TE KĀHUI RARAUNGA

Iwi Advisory Brief | 2026

Environmental impacts of hyperscale data centres

What iwi need to know

Every major technology corporation, Amazon, Google, Meta, Microsoft, is racing to build massive hyperscale data facilities in Aotearoa and across the Pacific. Iwi are being approached with promises of economic development and digital sovereignty. This brief sets out what the evidence actually shows, and what you need to ask before agreeing to anything. *Ka ora te wai, ka ora te whenua, ka ora te āpōpō.*

01 · UNDERSTANDING THE DIFFERENCE

Data centres vs. hyperscale data centres

A conventional data centre stores and processes data for a single organisation, a government agency, a business, or a university. It is modest in scale, draws limited power and water, and is typically managed for internal use.

A hyperscale data centre is categorically different. Built by corporations like Amazon, Google, and Meta to power AI and cloud computing globally, these industrial-scale facilities can consume over 25% of a local community's entire water supply and emit between 200,000 and 400,000 metric tonnes of CO_2 annually, roughly equivalent to the total annual greenhouse gas emissions of the Nelson region. They operate around the clock and require continuous cooling, continuous power, and a significant land footprint.

The distinction matters because the environmental harms, and the governance risks, are not simply larger versions of the same thing. They are qualitatively different in kind and demand a qualitatively different level of scrutiny from iwi Māori.

02 · THE SCALE OF THE PROBLEM

Numbers that matter

23.1 billion litres
of water used for cooling by Google data centres in 2023, roughly equivalent to the water consumption of Hamilton city for 2023.

200,000-400,000 metric tonnes of CO_2
emitted annually by hyperscale data centres, roughly equivalent to the annual greenhouse gas emissions of the Nelson region.

100-1,000 MW
Power draw of a single hyperscale facility, up to 200x a conventional data centre.

945 TWh of electricity
100 times New Zealand's entire electricity supply projected global data centre demand by 2030.

These figures[1] carry direct implications for Aotearoa. Hyperscale data centres are arriving precisely when iwi, hapū, and whānau are seeking to protect their own energy interests, including through participation in renewable energy assets. If the electricity grid is captured by the demands of hyperscale tenants, the cost and availability of power for Māori communities becomes a Tiriti issue, not merely a commercial one.

The economic promises made to communities rarely materialise. If investment in hyperscale data centres is abandoned, then the facilities that offshore corporations build on Aotearoa lands becomes our trash and e-waste to deal with. A facility worth billions today could become a stranded asset on Māori land tomorrow.

03 · ENVIRONMENTAL HARMS

He parekura taiao: Four dimensions of harm

Water:
Hyperscale data centres require enormous volumes of freshwater for cooling. Google's centres used over 4.5 trillion gallons in 2023 alone, enough for all of Hamilton in 2023. In some cases, this water cannot be returned to the water cycle because of contamination. Communities adjacent to data centres in the United States report dry wells, loss of water pressure, and contamination linked to cancer and miscarriage clusters. The proposed Datagrid NZ facility in Murihiku would draw from shallow aquifers on iwi takiwā[2].

Land and wāhi tapu:
The Datagrid NZ proposal in Murihiku required consents to remove inland wetlands and lay cables across Ōreti Beach, a site of deep significance to iwi Māori. Earthworks risk disturbing wāhi tapu. Wetlands are the kidneys of the taiao; their loss threatens a fundamental balance of our natural environments, with impact on both physical and meta-physical properties of these sites of significance. Mana Whenua secured important mitigation conditions, but the project demonstrates the breadth of cultural risk involved.

Energy and carbon:
We cannot project the amount of energy hyperscale data centres will consume as this depends on the number built and their size. However, data centres already consume approximately 2% of global electricity, a figure projected to reach nearly 13% by 2030. By that same year, the global industry may emit 2.5 billion tonnes of CO_2. In Aotearoa, Amazon's expansion plans in West Auckland were cited as a direct risk to the stability of our national electricity network, driving power prices higher for all consumers before the company abandoned its plans in 2025.

Air and noise:
Diesel backup generators needed for data centres emit fine particulates and nitrogen oxides linked to respiratory illness, cardiovascular disease, and rare cancers. Their continuous mechanical noise permanently alters the acoustic landscape, disrupting the centuries-old vibrations of our natural environments that impact the knowledge held within that taiao.

> *"Iwi Māori view freshwater as a precious taonga. It is finite and fundamental to all life. We insist on a non-consumptive approach that safeguards wai for future generations.",*
> **Te Ao Mārama Inc., Cultural Impact Assessment, 2026**

1. See *The Environmental Impacts of Hyperscale Data Centres and What Iwi Need to Know, a Te Kāhui Raraunga Working Paper (2026)* for full references.
2. From *Cultural Impact Assessment (Data NZ Limited Partnership / Te Ao Mārama Inc).*

04 · THE EVIDENCE FROM ELSEWHERE

He tirohanga ao whānui — What other communities show us

In **Santiago, Chile**, MOSACAT discovered that a proposed Google data centre planned to draw 169 litres of water per second in an already drought-prone area. Their resistance forced a public reckoning over who bears the costs of AI infrastructure.

In **Uruguay**, environmental protesters challenged Google's disclosures on emissions and water use, demonstrating that even with robust regulation, hyperscale corporations can override community concerns without sustained political pressure.

In **Tulsa, Oklahoma**, Indigenous advocates protested Meta's "Project Anthem" data centre as a threat to water, culture, and informed consent — naming it explicitly as colonial resource extraction under a digital banner.

Across North America, hyperscale developers target tribal communities for cheaper water, electricity, and tax incentives. Economic promises rarely materialise: a facility employing 1,500 construction workers may create only 100 permanent jobs.

> *"Indigenous communities are being told AI data centres will help protect data sovereignty. However, many tribal nations lack the legal infrastructure to regulate multinationals. Giving unfettered access is not data sovereignty, it is giving away power.",*
>
> **Honor the Earth, Data Centers: Myth vs. Fact, 2025**

05 · OUR FRAMEWORK

Māori Data Sovereignty is the starting point

Sovereignty over data does not only reside in where the servers are located. It resides in who controls the data, under what conditions, and with what legal recourse. A foreign-owned facility in your takiwā does not give you sovereignty without enforceable data governance conditions.

Most major technology corporations remain subject to the laws of their home countries regardless of where their infrastructure is physically located. Under the United States CLOUD Act (2018), for example, federal law enforcement can compel any US-based company to produce data stored on its servers, including those on foreign soil. Physical presence in Aotearoa does not exempt a US-owned platform from this reach. This is not a theoretical risk; the US Government issues tens of thousands of such legal demands each year.

THE CARE PRINCIPLES: THE TEST EVERY PROPOSAL MUST PASS

Collective benefit: Does this genuinely serve iwi and hapū, not just the developer?

Authority to control: Do iwi hold enforceable authority to determine how data relating to them and their taiao is governed?

Responsibility: Does the developer bear full accountability for all harms?

Ethics: Is there an ongoing accountability mechanism to the iwi and their community?

06 · WHAT IWI SHOULD DO

Ngā tohutohu: Five things to demand

1. **Demand full disclosure upfront:**
   Water consumption, energy draw, carbon emissions, generator use, true employment numbers post-build, and governance structures for all data, before engagement begins.

2. **Commission an iwi-led impact assessment, funded in full by the developer:**
   This assessment should have two distinct components: an environmental component addressing physical, ecological, and cultural effects; and a Māori Data Sovereignty component covering who controls Māori data held within the facility and what rights iwi can assert over it.

3. **Insist on binding consent conditions:**
   Regular environmental reporting, an iwi-led kaitiaki monitoring plan, and a formal legal mechanism for further resolutions and mitigation if cumulative effects emerge.

4. **Connect with other Indigenous communities:**
   Networks of knowledge and resistance run from Aotearoa to Chile to the United States. Te Kāhui Raraunga can assist in making those connections.

5. **Know that you can say no:**
   Under facets of NZ Law, including Te Tiriti, tangata whenua must be consulted on any activity affecting your values and environment. UNDRIP gives you the right to Free, Prior and Informed Consent, the right to consent or to withhold consent entirely, before a project is approved. Tino rangatiratanga is not just the right to negotiate better terms, it is the right to say with absolute clarity: No!

07 · CLOSING

Ko tā mātou whakaaro: Our position

The hyperscale data centre is an extractive facility that consumes water, land, energy, and through the data it stores, potentially Indigenous knowledge. Kaitiakitanga, rangatiratanga, and manaakitanga are governance frameworks of the highest order, and exactly what is required to evaluate these proposals.

> *He kura ka huna, he kura ka whākina,*
> *e koropupū ana te Wai Ora!*

FURTHER READING

Our work at Te Kāhui Raraunga is to ensure that iwi have the knowledge and the confidence to assert their rights in relation to data, in every room, at every table, and on **every acre of whenua.** This brief summarises the key findings of: *The Environmental Impacts of Hyperscale Data Centres and What Iwi Need to Know, a Te Kāhui Raraunga Working Paper (2026).* For the full analysis, and to see other resources from Te Kāhui Raraunga, visit

kahuiraraunga.io