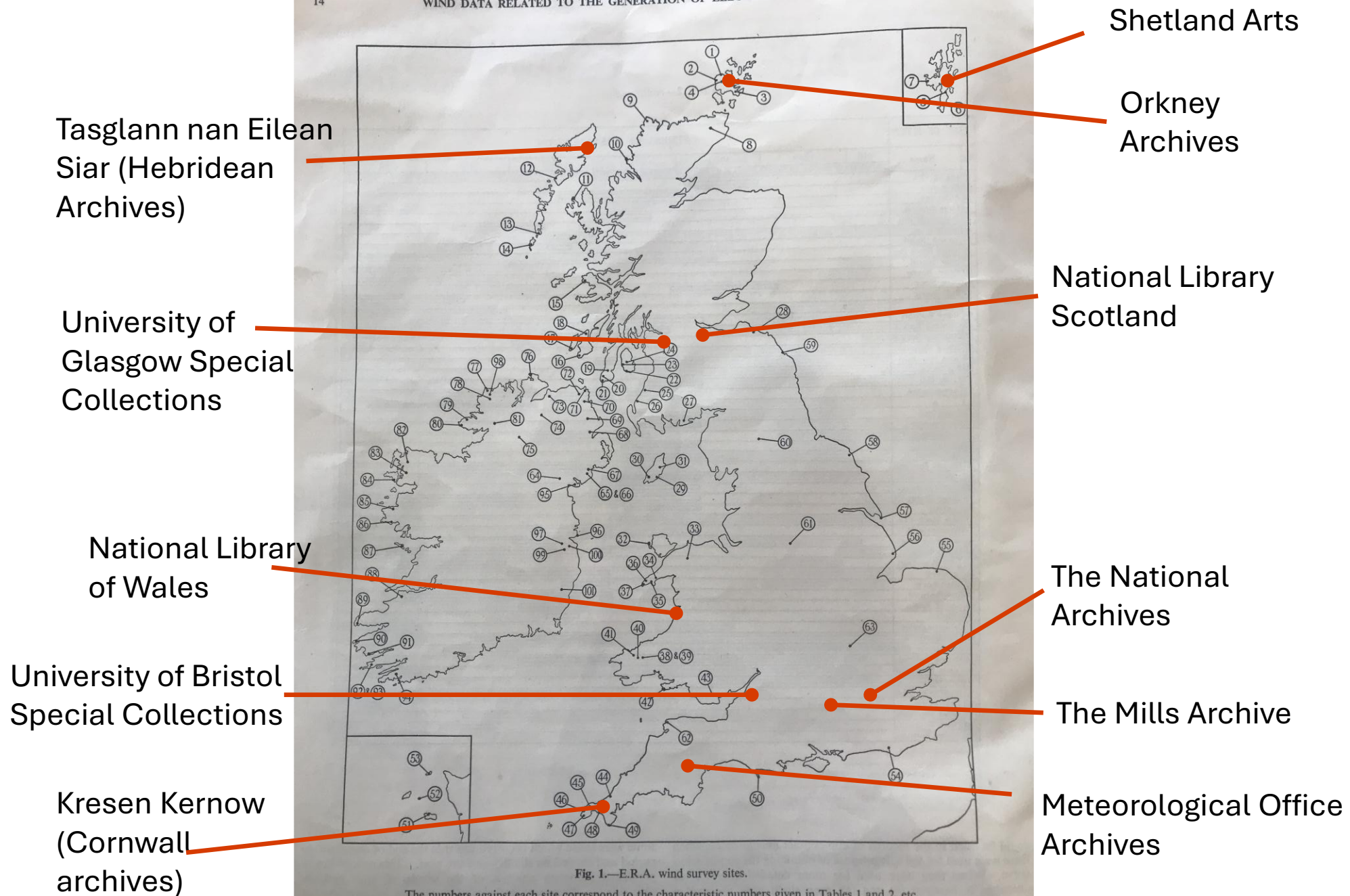
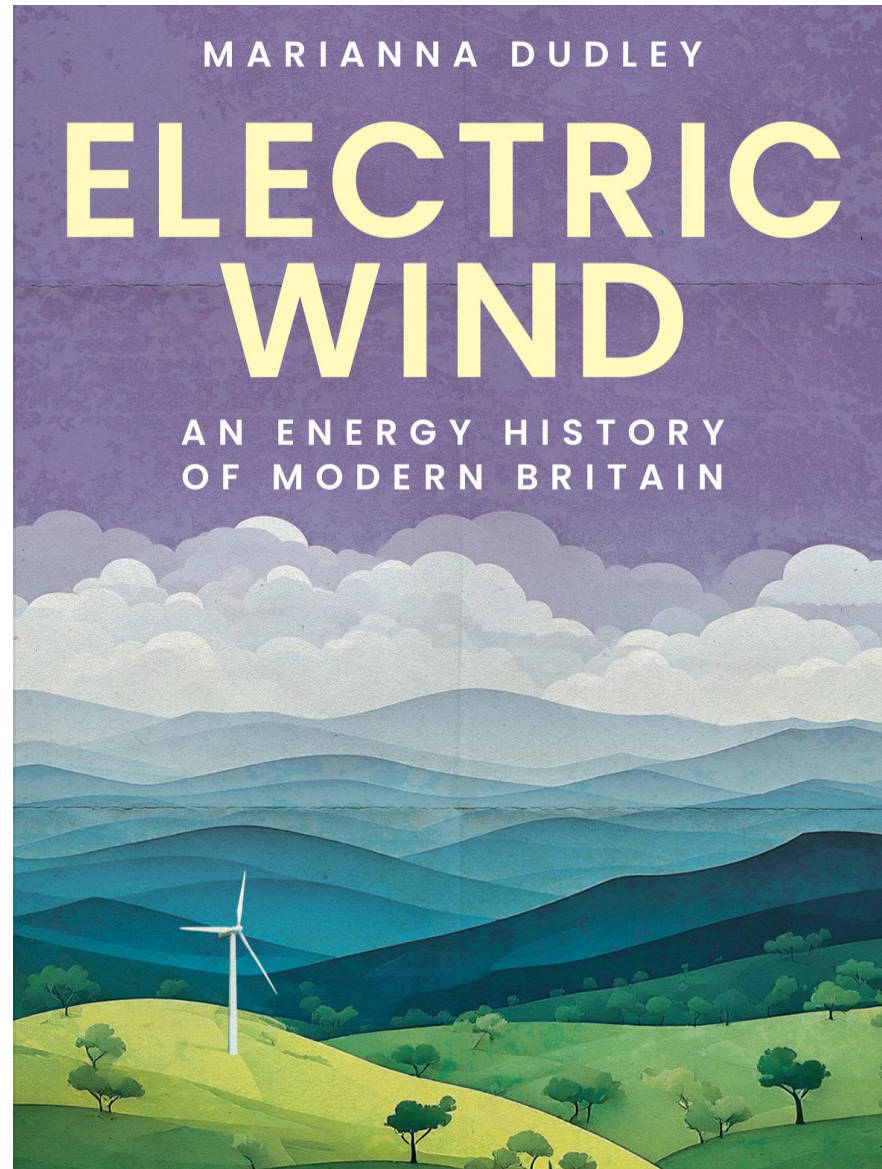


Fig. 1.—E.R.A. wind survey sites.

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Mapping the energy archives

- The history of wind energy has an archival geography which maps onto the regionality of wind energy itself.
- The geographic footprint of renewables is different to that of fossil fuels. This in turn generates archival material.
- Researchers have to look beyond central, and national, archives.
- Some challenging research logistics and expenses
- But a rich and varied network of archival traces that tell a history far more complex – and interesting – than a top-down, state-centric narrative.



Thank you to all the
archives, and archivists,
without whom I could not
have written this book.

Thank you for listening!

m.dudley@bristol.ac.uk