

Data centres planned for Scotland could use three quarters of country's current electricity demand

New, 'hyperscale' data centres which are planned for Scotland will demand between 2000 – 3000 megawatts (MW) of electricity supply, according to research by tech justice non-profit Foxglove.

Scotland's current peak electricity demand in winter is 4 gigawatts (4000MW) – meaning that the new data centres would use as much as 50-75% of all the electricity Scotland currently needs.ⁱ

This level of new electricity demand – two to three gigawatts of power – would consume a large proportion of Scotland's total power supply, resulting in significant carbon emissions. Just one of the eleven data centres planned will cause emissions similar to those of Edinburgh airport, according to figures from its own developer.ⁱⁱ

The new electricity demand created if all the data centres currently in the planning system are built would be comparable to:

- two to three times the capacity of the Peterhead gas power station: 1180MW.ⁱⁱⁱ
- the total output of the Torness and Hunterston B nuclear power stations, while both were still in operation: 1190MW^{iv} and 965MW^v respectively.
- the total generation capacity of all of Scotland's offshore wind turbines in 2024: 2971MW.^{vi}

The figures were compiled by Foxglove through a keyword search of local authority planning websites in November 2025. They include any applications made under the planning system – for example, 'screening requests' for Environmental Impact Assessments (EIAs), as well as full planning applications – but may omit data centres which developers are planning to build but have not yet submitted to the planning system.

The figures may be an under-estimate, as they are based on developers' own claims of their planned facilities' demand, which in several cases lack key data. They also do not include proposed data centres which have not yet been logged on local authorities' planning portals.

The following table shows all the planned data centres which Foxglove has been able to identify via local authorities' planning portals. It includes their location, their 'capacity' – or maximum electricity demand for their computer equipment – and their developer. It also includes information on projected climate emissions caused by the data centre, although Foxglove has only been able to find this for one project.

| Name | Address | Capacity (MW) | Annual emissions (tCO2e) | Developer | Local authority |
|-----------------------------|---|--------------------|--------------------------|-----------------------|-------------------------------|
| South Gyle | 1 Redheughs Avenue, EH12 9RH | 212.42 | 220,436 | Shelborn Drummond Ltd | Edinburgh |
| Wester Hermiston | N. Riccarton, Currie | 200 ^{vii} | n/a | Apatura | Edinburgh |
| Ravenscraig | | 550 | n/a | Apatura | North Lanarkshire |
| ‘Aurelius’ | Land at N. Lanrigg, ML1 5LT | n/a | n/a | ILI Group | North Lanarkshire |
| The Laundry Field | Land N. & E. of Stainrigg Mains Farm Coldstream | 300 | n/a | Apatura | Scottish Borders |
| ‘Cato’ | Land N. of Camilla Road Gleniston Auchtertool | n/a | n/a | ILI Group | Fife |
| Freeport | Freeport Shopping Village, EH55 8PN | 250 | n/a | Apatura | West Lothian |
| Westerhill | Land Adjacent To Crosshill Road Bishopbriggs | 300 | n/a | Apatura | East Dunbartonshire |
| Haspielaw Farm | Land At Haspielaw Farm, ML3 8RX | n/a | n/a | Apatura | South Lanarkshire |
| Ochiltree | Land S. of Creoch Farm, KA18 2QH | 200 | | Apatura | East Ayrshire |
| ‘Rufus’ | n/a | n/a | n/a | ILI Group | East Ayrshire ^{viii} |
| Total A – confirmed | | 2012.42 | | | |
| Total B – estimated* | | 3000 | | | |

*Note: Foxglove has been unable to find any figures on the capacity of ‘Aurelius,’ ‘Cato’ and ‘Rufus,’ three data centres referred to by their developer, ILI Group, as ‘the Stoics.’ However, ILI has said publicly that “The Stoics will stand among the largest hyperscale data centre clusters in the world, more than twice the size of many of today’s leading

campuses.”^{ix} It is not possible to derive a precise figure from this. However, in 2024 the consultancy McKinsey said that “Today, a 200-MW facility is considered normal.”^x It therefore seems reasonable to use a conservative estimate of 250MW each, in line with other proposed hyperscale data centres planned for Scotland where figures have been provided. Foxglove has also been unable to find a figure from the developer for Apatura’s proposed Haspielaw Farm site, and again has used an estimate of 250MW, putting it in line with the Apatura’s other proposed facilities. Using this estimate of 250MW for each of these four data centres brings the estimated total for all 11 data centres identified to around 3000MW.

ⁱ According to NESO, “Scotland’s current winter peak gross demand is just over 4 GW”:

<https://www.neso.energy/publications/electricity-ten-year-statement-etys/electricity-transmission-network-requirements/scottish-boundaries>

ⁱⁱ See ‘Giant data centre could use as much power as every home in Glasgow and Edinburgh,’ inews, 13/10/2025: <https://inews.co.uk/news/data-centre-power-home-glasgow-edinburgh-3973815>

ⁱⁱⁱ Figures from SSE, available at: <https://www.ssethermal.com/flexible-generation/operational/peterhead/>

^{iv} Figures from the Office of the Nuclear Regulator, available at: <https://www.onr.org.uk/our-work/what-we-regulate/operational-power-stations/operational-sites/facilities/torness>

^v Hunterston B stopped generating electricity in 2022, but figures for its capacity while operational from EDF are available at: <https://www.edfenergy.com/energy/power-stations/hunterston-b>

^{vi} Figures from the Scottish Government, available at: <https://www.gov.scot/publications/energy-statistics-for-scotland-q1-2024/pages/renewable-electricity-capacity/>

^{vii} A figure of 250MW has also been provided in some documents.

^{viii} Note: ‘Rufus’ is one of a group of three data centres planned by developer ILI, which has said it will be located in East Ayrshire. However, as of November 2025, it had not appeared on East Ayrshire’s planning portal.

^{ix} According to ILI’s website, see: <https://ili-energy.com/data-centres>

^x See ‘AI power: Expanding data center capacity to meet growing demand,’ mckinsey.com, 29/10/2024, available at: <https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/ai-power-expanding-data-center-capacity-to-meet-growing-demand>