Nature Conservation Council
The voice for nature in NSW

8 May 2026

Submission to the NSW Data Centre Consultation

The Nature Conservation Council of New South Wales (NCC) is the state's peak environment organisation. We represent over 200 environment groups across NSW. Together we are dedicated to protecting and conserving the wildlife, landscapes and natural resources of NSW.

We welcome the opportunity to make a submission to the NSW Data Centre Consultation, and structure our submission around the principles-based approach to data centre investment outlined in the consultation paper. We note that the consultation paper acknowledges the Australian Government's Expectations of data centres and AI infrastructure developers.

We recommend the NSW Government adopts all eight Public Interest Principles for Data Centres outlined by an alliance of civil society groups and unions including NCC. The document outlines that to maximise public benefit and reduce public harm all new data centre developments must:

- Be powered by 100% additional renewable energy
- Strengthen grid stability
- Be appropriately sited to minimise impacts on nature and land use
- Minimise embodied emissions and maximise efficiency and circularity
- Use water resources responsibly
- Operate with transparency
- Commit to earning and delivering ongoing social licence
- Support the training and upskilling of the workforce.

Principle 1 – Economic and jobs growth

A plan to manage data centre growth is critical

Australia's data centre capacity has been roughly doubling every four years, and Sydney accounts for most of this growth. Data Center Map lists 91 data centres in Greater Sydney:

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- 63 operational;
- 5 under construction;
- 15 planned;
- 8 status unconfirmed.

The uptake of AI use across industries is the primary driver of data centre demand. The Clean Energy Finance Corporation estimates that 84% of new hyperscale data centres in Australia could host AI technologies.

In the race for NSW to benefit from data centre investment, there is an opportunity for the NSW government to get on the front foot in managing benefits and impacts for the people of NSW to ensure that the public benefits. There is strong potential for investment, jobs, economic growth and data sovereignty.

On the other hand, there is a risk that energy demand from data centre growth pushes up energy prices during a cost of living and oil supply crisis and risks prolonging the life of coal fired power stations to meet energy demand.

A plan to manage data centre growth is essential. This will allow for ongoing focus on the renewable energy transition to enable closure of coal fired power stations and protect communities and nature in NSW from the increasingly severe impacts of climate change.

Lift the ambition of the renewable energy target

Increasing the pace and scale of the renewable energy transition is essential to meet current and ongoing energy demand across our economy.

There are significant economic and emissions reduction benefits from lifting the renewable energy target in the Roadmap to meet projected energy demand and to bring down energy prices.

ASL has called for the renewable energy generation target in the NSW Roadmap to be lifted from 12GW to 16GW by 2030. It has also called for targeting 42 GWh of new long-duration storage infrastructure by 2034.

ASL's IIO report states the benefit of the “ambitious” development pathway is $6.8b over 20 years (p60). With approximately 3 million households in NSW, this translates to $110

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per household per year in savings. Energy savings would also flow to businesses. The emissions reduction is estimated at 9 MtCO2e from FY2026 to FY2045 (p33).

Legislating this increased target would provide certainty to renewable energy investors and industry, compared with a non-legislative lifting of the target.

Principle 2 – Fund water and energy infrastructure

The NSW data centre strategy must include regulations to enable the Australian Government's Expectations of data centres and AI infrastructure developers to be met. Specifically, to ensure that the following Australian government expectations for data centres are backed in by NSW regulations:

This includes working in coordination with energy regulators and suppliers to:

- secure new and additional clean energy generation and/or storage to offset demand
- cover their share of transmission and distribution infrastructure costs
- minimise their energy demand and emissions by adopting industry-leading efficiency measures and technologies
- improve the overall security and stability of the energy grid, including by enhancing demand flexibility and opportunities for peak-load management and appropriate sharing of consumption data.

Data centre growth could lead to steep increases in energy demand

A report for the Clean Energy Finance Corporation has projected fast, sharp growth in data centre energy demand: from 8% (central case) to 11% (high case) of Australia's total electricity consumption in 2035, up from about 1% in 2025.

In NSW, under AEMO's central Step Change scenario, data centres are responsible for more than half of total electricity demand growth projected between now and 2030, and over a third between now and 2035. Between now and 2030, growth in data centre demand outstrips additional demand for both electric vehicles and residential and business electrification combined.

Under AEMO's rapid decarbonisation Accelerated Transition scenario, data centre demand growth makes up a lower proportion of new demand. However, data centre demand is still responsible for close to 40% of new demand between now and 2030, and close to 25% of new demand between now and 2035 in NSW.

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Implications of data centre growth for energy prices and emissions

The abovementioned report for the Clean Energy Finance Corporation found that without additional renewable energy and storage, data centre growth could increase wholesale electricity prices by 26% in NSW by 2035, relative to the baseline scenario. This is driven by increased reliance on higher-cost gas peaking generation and would also result in a 14% increase in National Electricity Market emissions. By contrast, the addition of renewable energy and storage limits price impacts to 3% in NSW, while reducing grid emissions by around 1%.

Recent data by the Clean Energy Regulator has revealed that greenhouse gas emissions from the top three data centre operators (AirTrunk, CDC and Amazon) have doubled in five years, rising 20% in 2024-2025. This is the wrong trajectory.

In 2024, the NSW Net Zero Commission annual report warned that our state was not on track to meet its 2030 and 2035 emission reduction targets. Given the rapid pace of data centre growth and energy demand implications in the interim, as well as numerous climate-related disasters, we must redouble efforts and address energy demand from data centres.

A suite of regulatory options is available to ensure additionality in renewable energy.

A starting point is good on-site energy efficiency and flexible demand. This extends to co-location of firmed renewable energy where practicable.

Some data centre types can shift workload by delaying non-urgent tasks to off-peak periods. Data centres can potentially utilise on-site batteries to provide grid services during peak demand.

Regulations should require demonstration of additional renewable energy via pre-financial power purchasing agreements (PPAs) and/or purchase of Renewable Electricity Guarantee of Origin certificates which allow businesses to effectively offset their electricity use with renewable generation on an annual basis. The latter allows for time and location tracking to ensure that electricity consumption occurs when renewable energy is being generated, rather than data centre demand pushing up reliance on the grid during periods of peak demand or low renewable generation.

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Whilst industry claims that 70% of data centre energy consumption is offset currently via PPAs or Large-scale Generation certificates (Data Centres Australia 2026), this includes post-financial close projects where arguably, the data centre customer load has shifted demand from other users without increasing the overall generation capacity of the grid. Genuine additionality is needed.

Data centres could help get new renewable energy – especially wind - capacity to financial close via PPAs, supported by LTESA/CIS underwriting as needed. Their consistent daytime load could help address renewable energy generation that would otherwise be curtailed.

Fund energy and water infrastructure upgrades

The suggestion in the consultation paper to require data centres to recover costs of network upgrades is supported. The same is needed for water infrastructure upgrades. This should apply to all new large loads not just data centres.

Principle 3 – Sustainable energy and water use and environmental impacts

The NSW Treasurer has put on record that due to high demand for data centres, we are "capable of applying really high standards here when it comes to power use, water use and other associated impacts".

Data centres should be powered by renewable energy not by fossil fuels

Data centres should be prevented from building off-grid fossil fuel power. It is unacceptable that Cloud Carrier has proposed to power its incoming data centres in Moss Vale using an attached gas-fired power station.

Co-located batteries should be prioritised over diesel backup generators for climate change, air pollution and fuel security reasons. It is noted that backup generators must be tested multiple times over the course of the year.

Water used by data centres must be in closed-loop systems and alternative cooling technology should be used to avoid the consumption of potable water.

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Sydney Water reports that rising demand for potable water from data centres was a factor in the pricing regulator's choice to increase water bills by $168 a year in 2025. Moreover, Sydney Water has projected that data centres could be consuming roughly a quarter of the city's available water by 2035.

A 2025 report by the Water Services Association of Australia recommends the introduction of transparent reporting of water consumption, minimum efficiency standards (including expansion of NABERS to water), and use of recycled water for data centres.

The examples below from Water Services Association of Australia demonstrate options for improved regulation of water impacts by data centres.

- In Santa Clara, California there are 31 data centres which rely on recycled water.
- In the Netherlands, the company PWM ruled that potable water will not be used in their data centres unless necessary.
- In Australia, some data centre operators, such as CDC, are achieving world-leading water utilisation rates.

WUE and PUE thresholds should be imposed

Whilst water and power conservation is in the business interests of data centres, there is a need to standardise and promote public confidence in the sector via enforceable water use efficiency (WUE) and power use efficiency (PUE) thresholds and 5-star energy ratings for facilities.

Principle 4 – Transparent and reliable data to inform regulatory settings

There are significant differences in industry and regulator projections of energy and water use demands of data centres. A nationally consistent framework is needed to inform planning for energy and water systems statewide. Therefore, data centres should be required to report on renewable energy procurement, electricity and water use, backup generation and any associated emissions.

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Principle 5 – Accounting for differences in size and location of data centres, and community needs, in policy settings

Siting of data centres

It is critical that all data centres, regardless of size or location, meet all 8 public interest principles outlined above.

A statewide planning approach is needed to ensure that data centres are sited away from high biodiversity areas and proximate to transmission lines where possible (given grid congestion concerns), and that the cumulative impacts of development are anticipated. Drought prone regions should be off limits unless data centres can prove 100% recycled water use.

There has been some discussion of siting data centres in renewable energy zones, where latency requirements allow. Siting data centres near renewable energy zones (REZs) could help reduce network augmentation costs, ease transmission constraints, support regional development, and unlock additional network capacity.

However, it is critical that communities are consulted to ensure confidence that benefits in the form of jobs and investment will flow to regions and impacts be minimised. There is already concern in some REZs with impacts from renewable energy infrastructure, as detailed in the parliamentary inquiry into impacts of renewable energy zones on rural and regional communities and industries. Care should be taken to ensure social licence issues associated with renewable energy zones are not compounded by resource, environmental and housing price impacts from data centre growth in the regions.

At minimum, data centres should meet or exceed requirements of NSW benefit sharing guidelines for renewable energy projects.

Thank you for the opportunity to make a submission. Your contact person at Nature Conservation Council of NSW is Senior Climate and Energy Campaigner, Jacqui Mills.

Yours sincerely,

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