

VTG statement on proposed Energy North's Project Ares Hyperscale AI Data Centre on Murunji Aboriginal Land Trust Barkly Region, NT.

Addressing: 'Any specific information you can provide on waste management and circular economy issues regarding data centres would be appreciated'

Request from Kevin Phnag's – NT Circular Economy

Data centres require a significant amount of energy, operating 24 hours a day and require a significant amount of water to cool the constant machines. Yet, the proposed Hyperscale Data Centre is predicted to have an greater environmental demand than standard data centres. Energy North projects, Project Ares to be the largest data centre in Australia! There is no current federal environmental legislation yet for AI Data Centres to approve this development. Electronic waste alone, the project is estimated to need to replace servers and GPUs every 5 years, extracting immense water and power for Singapore's data. Yet, the multi-billion project the literature states it is to last a short 25 years, even after extracting such a high volume of virgin materials. Project Ares has many environmental demands, through construction, operation and later decommissioning of it's own power and water station, solar farm, accommodation in the remote Barkly Region. Overall, using immense natural resources – is an Circular Economy possible?

Circular Economy Issues:

Circular economy is based on transitioning from a linear economy of take-make-destroy, to prioritising recycling of existing resources into a circular economy. This is where the extraction of new resources are limited and where the recycling of current materials are focused upon to 'close the loop'. Overall, to have minimal environmental impact on the earth.

After reading the literature on AI Data Centres, your information provided and other environmental reports there is little evidence Project Ares can be 'fully circular' or be 'zero-waste to landfill' as they claim. This is due to the Project Ares' *high demand on virgin natural resources* from the earth. Sustainable building resources or where recyclables will be sent for circularity are not listed in the literature. To be fully 'circular', emphasis on 'end of life' is equally as important as proper sourcing of recycled materials for new large-scale projects. Especially, when multi-billion projects like Project Ares and welcomed by Northern Territory Government, correct

sustainable investment for circularity could be possible. However, the literature states 'Project Ares relies on solutions that have not been created yet'.

GAPS

The literature does not state:

1. Project Ares interest in using recycled (non-virgin) materials to build the Hyperscale data centre and other proposed facilities to be deemed circular.
2. The literature states Energy North wants to focus on the 'Waste Hierarchy'. However, does not state Project Ares' plan to reduce or recycle at Waste Management Facilities onsite or the extra land size needed. Note: The only licenced landfill in the NT is Darwin's landfill over 600km away (Google, 2026). As a commercial large scale project waste cannot be disposed of in unlicenced landfills such as nearby Daly Waters.
3. The literature states 'zero waste to landfill goal'. However, does not state where the waste, such as high volumes of E-waste will be sent, inter-state or overseas. Such countries of Africa accept the highest volume of E-waste in the world, yet do not have capacity to accept more waste, as this waste is worsening the environmental and living conditions of it's people. Such as the release of lead, mercury, cadmium into the environment. A 'zero-waste to landfill' policy cannot include sending recycling overseas to then end up in other countries' landfill. This is irresponsible. To achieve circularity for Data Centres, E-waste recycling facilities at least must be built in Australia.

Current E-waste Issues in Australia

The Productivity Commission reported in January that Australians generate three times the world average of e-waste per person. Secondly, Nature Computational Science project estimates that generative AI could add 1.2 to 5 million tonnes of e-waste cumulatively by 2030. Yet, mandatory product stewardship the literature states does not currently exist. In 2011, the National Television and Computer Recycling Scheme was built for computers, printers, parts and peripherals and serves households and small businesses. Yet, other schemes have not been made mandatory since. Despite, not having a current clear destination for these recyclables. Further environmental damage is predicted, as to keep up with the demands of AI the Australian Government encourage further mining of rare earth minerals. Stating the without 'rare earth minerals you cannot manufacture data

centres or robotics'. For a society already affected by the Climate Crisis, severe floods, fires and cyclones driven by the Fossil Fuel industry we call for no more extraction of the earth resources. Especially, as the current Australian circularity rate is about 4.3%. The literature states 'We are subsidising the hole in the ground at one end of the pipeline and regulating nothing at the other.'

1.0 Table of Estimated Waste produced across the lifespan of Project Ares and estimated waste outcome by VTG

Stage of Project Ares	Waste Type	Waste Outcome
Construction Waste	Civil	Recycled
	Excavation Spoil	Recycled overseas
	Steel	Recycled in Aus
	Concrete	Recycled (unknown)
	Packaging	Treated + Disposed in Aus
	Fuels	Recycled in Aus
	Lubricants	Treated & Disposed in Aus
	Hazardous	Landfill
	General domestic waste	
Operational	Solar Panels	Large scale unknown
	BESS Modules	Unknown
	IT Equipment	E-waste 100% can never be recycled, severe concerns about this being sent overseas
	General Domestic Waste	Landfill
	Waste Water	Treated and disposed in Aus
	Coolant	Treated and disposed in Aus
	Servers	E-waste concerns
	Graphic Processing Units (GPU)	E-waste concerns
	Networking Hardware	E-waste concerns
	BESS Modules	

Decommissioning & rehabilitation	Construction waste	Could be recycled and recovered Severe waste concerns and ecological impact on the site ongoing
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Environmental Principles

VTG call the EP and NT EPA to consider and apply the principles for **Ecologically Sustainable Development (ESD)** which include:

- **Precautionary principle:** If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
- **Principle of intergenerational and intragenerational equity:** Ensuring that the health, diversity and productivity of the environment is maintained or enhanced for future generations.
- **Principle of sustainable use:** Natural resources should be used in a manner that is sustainable, prudent, rational, wise and appropriate (NT EPA, 2019) 7

The literature calls for the Precautionary principle to be applied to stop the Project Ares project from proceeding. As, multiple sources in the literature state Project Ares will cause irreversible environmental damage. Secondly, the Project has lack of environmental legislation, gaps within scientific studies as stated below and overall approval from the Federal Government.

A sustainable use of Australia's natural resources would be severely limiting the size of this project drastically or calling for further action from the federal government to not proceed with this project. Circularity is not viable, when such extraction of natural resources are being proposed.

Impact on Natural resources:

Water Use - Estimated 4 GL of groundwater a year extracted from the Wiso Basin Limestone Aquifer. Environment reports estimated to really be 25GL per year of fracked ground water. This is the equivalent of 5 Olympic Swimming pools a day, an equivalent of 1,600 Olympic swimming pools a year!

This demand on the aquifers ground table, has a negative on flow polluting all ground water tables and aquatic species below.

Energy Use – Energy North Project Ares is expected to use 6x what Darwin & Katherine use in one year. ~3,000 MWp of solar, 16 GWh of batteries, and a ~1,038 MW gas-fired off grid power station.

Land Use - Massive equivalent of 90 Football fields, 90Ha
Including a 7,000 ha Solar Farm

It is noted an area greater than 3000ha has 'potentially to reduce biodiversity to a point where some populations may fall to unsustainable levels'. Yet, this project is projected to clear a land size of 186,000 ha. Under the EPBC Deforestation is a clearly linked to Environmental Degradation.

Fauna Impact - Critical impact on the habitat of 12 listed threatened species and 15 migratory species are presented in the EPBC. Including the habitat of the Greater Bilby, Great Egret and Grey Falcon listed as some of Australia's rarest animals and national icons.

Particularly, birds are most vulnerable due to 'polarisation-sensitive vision'. High rare of mortality, as birds mis-take the solar farms as water.

Health Impact - Estimated around a data centre the heat increases by 5-9 degrees within a 10km radius of a Data Centre! This is linked to many heat related disease, affecting immune compromised peoples especially elderly and children.

Deeply concerned that too little is understood about the nature of significant impacts of a hyperscale data centre of this nature

Gaps within the Energy North Report, VTG call for NT EPA to investigate:

Cultural Heritage: Energy North has not stated if community consultation with the Traditional Owners of the Murunji Aboriginal Land Trust has been established. It is also concerning that this project is projected to take up over 70% of the Murunji people's land. We recommend development of this project ceases until proper long-term community consultation with the Murunji people has happened. Including the research into the cultural heritage, sacred and significant sites to the Murunji people through working with the specific land council. Then, when the Murunji people are educated on the full extent of the project in their language, other inclusive measures and all significant impacts of Project Ares is understood. So, only then the Murunji people if they choose can give proper consent.

Environmental Heritage: Energy North has not stated Environmental heritage such as significant Tree Species nor presence of Tree hollows which are protected Environmental Key Stone resources for all terrestrial ecosystems. We recommend the land is further accessed for Environmental Heritage, including the geomorphology understanding the history on the site and testing on the age of dominant tree species.

VTG's Recommendations:

- The Federal Government to prevent this project from proceeding due to 'foreseeable irreversible environmental damage'
- To pause construction plans until the Senate Inquiry into Artificial Intelligence and Data Centres report on 16 November 2026
- For the EPA to create targets for E-Waste reduction and mandatory product stewardship projects for the NT and Australia no longer just voluntary

If it was approved, call for the Project to only approved if the following are actioned:

- Ensure proper consultation with the Murunji People, understanding of sacred sites in the area and all significant impacts are understood
- Detailed Environmental Impact Assessment of Environmental Heritage to deem the age of the trees and key stone resources such as Tree Hollows.
- The Project Ares Data Centre to built out of all recycled materials
- Mandated by Federal Government for Project Ares to run entirely on renewable energy
- Energy North to provide a comprehensive full lifecycle of all waste and recovery obligations
- All recycled materials, are then recycled in Australia to a standard they are able to be used again in other projects in Australia.

The literature states industrial recycling technologies and reuse opportunities must advance considerably by the time of construction July 2027 next year and be consistent to time of decommissioning activities are required'.

Sources:

Desktop Ecological Assessment – EcOZ Report 2026

Referral under the EP Act 2026

ECNT_Submission_on_the_Referral_of_Project_Ares_.pdf

Proposed \$40b, 185ha data centre to use six times Top End's annual electricity consumption - ABC News

Why the world's biggest AI companies want data centres in the NT - ABC News

Submission-guide-on-the-referral-of-the-Project-Ares-hyperscale-data-centre.pdf

Project Ares, by the numbers. A gigawatt data centre and gas plant in the Barkly

Greenpeace, Australia Pacific, 'Energy Vampires: The AI data centres draining Australia' (May 2026) p. 68.

Environment Protection Act 2019 (NT) Pt 2, Div 1.