# Google’s AI datacentre plan in Essex sparks climate concern



Google’s proposal to build a vast new datacentre in Thurrock, Essex, has intensified debate over the environmental cost of the UK’s AI ambitions. The planned “hyperscale datacentre,” covering 52 hectares on a former speedway site, is projected to emit more than half a million tonnes of carbon dioxide each year — a level campaigners equate to 500 short-haul flights per week.

Planning documents from a subsidiary of Alphabet, Google’s parent company, estimate the site’s emissions at around 568,727 tonnes of CO₂ equivalent annually. Google describes this as “minor adverse and not significant” in the context of the UK’s wider carbon budgets, citing future decarbonisation of the grid. But campaign group Foxglove argues the datacentre’s emissions would exceed those of some international airports, warning of serious pressure on local energy and water supplies.

The project reflects the UK government’s strategy to boost AI capabilities, with computing power demand expected to grow thirteenfold by 2035. Ministers see datacentre expansion as vital to maintaining national competitiveness and avoiding a “compute gap” that could threaten security and economic growth. Investment from major US tech firms, including Nvidia and OpenAI, is expected to feature prominently in upcoming diplomatic engagements, including a state visit from US President Donald Trump.

Datacentres already account for about 2.5 per cent of the UK’s electricity use — a figure forecast to quadruple by 2030. Google has made broader UK infrastructure commitments, including a new facility in Waltham Cross featuring air cooling and renewable energy partnerships aimed at achieving 95 per cent carbon-free operations by 2026. However, similar environmental safeguards for the Thurrock site remain under scrutiny.

The Essex plan follows a wider regional pattern. In Ireland, Google is developing a datacentre at Grange Castle Business Park projected to emit around 224,250 tonnes of CO₂ annually. The expansion of such facilities across Europe is drawing criticism from environmental groups, who argue that emissions, water use and energy demands are being overlooked in the race to meet digital demand.

Analysts at Bain & Company warn that by 2035, datacentres and AI could be responsible for up to 2 per cent of global emissions and 17 per cent of industrial emissions, with the heaviest impact in areas dependent on fossil fuels. In the UK, this raises questions about the pace of datacentre development and the urgency of investment in renewable energy and grid infrastructure.

Campaigners are calling on the government to reconsider the scale of expansion, warning that without stronger environmental oversight, datacentre growth risks undermining the country’s climate commitments. They argue for policies that align AI infrastructure with sustainable practices, ensuring that innovation does not come at the cost of environmental responsibility.

As the Thurrock proposal enters the planning phase, it has become a flashpoint for the UK’s broader dilemma — how to lead in AI while honouring climate goals. The outcome may help shape not only local impacts but the future balance between digital growth and environmental sustainability.

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## Bibliography

1. <https://www.theguardian.com/technology/2025/sep/15/google-datacentre-kent-co2-thurrock-uk-ai> - Please view link - unable to able to access data
2. <https://www.theguardian.com/technology/2025/sep/15/google-datacentre-kent-co2-thurrock-uk-ai> - A new Google datacentre in Essex is projected to emit over half a million tonnes of carbon dioxide annually, equivalent to approximately 500 short-haul flights per week. The facility, covering 52 hectares, is part of a broader initiative to expand AI infrastructure in the UK. The plans were submitted by a subsidiary of Alphabet, Google's parent company, amid efforts to enhance AI capabilities in Britain. The UK government anticipates a 13-fold increase in AI computing power by 2035 and is seeking to secure large-scale investments from major tech companies. However, environmental campaigners express concerns about the significant greenhouse gas emissions and resource consumption associated with such large-scale data centres.
3. <https://www.computing.co.uk/news/2025/google-s-planned-essex-datacentre-could-emit-570-000-tonnes-of-co-annually> - Google's proposed Essex datacentre is expected to emit nearly 570,000 tonnes of CO₂ annually. The 'hyperscale' site in Thurrock would span 52 hectares and could house up to four datacentre buildings. This development is part of the UK's efforts to meet the growing demand for computing power, particularly as AI adoption accelerates. The project has faced criticism from environmental groups, which argue that the emissions would be several times higher than those of an international airport. The UK government is pursuing rapid expansion of datacentre capacity to avoid falling behind international rivals. ([computing.co.uk](https://www.computing.co.uk/news/2025/google-s-planned-essex-datacentre-could-emit-570-000-tonnes-of-co-annually?utm_source=openai))
4. <https://thurrock.nub.news/news/local-news/spotlight-turned-on-huge-environmental-impact-of-borough-datacentre-plan-that-will-be-equal-to-500-plane-flights-a-week-272170> - Google's plan to build a new datacentre in Thurrock, Essex, has raised environmental concerns. The proposed facility is expected to emit over half a million tonnes of CO₂ annually, equivalent to about 500 short-haul flights per week. The site, covering 52 hectares, was previously home to a speedway and stock car track. Environmental campaigners argue that the datacentre will significantly increase greenhouse gas emissions and put pressure on the UK's power and water resources. The UK government is aiming to ramp up AI capacity, but critics warn of the environmental impact of such large-scale data centres. ([thurrock.nub.news](https://thurrock.nub.news/news/local-news/spotlight-turned-on-huge-environmental-impact-of-borough-datacentre-plan-that-will-be-equal-to-500-plane-flights-a-week-272170?utm_source=openai))
5. <https://www.itpro.com/business/business-strategy/google-opens-doors-on-uk-data-center-ahead-of-trump-visit> - Google has inaugurated its first UK data centre in Waltham Cross, Broxbourne, as part of a broader £5 billion investment in UK infrastructure. The $1 billion centre aims to bolster AI-driven services such as Google Cloud, Search, Maps, and Workspace. The company emphasizes environmental sustainability, implementing advanced air-cooling systems to minimize water usage and support off-site heat recovery for local benefit. Google has partnered with energy firms like ENGIE and Shell to promote renewable energy, aiming for 95% carbon-free operation in the UK by 2026. Despite the innovation, local residents expressed concerns over construction-related noise, view disruption, and falling property values. In response, Google established a community fund and pledged support for local charities and development projects. ([itpro.com](https://www.itpro.com/business/business-strategy/google-opens-doors-on-uk-data-center-ahead-of-trump-visit?utm_source=openai))
6. <https://www.irishtimes.com/business/2024/07/04/planned-google-data-centre-would-create-almost-quarter-million-tonnes-of-carbon-emissions/> - Google Ireland Ltd's planned new data centre in south Dublin is projected to indirectly contribute 224,250 tonnes of CO₂ emissions annually without any mitigation measures. The facility, covering 72,400 square metres, will involve the construction of eight data halls on a 50-acre site. The project is the third phase of Google's data centre campus at Grange Castle Business Park and is expected to create 800 construction jobs and 50 operational jobs. The planning documents highlight the need for the data centre to meet increasing demands for Google's ICT services in Ireland. ([irishtimes.com](https://www.irishtimes.com/business/2024/07/04/planned-google-data-centre-would-create-almost-quarter-million-tonnes-of-carbon-emissions/?utm_source=openai))
7. <https://www.rte.ie/news/business/2024/0704/1458263-new-google-data-centre-to-generate-224-250-tonnes-of-co2/> - Google Ireland Ltd's planned new data centre in south Dublin is projected to indirectly contribute 224,250 tonnes of CO₂ emissions annually without any mitigation measures. The facility, covering 72,400 square metres, will involve the construction of eight data halls on a 50-acre site. The project is the third phase of Google's data centre campus at Grange Castle Business Park and is expected to create 800 construction jobs and 50 operational jobs. The planning documents highlight the need for the data centre to meet increasing demands for Google's ICT services in Ireland. ([rte.ie](https://www.rte.ie/news/business/2024/0704/1458263-new-google-data-centre-to-generate-224-250-tonnes-of-co2/?utm_source=openai))