# Killellan AI Growth Zone aims to link green power and hyperscale data centres



A proposal to transform a 184-acre industrial site near Dunoon into the Killellan AI Growth Zone has reignited debate over how Scotland can align industrial regeneration with the net-zero transition.

Argyll Data Development says the campus would combine modular hyperscale and edge data centres with a “national green grid” operations hub, using microgrids to match local low-carbon generation with demand and cut curtailment. Early plans target 100–600MW of behind-the-meter capacity in phase one, scalable beyond 2GW, with total investment estimated at £15bn and up to 5,000 jobs.

Local MSP Jenni Minto has backed the bid for UK Government AI Growth Zone status. The developer cites partnerships with CorPower Ocean, Schneider Electric and Lenovo, and says it is in talks with investors and potential tenants in AI, life sciences and secure hosting.

Microgrids and private-wire networks are central to the concept, drawing on wind, solar, hydrogen and wave power with storage such as vanadium flow batteries. Proponents say this approach can improve resilience, cut costs and allow islanding until national grid reinforcements arrive.

To qualify for AI Growth Zone recognition, the project must show credible access to at least 500MW by 2030 or an equivalent behind-the-meter plan. It must also address environmental and visual impact concerns from residents, even with the site’s industrial zoning and history as a North Sea oil-rig yard.

Scotland’s renewables rollout has been hampered by transmission bottlenecks, and Killellan’s reliance on local generation will need firm power-purchase and storage agreements as well as regulatory clarity.

Supporters see the scheme as a way to anchor AI and other data-intensive industries in Scotland while integrating renewables and testing emerging technologies. Critics want more detail on supply contracts, finance, timelines and community engagement before its first phase, targeted for mid-2027.

If it delivers, Killellan could offer a model for combining high-performance computing with distributed green energy in former industrial regions — and a policy template for linking digital growth to net-zero goals.

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## Bibliography

1. <https://www.heraldscotland.com/news/25385229.dunoon-data-centres-support-net-zero-drive-scotland/?ref=rss> - Please view link - unable to able to access data
2. <https://www.heraldscotland.com/news/25385229.dunoon-data-centres-support-net-zero-drive-scotland/?ref=rss> - This Herald Scotland piece outlines the Killellan AI Growth Zone proposal on industrial land near Dunoon, explaining ambitions to redevelop a former rig‑building and quarry site into a low‑carbon data centre campus. It reports comments from project lead Peter Griffiths about using the first data hall as an operations centre to manage a national green grid and microgrids, and cites projected employment figures — some 5,000 roles across construction, operations and supply chains — plus partner names and an anticipated phased build with initial operations around 2027. The article also records local concerns about landscape impact and notes the site’s industrial zoning.
3. <https://argylldev.com/ai-growth-zone-overview> - Argyll Data Development’s official Killellan AI Growth Zone overview sets out the project in full: a nationally significant, 184‑acre, industrially zoned site near Dunoon intended to host modular hyperscale and edge data infrastructure powered by on‑site renewables. The page details a Phase One capacity target of 100–600MW, scalable to more than 2GW, and an energy strategy using wind, solar, wave, hydrogen and vanadium flow battery storage plus private‑wire operation to mitigate grid constraints. It lists consortium partners (including Schneider Electric, Lenovo and CorPower Ocean), economic impacts, a £15 billion investment figure and job creation estimates for construction and long‑term operations.
4. <https://www.datacenterdynamics.com/en/news/data-center-campus-planned-for-former-oil-rig-factory-in-dunoon-scotland/> - Data Centre Dynamics reports on a plan to convert a former oil‑rig fabrication site at Dunoon into the Killellan AI Growth Zone data centre campus. The article repeats project parameters from the developer: initial 100–600MW capacity, aspiration towards 2GW, use of on‑site renewables (wind, solar, hydro, hydrogen) and vanadium flow batteries, and the intention to run early phases in island mode while grid links are developed. It references the site’s industrial history and a reportedly large former workforce, notes partner companies and states the developer’s target to have the first phase operational around 2027 while pursuing AI Growth Zone status.
5. <https://www.gov.uk/government/publications/ai-growth-zones/ai-growth-zones-open-for-applications> - The UK Government’s AI Growth Zones guidance explains the national programme intended to attract investment in AI‑optimised infrastructure by improving access to power and planning support for sites that can host large‑scale compute. It sets out eligibility and assessment criteria — technical feasibility (power and water), delivery feasibility, local impact and government support requested — and specifies expectations such as demonstrating access to at least 500MW of power capacity by 2030 or credible behind‑the‑meter solutions. The guidance encourages bids from local authorities and industry, highlights deindustrialised areas as priorities and describes aims to create skilled jobs and regional economic benefit.
6. <https://corpowerocean.com/corpower-ocean-to-develop-uks-largest-wave-energy-array-at-emec/> - CorPower Ocean’s announcement describes plans to develop a multi‑device wave energy array at the European Marine Energy Centre (EMEC) in Orkney, presenting commercial‑scale wave technology as a maturing renewable option. The release outlines device characteristics, WaveSpring power‑amplification and storm‑survivability features, and a staged deployment aiming to deliver megawatts of predictable, complementary generation. The material supports the idea that wave power can contribute to local, low‑carbon energy mixes for coastal projects, offering an additional renewable source that schemes like Killellan might integrate to reduce reliance on the wider transmission system.
7. <https://www.datacenterknowledge.com/uptime/microgrids-for-data-centers-enhancing-uptime-while-reducing-costs> - DataCenterKnowledge explains how microgrids and on‑site distributed energy resources can help data centres boost resilience and cut operating costs while integrating renewables. The article describes microgrid benefits — islanding capability, coordinated batteries and generators, demand response participation and improved energy management — and notes that advanced control systems (including AI and analytics) can optimise generation, storage and load in real time. It discusses commercial and environmental drivers for private‑wire and behind‑the‑meter solutions, and why microgrids are increasingly considered for new hyperscale and edge facilities facing long grid‑connection lead times or transmission constraints.