



## Climate Council of Australia

Submission to:                      Getting it right: Building AI infrastructure that works  
for Australia: Consultation paper - September 2026

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9 October 2026

## *About the Climate Council*

The Climate Council is Australia's own independent, evidence-based organisation on climate science, impacts and solutions.

We connect decision-makers, the public and the media to catalyse action at scale, elevate climate stories in the news and shape the conversation on climate consequences and action, at home and abroad.

We advocate for climate policies and solutions that can rapidly drive down emissions, based on the most up-to-date climate science and information.

We do this in partnership with our incredible community: thousands of generous, passionate supporters and donors, who have backed us every step of the way since they crowd-funded our beginning as a non-profit organisation in 2013.

Importantly, our work on data centres considers the intersection of the industry's growth with Australia's shift to renewables, climate targets, and water resources. The responsibility to address these issues lies with both data centre operators, and the customers – including global technology and AI companies – that lease these spaces, and are driving the surging demand for new data centre infrastructure. We acknowledge the range of additional environmental, social, ethical, economic and workforce concerns relating to data centres and AI, and the importance of taking action to address them alongside managing the climate and energy impacts of data centre infrastructure.

To find out more about the Climate Council's work, visit [www.climatecouncil.org.au](http://www.climatecouncil.org.au).

## Summary of recommendations

- 1** APPLY MANDATORY ENERGY, WATER AND REPORTING STANDARDS FROM 30 MW OF TOTAL ENERGY DEMAND, WITH PORTFOLIO AGGREGATION AND ANTI-AVOIDANCE RULES
- 2** APPLY THE RENEWABLE OBLIGATION TO DATA CENTRES 30MW+ THAT COMMENCE OPERATIONS AFTER 23 MARCH 2026, AND PHASE IT IN FOR EXISTING DATA CENTRES
- 3** NEW RENEWABLE SUPPLY SHOULD BE BUILT WITHIN THREE YEARS OF A DATA CENTRE COMMENCING OPERATIONS
- 4** THE RENEWABLE OBLIGATION MUST BE UNDERPINNED BY A REQUIREMENT TO ENTER INTO LONG-TERM CONTRACTS WITH RENEWABLES PRE-FINAL INVESTMENT DECISION
- 5** INCLUDE AUSTRALIA'S CLIMATE TARGETS AS AN ASSESSMENT CRITERION FOR ANY MODIFICATIONS TO THE RENEWABLE ELECTRICITY OBLIGATION
- 6** RULE OUT OFF-GRID FOSSIL FUEL GENERATION AS A PRIMARY POWER SOURCE AT ANY TIME – INCLUDING WHILE NEW RENEWABLES ARE BEING BUILT
- 7** CONSIDER MECHANISMS TO UNLOCK THE INDUSTRY'S POTENTIAL TO ACCELERATE AUSTRALIA'S RENEWABLE ROLLOUT BY ACTING AS ANCHOR OFFTAKERS IN LARGE RENEWABLE PROJECTS
- 8** ESTABLISH A NATIONAL FRAMEWORK FOR PUBLIC REPORTING ON DATA CENTRE ENERGY DEMAND, WATER USE AND CLIMATE POLLUTION
- 9** MAKE BEST-PRACTICE ENERGY EFFICIENCY THE STANDARD FOR ALL DATA CENTRES
- 10** PLACE STRONG LIMITS ON USE OF WATER THAT ACCOUNT FOR THE CHANGING CLIMATE, ACCOMPANIED BY BEST-PRACTICE WATER EFFICIENCY RATINGS AND REPORTING
- 11** ENSURE DATA CENTRES PAY FOR THE ENERGY AND WATER INFRASTRUCTURE THEY NEED TO PROTECT HOUSEHOLDS FROM RISING BILLS
- 12** PHASE OUT FUEL TAX CREDITS FOR THE INDUSTRY TO INCENTIVISE FLEXIBLE DEMAND BACKED BY RENEWABLE SOLUTIONS
- 13** REQUIRE MEANINGFUL COMMUNITY AND FIRST NATIONS ENGAGEMENT AND BENEFIT SHARING
- 14** WORK WITH STATES, TERRITORIES AND OTHER STAKEHOLDERS TO ENCOURAGE BEST-PRACTICE REGIONAL DATA CENTRES THAT DELIVER LASTING COMMUNITY BENEFITS
- 15** REQUIRE DATA CENTRES TO CONTRIBUTE TO THE ELECTRICAL WORKFORCE THROUGH AN APPRENTICE QUOTA AND A TRAINING LEVY

# Introduction

Australia is rapidly shifting from fossil fuels to renewable energy to cut climate pollution, strengthen energy security, put downward pressure on power bills and keep communities safer from worsening fires, floods and extreme heat. Climate-fuelled disasters across the country are already more frequent and intense, and communities are living with the consequences. The 2025/26 summer saw Victorian communities flung from catastrophic fire warnings to flash flooding within a week and back to extreme heat ten days later, western Queensland receiving its average annual rainfall in five weeks, and Western Australia's Eyre Highway closed by fire and then by floodwater within two days ([Climate Council 2026a](#)). In NSW, climate change is estimated to have reduced income per capita by more than \$20,000, or approximately \$180 billion in total in 2024 alone ([NSW Net Zero Commission 2026](#)).

In September 2026, the United Nations Environment Programme (UNEP) released a landmark report confirming that exceeding heating of 1.5°C above pre-industrial levels is now unavoidable ([UNEP 2026](#)). With every fraction of a degree above 1.5°C, the risk of triggering irreversible tipping points – including the destabilisation of major ice sheets, the degradation of the Amazon rainforest, and disruption to the ocean currents that help regulate our climate – grows sharply. UNEP is clear that the only way to minimise how high temperatures peak, and bring them back down as quickly as possible, is to rapidly and deeply slash climate pollution.

Australia is making strong progress, with renewables and storage now supplying more than 45% of electricity in the National Electricity Market (NEM) – nearly double their share six years ago ([Open Electricity 2026](#)). Australian households are leading the charge, with solar on more than 4.5 million homes, and more than 500,000 home batteries installed in just over a year ([Clean Energy Regulator 2026a](#)).

But right now, the Australian Government's own projections show that the data centre industry – and its customers, including international AI and technology companies – are putting this progress at risk. Much of the emissions reduction expected this decade depends on rapid decarbonisation of the electricity sector. However, beyond 2030, the latest projections show slower progress in cutting electricity sector pollution than previously expected. The projections explicitly note the role of data centres in slowing the shift: without intervention, their increasing electricity demand will be met by a mix of coal, gas and renewables, rather than renewables alone ([Department of Climate Change, Energy, the Environment and Water \(DCCEEW\) 2025](#)). These impacts are avoidable if we put the policies in place to ensure data centres are powered by additional renewable and storage ([Baringa and Clean Energy Finance Corporation \(CEFC\) 2025](#)).

Water demand from the data centre industry is also surging. Data centres can require significant volumes of water, with industry estimates suggesting demand will at least triple

by 2030 ([Mandala and Data Centres Australia 2025](#)). As climate change intensifies drought and water stress across Australia, unchecked growth could place increasing pressure on already constrained water resources.

## WHAT'S AT STAKE FOR AUSTRALIA

**225** New data centres in the pipeline in our main grid, more than double the amount just a year ago ([AEMO 2026](#)).

**7x** Forecast increase in energy demand over the next decade, from ~3% of demand (5 TWh) to 13% (34 TWh) in 2035-36 ([AEMO 2026](#)).

**7x** Estimated increase in water demand over the next decade, reaching 47 billion litres in 2035-36 – or 18,800 Olympic swimming pools.<sup>1</sup>

**+20%** Increase in wholesale price on average in the NEM by 2035, compared to the baseline, without additional renewables and storage to match data centre demand ([Baringa and CEFC 2025](#)).<sup>2</sup>

**+14%** Additional climate pollution from our main grid in 2035 without intervention ([Baringa and CEFC 2025](#)).<sup>2</sup>

## THE ALBANESE GOVERNMENT MUST NOT LET THIS ONCE-IN-A- GENERATION OPPORTUNITY GO TO WASTE

Enforceable rules can ensure the data boom supports a reliable, clean grid that secures Australia's future. The Climate Council welcomes the Albanese Government's commitment to introduce mandatory standards for AI and data centres. Data centre operators and their customers have significant financial capacity, and many are already taking steps to source renewable energy and increase water and energy efficiency. They are well-placed to meet strong regulatory requirements.

However, a lack of detail on how significant climate pollution will be prevented remains a missing piece in the Australian Government's commitments. The need to align the industry's growth with climate targets is not mentioned in the [consultation paper](#); the start

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<sup>1</sup> Climate Council estimates based on assumptions in Mandala and Data Centres Australia's report [Data Centres as Enabling Infrastructure](#). This applies Mandala's calculated average WUE for Australian data centres of 1.8 and average PUE of 1.3 to AEMO's forecast energy consumption of 34 TWh in 2035-36. This assumes there is no improvement in data centre water efficiency between now and 2035-36.

<sup>2</sup> Modelling of price and pollution impacts by [Baringa and the CEFC](#) was undertaken in 2025, using the latest figures available at the time including AEMO's 2024 Electricity Statement of Opportunities (ESOO). AEMO's 2026 ESOO forecasts significantly greater data centre demand. The impacts of unmatched demand are therefore likely to be larger than the modelling shows.

date and approach to the application of the standards is not confirmed; there is no clear definition of what counts as "new" renewables; and off-grid gas is not explicitly ruled out as a primary power source.

The Government must close these gaps before the standards are introduced into Parliament. The vast majority of Australians (82%) agree that data centres should be required to invest in additional renewable energy and storage to match their own electricity, and seven in ten support strict energy and water standards for new facilities ([YouGov/Climate Council 2026](#)).

In under two weeks, 10,000 Australians and counting have signed our [open letter](#) calling on the Albanese Government to ensure the new rules align with our climate laws and targets by:

- Making sure that every new data centre and its customers match no less than 100% of their energy use with genuinely new renewable power and storage.
- Ensuring new renewable generation and storage is built within three years – not a long or unlimited window – with penalties for non-compliance. NSW already requires data centres to match their demand with new renewables within four years to be eligible for fast-tracked planning assessment.
- Closing the door on off-grid gas as a primary power source for data centres – including while they set up new renewable energy sources.
- Requiring data centres to adopt best-practice water and energy efficiency measures, and avoid drawing on drinking water supplies – like the Victorian Government's data centre rules which will require data centres to use recycled or non-drinking water for cooling.
- Ensuring the rules apply to all data centres, everywhere in Australia – including facilities already in the pipeline.

**Choices made now will determine if the data centre industry – and its global tech customers – act as partners in Australia's climate goals, or become a reason they're derailed.**

# 1. Thresholds for application of the standards

Over recent years, large hyperscale data centres have rapidly begun emerging across the country – and they are growing in size. While new large data centres pose unique risks to our grid and climate, the cumulative impacts of smaller proposals should not be ignored.

*Is a single threshold such as an energy capacity (MW) sufficient to identify the data centres that should be subject to the AI standards? If not, what additional thresholds (for example water use, compute [FLOPS], or electricity consumption [MWh]) should be considered?*

The consultation paper considers thresholds based on a facility's "ultimate electricity network connection capacity" ([p 7](#)). A threshold based on grid connection alone would let a growing category of projects escape regulation, with significant consequences for our climate. Several of the largest data centres now proposed in Australia are designed to run partly or wholly on dedicated off-grid gas-fired generation, including:

- **Energy North's Project Ares Integrated Hyperscale Data Centre Campus (NT):** a proposed 1 GW campus designed to operate entirely off-grid, combining solar, a battery and gas-fired generation. Even after assuming its proposed solar and battery plans are fully up and running, analysis shows Project Ares would still require around 76 terajoules (TJ) of gas per day if running at 80% capacity. This is more gas than the entire Territory and all its citizens and other businesses use on average (66 TJ a day) ([Climate Council 2026b](#))
- **Beetaloo Digital Data Centre Development (NT):** would be powered by up to 2 GW of dedicated on-site gas-fired generation. Beetaloo Energy admits the proposal is intended to drum up domestic demand for gas to accelerate the development of its plan to extract gas from the Beetaloo Basin ([Beetaloo Energy 2026](#)).
- **Cloud Carrier Southern Highlands Data Campus, Moss Vale (NSW):** is proposing a dedicated new 673 MW gas-fired power station that would add an estimated two million tonnes, or more, of climate pollution in NSW every year – equivalent to the annual climate pollution of more than 800,000 cars ([Climate Council 2026c](#)).

The threshold should therefore be based on total energy demand, including any on-site or behind-the-meter generation, so that off-grid and hybrid facilities face the same obligations as grid-connected facilities of equivalent scale. Failing to apply data centre energy policy uniformly across on and off grid projects will only incentivise data centre investment to use the most polluting sources of energy, undermining Australia's climate targets and significantly impacting the degree of dangerous warming Australians can expect to experience.

*Does a tiered approach sufficiently capture different types of facilities and ensure proportionate obligations relating to Australia's energy transition, water management, and communities?*

Mandatory requirements to bring forward new renewables, avoid using drinking water, and report on energy, emissions and water use must apply to every data centre with a total energy demand of 30 MW or more. A threshold of 100 MW for these requirements is too high and would leave Australia open to significant risks. Ireland's renewable energy requirements for data centres apply to all facilities over 10 Megavolt-Ampere (MVA) – approximately 10 MW ([Ireland Commission for Regulation of Utilities 2025](#)). NSW treats any data centre with total power consumption above 15 MW as State Significant Development ([NSW Government 2023](#)).

It may be appropriate to consider scaling of obligations within the covered group of facilities, for example by applying stricter peak-period matching to the largest loads, as the paper suggests.

Data centres are often developed as staged campuses or are expanded following their construction. For example, AirTrunk's Mamre Road data centre intends to bring buildings online in six phases from 2028 to 2036 ([E-Lab Consulting 2025](#)). Thresholds should apply to total planned and approved capacity across all stages, and to any expansion of an existing facility, so that later stages are covered from the outset and capacity cannot be split to stay under the limit.

In addition, clusters of facilities are often built in the same or nearby precincts. Assessed individually, each may sit below a given threshold, while the combined demand on water, energy and grid infrastructure is substantial. Western Sydney councils have called for cumulative impacts to be assessed at a precinct level ([Western Sydney Regional Organisation of Councils Ltd 2026](#)).

Anti-avoidance provisions are also critical to prevent developers from defining proposals in ways that avoid the thresholds, for example by splitting a campus into stages or separate entities.

**RECOMMENDATION 1: APPLY MANDATORY ENERGY, WATER AND REPORTING STANDARDS FROM 30 MW OF TOTAL ENERGY DEMAND, WITH PORTFOLIO AGGREGATION AND ANTI-AVOIDANCE RULES**

Mandatory requirements to bring forward new renewables, avoid using drinking water, and report on energy, emissions and water use must apply to every data centre with total energy demand of 30 MW or more. The threshold must be based on total energy demand, rather than grid connection capacity, to ensure off-grid fossil fuel generation does not escape regulation. Total energy demand, water use and emissions cumulatively across company portfolios and staged developments should be assessed, with strong anti-avoidance provisions.

## 2. Approach to the application of the AI standards

There are around 165 data centres already operating in Australia, accounting for 3% of total demand in Australia's main grid, the National Electricity Market (NEM) ([AEMO 2026](#)). Hyperscale facilities have rapidly begun emerging across the country in recent years, many of which are already operating or significantly progressed through the approvals and development process. For example, Australia's first hyperscale data centre and one of the largest data centres in Australia today, [AirTrunk's SYDI](#), opened in 2017 and has a capacity of 130 MW. Last year, the NSW Government approved the development of what was at the time set to be the southern hemisphere's largest data centre – the [504 MW Marsden Park Data Centre](#). The Western Downs Digital Park in Queensland could be six times the size: up to 3.24 GW total energy demand ([HDR 2026](#)).

There are at least 225 new data centre proposals in the connections pipeline in the NEM. AEMO's most recent forecasts show data centre energy consumption in the NEM rising to around 13% by 2035-36 ([AEMO 2026](#)) – bringing significant risks for our grid, power prices and climate.

The Government's [consultation paper](#) acknowledges that several large data centre projects now moving through approvals may be operational before the AI standards are introduced. Because so many large facilities are already operating or well advanced through approvals, standards that apply only to future projects would miss much of the demand that will drive prices and pollution over the next decade. Facilities that come online well after the Government clearly stated its intention for data centres to bring on new renewables, could slip through the cracks. There is also a significant risk of a rush to secure development and grid connection approvals, or lodge new applications, before the rules take effect.

Given the unique risks the data centre industry poses to Australia's renewable and climate targets, communities and power bills, the renewable obligation should be phased in for every data centre in Australia of 30 MW or more, from a reference date set now, with a fair, time-limited transition for existing facilities and contracts.

Applying mandatory energy requirements to both new and existing facilities would ensure an even playing field for new and existing facilities, and would prevent a rush to submit applications or obtain development and grid connection approval before the standards come into force. Data centre operators and their customers have significant financial capacity, and many are already taking steps to source renewable energy and increase water and energy efficiency ([Mandala and Data Centres Australia 2025](#)). A threshold-based obligation covering both existing and new facilities, with a transition that respects existing contracts, is therefore proportionate to the scale and urgency of the risks the industry poses.

*At what point in development processes should mandatory requirements apply for large data centres?*

Any data centre that comes online after 23 March 2026 should be required to demonstrate to the Clean Energy Regulator (CER) that it has contracted with new renewable generation and storage before it can commence operations.

*Should there be a transition period for data centre proponents to meet their obligations, for example submitting a plan within a certain timeframe after commencing operations? If so, at what point in the development cycle should this occur?*

Any data centre that is due to come online after the obligation commences (23 March 2026) must be able to demonstrate that it has contracted with new renewable generation and storage before it may commence operations. It should then be required to demonstrate that the new supply has been built within three years from the commencement of operations. After three years, if the new supply is not online, a facility should be subject to material financial penalties sufficient to incentivise compliance, unless it can demonstrate that the delays are entirely outside of its control.

The obligation should also be phased in for existing data centres with total energy demand above 30 MW. The obligation should start when their current power agreements end or are renewed. From that point, they must contract with new capacity that is built within three years.

We recognise that some operators will have entered into power agreements between the 23 March 2026 and commencement of the legislation, and that the standards may affect those arrangements. All agreements entered into, extended or varied after the reference date should be disclosed to the CER, which would assess whether transitional arrangements are warranted, for example where an operator can show the agreement was substantially negotiated before the reference date, or where unwinding it would cause disproportionate hardship. Any transitional relief should be time-limited, so it supports a fair transition without creating a new pathway around the standards.

**RECOMMENDATION 2: APPLY THE RENEWABLE OBLIGATION TO DATA CENTRES 30MW+ THAT COMMENCE OPERATIONS AFTER 23 MARCH 2026, AND PHASE IT IN FOR EXISTING DATA CENTRES**

The renewable obligation should be phased in for every data centre with a total energy demand of 30 MW or greater – both new and existing – and its customers. This would include transitional provisions that give facilities a time-limited grace period, depending on when they began operating:

- Any facility that commences operations after 23 March 2026 must contract new renewable generation and storage immediately, and have new capacity operating within three years of starting operations.
- Reasonable transitional arrangements for data centres entering into power agreements before the commencement of the legislation should be considered.
- Existing facilities should transition when their current power agreements end, following the same three-year path.

Further detail on the renewable obligation is set out in section 3 of our submission.

*How should governments anticipate and respond to large data centre energy loads which may become operational faster than additional energy generation can be completed to offset their demand?*

A three year window to match demand with new renewable generation would sufficiently account for renewable development timeframes: on average since 2017, solar projects have taken 21 months to reach commissioning following FID, while wind projects take 30 months and batteries take 24 months ([Clean Energy Council 2026](#)).

The amount of new renewable capacity required would increase over time to align with actual data centre demand, reflecting data centre ramp-up periods. For example, if a data centre only operates at 25% of its full capacity in its first year, it would only need to match this amount with new renewables, rather than its full approved capacity.

The Government should also explore and implement policies that expedite the delivery of new renewable projects, for example by supporting renewable projects to take FID earlier (including through the provision of finance), through policies to alleviate supply chain and labour force pressures and by achieving faster approvals, including by giving renewable projects priority access to the Government's investor Front Door.

*Following the passage of the proposed legislation, when should compliance start? For example, immediately, or staggered for different requirements, recognising practical constraints around planning and approvals, and to ensure regulation is proportionate. How should certainty for, and impacts on, the Australian community be balanced with these considerations?*

Compliance should start immediately and apply to all facilities that come online after 23 March 2026, with transitional provisions that give facilities a time-limited grace period, depending on when they began operating.

Operators and customers have been on notice since 23 March 2026, when the Government's [Expectations of data centres and AI infrastructure developers](#) stated that new data centres should secure new and additional clean energy and/or storage to offset their demand. This commitment has been consistently reaffirmed in the months since. The Prime Minister's

*AI in Australia's interests* address on 15 July 2026 announced the intention to legislate national standards including energy obligations ([Albanese 2026](#)), the Energy and Climate Change Ministerial Council (ECMC) Meeting Communique on 28 July 2026 confirmed further details of this commitment ([ECMC 2026](#)), followed by Minister Bowen's Press Club Address on 5 August 2026 ([Bowen 2026](#)). Minister Bowen confirmed there would be no carve-outs from the renewable obligation on 28 August 2026 ([Hannam 2026](#)).

The application of the obligation from the reference date should be reflected in the legislation to provide certainty and clarity to industry.

### 3. Make a positive contribution to Australia's energy transition

#### **SUPPORTING INVESTMENT IN NEW RENEWABLE ENERGY THROUGH A RENEWABLE ELECTRICITY OBLIGATION**

If surging data centre energy demand is not met with an equivalent increase in additional clean energy, Australia faces a critical setback in our shift to renewables. We may need to rely on coal for longer, and increase gas generation. This would not only drive up climate pollution, but also undermine energy affordability and reliability for homes and businesses.

The large-scale renewable energy currently being built in Australia is primarily intended to replace retiring coal generators and meet increasing demand as our economy electrifies and population grows. If data centres consume this new renewable energy supply, this will reduce the amount available for our homes, transport systems and industry. This would delay the retirement of our ageing and unreliable coal stations, and increase reliance on harmful polluting gas – putting not only our climate targets at risk, but also our energy reliability and affordability. Our polluting old coal power stations are driving outage risk and electricity price spikes, while expensive and volatile gas prices are the main reason electricity prices are so high ([Climate Council 2026d](#)). Prolonged reliance on coal and gas due to data centres would also supercharge climate extremes and their impacts on Australian communities and business.

While the risks to our grid may emerge from poorly managed growth, some in the industry are going further – actively advocating for new gas generation to power data centres, threatening to lock in fossil fuel dependence for decades. Proposals like Project Ares, Beetaloo Digital and Cloud Carrier's Moss Vale Campus, discussed in section 1, demonstrate what is at stake.

We welcome the Government's commitment to ensure large data centres bring forward new renewable generation to fully offset their energy demand. However, several critical design questions remain; and how they are resolved will decide whether the standards deliver on the Government's promise to avoid additional climate pollution and higher power prices.

### *How could obligations be phased in to account for the time needed to build data centres and new renewable projects?*

Climate Council proposes that a data centre must demonstrate to the Clean Energy Regulator (CER) that it has contracted with new (pre-FID) renewable capacity before it can commence operations. It must then demonstrate that this supply has been built within three years of the data centre starting operations. There must be material financial penalties for non-compliance after this time, unless a data centre can demonstrate the delays are wholly outside its control. The CER must be adequately resourced to perform these additional responsibilities to the high standard the community rightly expects.

On average since 2017, solar projects have taken 21 months to reach commissioning following FID, while wind projects take 30 months and batteries take 24 months ([Clean Energy Council 2026](#)). Noting data centre operators and customers have the opportunity to lock in power deals before construction commences, the proposed three year window to match demand following the commencement of operations suitably accounts for the time needed for a renewable project to complete construction. Following extensive consultation on its data centres framework, NSW has allowed a window of four years for a data centre to match its annual average energy demand with new renewable supply in order to be eligible for fast-tracked assessment ([NSW Government 2026](#)).

The amount of new renewable capacity required would increase over time to align with actual data centre demand, reflecting data centre ramp-up periods. For example, if a data centre only operates at 25% of its full capacity in its first year, it would only need to match this amount with new renewables for that year, rather than its full approved capacity.

We note the consultation paper considers the use of Large-scale Generation Certificates (LGCs) or Renewable Electricity Guarantee of Origin (REGO) certificates from existing renewable capacity as an interim measure. The Government should consider alternative interim measures that would better support climate and energy targets. There is a significant oversupply of LGCs and their prices are extremely low. Given this, and the changing energy policy landscape, LGCs are no longer a key driver of renewable investment ([Clean Energy Regulator 2026b](#)). Similarly, while REGOs could be a mechanism to ensure data centre energy demand is matched around the clock with renewable energy, they alone do not ensure new capacity is built.

If REGOs are to be used as an interim measure, this could be limited to REGOs from recently built renewable projects. Green Energy Markets' analysis indicates that already operational and committed projects energised from January 2026 onwards will produce sufficient renewable certificates to cover incremental additional data centre electricity demand to at least 2030 ([Upson and Edis 2026](#)). However, as a more effective incentive for the timely delivery of new renewable supply, Green Energy Markets recommends that data centres should be required to make-up for any shortfall before new supply is built, by surrendering additional REGOs from new projects once they are built. This would mirror the approach

under the Large-scale Renewable Energy Target (LRET) scheme which allows electricity retailers to recover shortfall penalties within a three year grace period ([Upson and Edis 2026](#)).

### **RECOMMENDATION 3: NEW RENEWABLE SUPPLY SHOULD BE BUILT WITHIN THREE YEARS OF A DATA CENTRE COMMENCING OPERATIONS**

The new generation supported by a data centre should be built within three years of starting operations. Mechanisms should incentivise the capacity to be built as quickly as possible, with material financial penalties for non-compliance at the end of the three-year window. A data centre should be required to match its actual energy use with new renewable generation, meaning the volume of new renewable electricity procured should increase over time in line with actual data centre demand.

#### *How should 'new' renewable capacity be defined in relation to data centre investments?*

The definition of "new" is critical to protecting Australians from rising climate pollution and power bills. The standards must ensure new data centre energy demand is met with generation that would not have been built anyway to supply other parts of the economy. To achieve this, "new" should be defined as generation and storage that has not reached final investment decision (FID) before the agreement is finalised. This aligns with NSW's Data Centre Guidelines which require data centres to enter into PPAs and firming agreements with renewable projects that have not reached FID at the time of contracting ([NSW Government 2026](#)).

Projects that have been awarded government underwriting (including through Capacity Investment Scheme (CIS) or NSW's Long-Term Energy Service Agreements (LTESA)) should not be treated as "new". This renewable supply is needed to replace retiring coal generators and meet increasing demand as our economy electrifies and population grows. If data centres consume it, this will reduce the amount available for our homes, transport systems and industry. It would also result in taxpayers indirectly funding data centres.

Climate Council stresses that relying on REGOs alone is not sufficient to ensure new capacity is built. The majority of renewable energy projects require a long-term PPA to secure the financial certainty required to reach FID ([Upson and Edis 2026](#)). Long-term PPAs with new projects (and/or on-site renewable generation) should therefore underpin the renewable obligation for data centres, with ongoing compliance through the surrender of REGOs from new projects for every MWh a data centre consumes. Like NSW's requirements, agreements should have a duration of at least ten years.

In Australia, there is little transparency around PPAs, with the terms of the agreements often remaining confidential between the operators, developers and their advisers. A number of data centre operators and customers voluntarily disclose their power

agreements, for example earlier this year Amazon announced it had signed nine new PPAs including one wind farm, three utility-scale solar and battery hybrids, four distributed solar-battery projects, and a new battery installation at the previously announced Mokoan Solar Farm ([Amazon 2026](#)).

Strengthening transparency around PPAs will be critical for tracking whether they are genuinely driving additional renewable capacity, while enhancing accountability and supporting informed policy design into the future.

#### **RECOMMENDATION 4: THE RENEWABLE OBLIGATION MUST BE UNDERPINNED BY A REQUIREMENT TO ENTER INTO LONG-TERM CONTRACTS WITH RENEWABLES PRE-FINAL INVESTMENT DECISION (FID)**

Data centres and their customers with total energy demand of 30 MW or greater must be required to enter into long-term contracts, such as power purchase agreements (PPAs), with pre-FID renewable generation projects before they can commence operations. Ongoing compliance should be demonstrated through the surrender of time-matched Renewable Electricity Guarantee of Origin (REGO) certificates from new projects for every MWh consumed. The Clean Energy Regulator should be responsible for compliance.

*At what capacity threshold should an obligation to retire or surrender renewable energy certificates apply?*

The renewable obligation should apply to all facilities with 30 MW or more of total energy demand, aggregated across portfolios, staged developments and co-located facilities (see Recommendation 1).

*Should the information on REGO certificates be used to time-match electricity use in certain periods? If so, what should these periods be?*

Yes. Time-matching will ensure that electricity use aligns with where and when renewable energy is actually being generated or discharged, reducing the risk that data centre demand increases reliance on fossil fuels during periods of peak demand or low renewable output.

*Are there any complexities in how data centres could acquire certificates to meet a renewable electricity obligation?*

In Australia, data centre operators are responsible for building and managing physical infrastructure, but often have tenants – increasingly global tech and AI companies – who drive the IT load that accounts for the majority of electricity consumption. As a result, PPAs are typically joint arrangements involving both operators and customers. Other important operational factors – including the ability to shift or flex demand in response to grid

conditions – are similarly shaped largely by customer needs and workloads ([Data Centres Australia 2026b](#)).

The separation between operator and customer creates complexities in the application of energy and sustainability obligations – but these are far from insurmountable. Other countries that have adopted energy and sustainability requirements for data centres, such as Ireland and Germany, place responsibility primarily on the operators. Under NSW's Data Centre Guidelines, renewable commitments of co-location data centre operators can be demonstrated through a combination of operator and/or major tenant agreements ([NSW Government 2026](#)).

Operators could be required to disclose their tenants, where relevant, to governments and utilities as part of planning and grid connection processes, provide information on how both parties will meet requirements, and pass on any obligations to customers as part of their tenant agreements.

In addition, the ability – and willingness – of many data centre operators and their customers to enter into large, long-term PPAs offers a significant advantage to clean energy investment. Mechanisms to require renewable energy and storage procurement should be carefully designed to ensure that there are no unintended consequences that could undermine this ability. For example, a state-based portfolio approach to demand-matching may be appropriate, particularly for smaller facilities. Under NSW's Data Centre Guidelines, agreements can be entered into on a portfolio basis or contracted to specific data centres, provided the data centre demand is met ([NSW Government 2026](#)).

*What incentives or obligations would encourage data centres to invest in on-site generation, batteries or other flexible demand measures, to minimise energy usage during peak pricing?*

Climate Council understands that, consistent with the Australian Energy Market Commission (AEMC)'s advice, requirements for data centres to have sufficient firming contracts to cover their load will be implemented through changes to the National Electricity Rules, and enforced by the Australian Energy Regulator ([AEMC 2026](#)). We look forward to the opportunity to comment on these rules when they are released for consultation.

Without adequate firming, data centre demand will widen the gap between renewable generation and load during peak periods, leaving Australian homes and businesses to foot the bill. Data centres must be required to contract with (or install) new firming capacity that is in the grid from day one of operations. Fortunately, there are many advanced battery storage projects around the country, and they are quicker to build than wind or solar farms ([Upson and Edis 2026](#); [AEMO 2026b](#)).

The definition of firming is also critical to protecting against large amounts of new polluting gas generation. As we're shifting to renewable energy and storage, fossil gas has a small and shrinking role to play in our energy mix. It should only be used to generate electricity on the rare occasions it is needed as back up. However, some facilities are planning to lock in significant amounts of new gas generation by claiming it would be limited to a firming role.

For example, the 1 GW [Project Ares](#) proposal is being marketed by Energy North as a "sustainable, renewable facility" because it might one day build some solar and a battery. In reality, the facility would be powered solely by gas in its initial years ([Energy North 2026](#)). In other words, gas won't just be Project Ares's backup or "firming": it will be its primary source of power initially, and could remain so indefinitely. Even after assuming its proposed solar and battery plans are fully up and running, assuming the data centre reaches an 80% utilisation rate, analysis shows Project Ares would still require around 76 terajoules (TJ) of gas per day. This is more gas than the entire Territory uses on average (66 TJ/day). This could release more than 1.4 million tonnes of climate pollution every year – more than one quarter of Australia's projected emissions overshoot in 2030 of 5 million tonnes ([Climate Council 2026b](#)).

The Australian Government must make sure Australia's data centres rules close the door to proposals like Project Ares that would lock in massive amounts of new polluting gas generation by claiming it would be limited to a firming role.

*Where electricity is being purchased from a state-owned operator, what should the AER consider when assessing whether to modify a data centre's renewable electricity obligation?*

First, Climate Council notes that it is extremely unlikely a data centre will be able to demonstrate that existing state-owned fossil generation is cheaper or better for the grid. Coal stations are ageing, increasingly unreliable and scheduled to retire, and expensive gas generation is a key driver of high prices. Renewables are the cheapest form of power, and developers know this: data centre operators already voluntarily secure 40% of their energy through renewable PPAs, because it makes commercial sense ([Mandala and Data Centres Australia 2025](#)).

In addition, the condition for allowing data centres to access existing state-owned generators as stated by the Government is that such an arrangement must be demonstrated to be better for all consumers (and the system as a whole) than the alternative of meeting data centre energy demand through new renewable generation. It seems extremely improbable, based on the simple laws of supply and demand, that using existing generation that would otherwise be supplied to the system as a whole will result in lower prices for all customers than matching the new demand with new supply, especially new supply from the lowest cost form of energy: firmed renewables. Any test for the use of state-owned

generators must remain a test of the impacts on the system as a whole and not on the cost of power to the data centre itself.

This aside, Climate Council recommends that Australia's climate targets are made a key consideration when assessing whether a data centre should be allowed to purchase electricity from a state-owned operator, together with benefits to grid stability and lower customer prices. This would align with the National Electricity Objective (NEO), which includes consideration of:

- a) price, quality, safety, reliability and security of supply of electricity; and
- b) the reliability, safety and security of the national electricity system; and
- c) the achievement of targets set by a participating jurisdiction –
  - i) for reducing Australia's greenhouse gas emissions; or
  - ii) that are likely to contribute to reducing Australia's greenhouse gas emissions.

If a data centre does obtain approval to purchase energy from a state-owned generator, this should not exempt it from contributing to Australia's climate and energy targets. It should still be required to surrender new project REGOs to match their electricity use.

### **RECOMMENDATION 5: INCLUDE AUSTRALIA'S CLIMATE TARGETS AS AN ASSESSMENT CRITERION FOR ANY MODIFICATIONS TO THE RENEWABLE ELECTRICITY OBLIGATION**

Consistent with the National Electricity Objective (NEO), greenhouse gas emissions should be a key consideration of the AER when assessing whether a data centre should be allowed to purchase electricity from a state-owned operator.

*What unintended consequences or implementation challenges should the government consider in designing a renewable electricity framework for data centres?*

#### **Safeguarding against off-grid fossil fuels**

Australia must learn from other jurisdictions and prevent reliance on fossil fuels to meet primary data centre demand at any time – including during any transitional period for matching data centre demand with new renewables. For example, Ireland has allowed a six-year 'glide path' for its renewable obligation – intended to account for the timelines of renewable project development in Ireland ([Ireland Commission for Regulation of Utilities 2025](#)). It effectively allows data centres to operate entirely on fossil fuels during their first six years of operation if they choose – which would make them significantly more emissions-intensive than using electricity from Ireland's ~40% renewable grid.

Environmental groups are currently challenging this policy in Ireland's high court ([Friends of the Irish Environment 2026](#)).

Rules must prevent data centre operators from building off-grid fossil fuel generation, which would be a material step backwards for Australia's shift to renewables.

### **RECOMMENDATION 6: RULE OUT OFF-GRID FOSSIL FUEL GENERATION AS A PRIMARY POWER SOURCE AT ANY TIME – INCLUDING WHILE NEW RENEWABLES ARE BEING BUILT**

Data centres must not be permitted to rely on off-grid or behind-the-meter fossil fuel generation as a primary power source at any time, including while new renewable supply is being built. Failure to ensure this would be a material step backwards for Australia's shift to renewables and climate targets.

#### **Unlocking the industry's potential to accelerate Australia's shift to renewables**

Matching data centre demand with new renewables will reduce the impacts on the grid, power prices and pollution. But given data centres' unique ability, as large energy users, to enter into long term agreements with renewable developers, they could and should play a positive role in the shift.

For example, the requirement to match at least 100% of demand with new renewables could be coupled with financing mechanisms that encourage data centres to act as anchor offtakers in large renewable projects that produce surplus energy to their demand, so that surplus renewable energy is made available to the wider economy.

The CEFC is reportedly already considering providing financing to data centres powered by renewable energy ([Burgess 2026](#)). It is important that any such financing plays a truly positive role in our shift to renewables. For example, the CEFC could provide concessional finance to renewable energy projects linked to large anchor offtakers including data centres (provided the data centre meets all other requirements under the National Standards and National Electricity Rules).

#### **Supporting new wind projects**

The NSW Government notes that as of February 2026, over half of the proposed projects in its planning system had committed to some form of PPA or other long-term renewable energy sourcing. However, PPAs largely skew towards solar projects, rather than wind or storage ([NSW Government 2026](#)). This matches a global trend: solar projects comprise 79% of data centre PPAs ([AirTrunk, Amazon Web Services, CDC Data Centres and NEXTDC 2025](#)).

Wind is an essential part of a reliable energy system, working alongside solar and storage to ensure power is available around the clock. The Australian Government should consider options to encourage investment in wind, for example through the concessional finance mechanisms discussed above.

## RECOMMENDATION 7: CONSIDER MECHANISMS TO UNLOCK THE INDUSTRY'S POTENTIAL TO ACCELERATE AUSTRALIA'S RENEWABLE ROLLOUT BY ACTING AS ANCHOR OFFTAKERS IN LARGE RENEWABLE PROJECTS

The Australian Government should consider mechanisms, such as concessional finance, to encourage data centres to act as anchor offtakers in large renewable projects – particularly wind projects – so that surplus renewable energy is made available to the wider economy. Any such mechanism must complement, not replace, mandatory obligations.

## ENERGY EFFICIENCY

Proven technologies already exist to significantly reduce data centre energy consumption, and many operators are already adopting them to some degree. Data centres in Australia are already more energy efficient than the global average, with power usage effectiveness (PUE) as low as 1.07 and a median PUE of 1.30 ([Mandala and Data Centres Australia 2025](#)). There is a commercial imperative for operators and their customers to reduce energy demand, and in turn, costs. Making efficient data centres the standard would build on this momentum and reduce strain on the energy system.

*What performance metrics or ratings would reflect an appropriate standard for energy usage and efficiency in data centres? Examples could include:*

- *A design PUE rating of <1.25 for data centres using potable water and <1.34 for data centres using non-potable water or recycled water*
- *Minimum NABERS data centre rating once operational (e.g. 5-star = 1.34 operational PUE).*

Climate Council supports the proposed PUE rating of less than 1.34 for data centres using non-potable or recycled water. This should be reviewed regularly and progressively tightened as technology and international practice improve.

We note that there can be trade-offs between energy and water efficiency. However, all new data centres should prioritise use of non-potable or recycled water, so a stronger PUE rating for data centres that use potable water should only be in place in instances where a data centre can credibly demonstrate this is not possible.

*Should the Commonwealth establish national baseline energy and water efficiency metrics for data centres? What might be the benefits and/or unintended consequences of this approach?*

Yes. Consistent, reliable and transparent information on the magnitude of both current and future demand is a critical foundation for effectively planning for and reducing impacts.

National baseline metrics would also give industry certainty, create a level playing field and build public confidence that energy and water are being used responsibly.

The European Commission is already developing a common rating scheme for data centres aimed at increasing transparency on their energy use and supporting their sustainable integration into Europe's energy system ([European Commission 2026](#)).

In Australia, while the largest data centre operators are required to report on their energy use and climate pollution through the National Greenhouse and Energy Reporting Scheme, operators below the reporting threshold are not captured, there is very little transparency of customer energy and water use and emissions, and information on water use remains a gap.

Energy use, efficiency and emissions should be reported annually, and publicly, in a nationally consistent format, including – but not limited to: electricity use, electricity source, PUE, backup generator use, greenhouse gas emissions, retirement of REGO certificates, water use and source, water and energy efficiency measures, drought resilience measures, and impacts on local water resources.

The significant variation between industry and institutional demand forecasts ([Climate Council 2026c](#)) also shows there is a need for governments at all levels, and industry, to work together to develop a nationally consistent framework that balances commercial sensitivity and security considerations with best practice reporting standards.

### **RECOMMENDATION 8: ESTABLISH A NATIONAL FRAMEWORK FOR PUBLIC REPORTING ON DATA CENTRE ENERGY DEMAND, WATER USE AND CLIMATE POLLUTION**

Set up a framework for nationally consistent reporting for both data centre operators and customers, including – but not limited to: electricity use, electricity source, PUE, backup generator use, greenhouse gas emissions, retirement of REGO certificates, water use and source, water and energy efficiency measures, drought resilience measures, and impacts on local water resources. As part of this, a consistent approach to forecasting should be developed to allow governments, regulators and utilities to better coordinate and plan for data centre development.

*Should all data centres be required to meet energy and water performance thresholds? If not, how should requirements change or scale for different data centres?*

All data centres above 30 MW should be required to meet energy and water performance requirements, aggregated across portfolios, staged developments and co-located facilities (see Recommendation 1).

## RECOMMENDATION 9: MAKE BEST-PRACTICE ENERGY EFFICIENCY THE STANDARD FOR ALL DATA CENTRES

All data centres above 30 MW should be required to demonstrate they will achieve a design PUE of no greater than 1.34 before they are approved. They should be required to maintain a minimum five-star NABERS Energy rating once operating.

These benchmarks should be regularly reviewed and progressively strengthened to reflect technological advancements and evolving industry and international best practice.

*How frequently should data centres be required to transparently and publicly report their energy use, efficiency, and emissions as part of plans demonstrating compliance with mandatory requirements?*

Annually.

## 4. Use innovative, efficient and sustainable solutions to minimise water use

Australia's climate is characterised by a highly variable watercycle. Drought is a fundamental part of the landscape, but climate change – primarily driven by the burning of coal, oil and gas – is making hot days hotter, droughts more aggressive and heatwaves longer and more frequent. Since the 1970s, southwest Australia has experienced a 16% decline in April to October (cool season) rainfall. Across the same region, May to July rainfall has seen the largest decrease, of around 20% since 1970.

In Southeast Australia, there has been a decrease of around 9% in April to October rainfall since 1994 ([CSIRO and BoM 2024](#)). These areas include major population centres of Sydney, Melbourne and Perth where most data centres are located and more are planned to be built. During the 2017 to 2019 Tinderbox Drought, southeast Australia experienced its driest three-year period on record. Towns in NSW nearly ran out of drinking water, and had to rely on emergency measures. Every drought in Australia is now hotter than the last because of climate pollution. This summer, climate pollution and El Niño will combine in Australia to supercharge the risk of dangerous drought, heatwaves and fires ([Climate Council 2026e](#)).

Without action, the data centre industry's water demand could grow to around seven times its current size by 2035-36 – to 47 billion litres every year, or nearly 19,000 olympic pools.<sup>3</sup> The data centre industry's use of water resources must be managed carefully as rainfall decreases and ongoing supplies become increasingly uncertain.

*Should data centres be required to meet performance metrics or ratings for water usage and efficiency in data centres?*

Yes. All data centres covered by the standards (30 MW or more, Recommendation 1) should meet a design WUE target at approval and report their actual WUE annually.

Victoria's [Sustainable Data Centre Action Plan](#) and [NSW's Data Centre Guidelines](#) both require facilities to meet a design WUE  $\leq 1.0$  (if using potable water) or  $\leq 1.6$  (non-potable) ([Victorian Government 2026](#); [NSW Government 2026](#)).

Strong WUE standards are achievable. According to the data centre industry, Australia's most water efficient data centres achieve WUEs as low as 0.01 through innovative cooling systems, including free-air cooling and closed-loop systems ([Mandala and Data Centres](#)

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<sup>3</sup> Climate Council estimate, based on assumptions in Mandala and Data Centres Australia's report [Data Centres as Enabling Infrastructure](#). This applies Mandala's calculated average WUE for Australian data centres of 1.8 and average PUE of 1.3 to AEMO's forecast energy consumption of 34 TWh in 2035-36. This assumes there is no improvement in data centre water efficiency between now and 2035-36.

[Australia 2025](#)). NSW analysis shows 9 out of 12 proposed projects had an average WUE of 1.0 ([NSW Government 2026](#)).

WUE benchmarks should be regularly reviewed and progressively strengthened to reflect technological advancements and evolving industry and international best practice.

*If so, are existing metrics (for example, WUE ratings) fit for purpose, or would new or adjusted metrics be more appropriate (for example, by factoring water stress regions and water sources into WUE ratings)?*

Any benchmark WUE rating must be accompanied by a requirement for data centres to prioritise non-potable or recycled water, and the consideration of water stress and climate impacts in the region. Data centres should not be permitted to use any potable water in water stressed regions.

Water resources are under increasing pressure in data centre hotspots Sydney and Melbourne. Between 2023 and 2025, almost all of southern Australia experienced a serious to extreme lack of rain, causing severe to exceptional drought conditions. Melbourne experienced some of the lowest rainfall and inflows on record – similar to the worst years of the Millennium Drought. The city’s water storage levels are at less than 70% capacity as at September 2026, 36% below the 30-year average ([Melbourne Water 2026](#)). Under a hotter climate, droughts are likely to become longer, more frequent and more intense ([Victorian Government 2025](#)).

Over the past 20 years, Greater Sydney has been in drought almost 50% of the time. During the Tinderbox Drought (2017-19), the region experienced one of the worst drought sequences on record. Over the coming years as climate change worsens, more severe droughts will lead to lower dam levels and reduced availability of water, while increasing temperatures will also lead to an increase in water demand ([Sydney Water and Water NSW 2025](#)).

*Should a minimum NABERS data centre rating, based on WUE and agreed by states and territories, be required once a facility is operational?*

Yes. NABERS has secured funding to develop a national water efficiency framework for data centres, complementing its existing NABERS Energy rating tool for data centres ([WSAA 2026](#)). A minimum NABERS water rating should be met on an ongoing basis once a facility is operational.

*Should water-use thresholds trigger additional requirements? If so, what thresholds should apply, and should they align with the tiered approach outlined on page 8?*

Yes. All data centres of 30 MW or more, aggregated across portfolios, staged developments and co-located facilities, should meet WUE targets and reporting requirements. Facilities using water-intensive cooling (evaporative, adiabatic or other open-loop systems), or

exceeding a set annual water volume, should in addition be required to use recycled or non-potable water.

*What aspects of water use should data centres transparently and publicly report? E.g. maximum and peak demand, potable and non-potable water sources, efficiency measures, drought resilience measures and impacts on local water systems.*

Data centres should be required to transparently and publicly report on actual annual demand, maximum and peak demand, water sources, efficiency measures, drought resilience measures and impacts on local water resources.

*Should a nationally consistent hierarchy of water sources be adopted for data centres, prioritising non-potable/recycled water with potable water as last resort?*

Yes. New data centres should be required to avoid using potable water in their cooling systems as far as possible. In Victoria, facilities using water-intensive cooling (evaporative, adiabatic or other open-loop systems) are expected to meet cooling needs from recycled or other non-drinking sources – or hold an agreement with their water corporation to transition when available. The AI standards should adopt this as a minimum.

Data centres should not be permitted to use potable water for cooling in regions under drought restrictions or declared water stress – no exceptions.

*Where recycled or non-potable water supplies are not reasonably available, what alternative approaches might be promoted to achieve equivalent water security outcomes? For example, water offsets within the same catchment, investment in recycled water infrastructure with an associated transition timeframe, desalinated water supply, and local water efficiency programs.*

In water-stressed regions a data centre that cannot avoid using potable cooling water should not be approved. Outside water-stressed regions, use of potable water should be limited as far as possible. In Victoria, where recycled or non-drinking water is not yet available, data centres must agree a plan with the water corporation to offset interim drinking water use – for example through funding agreements or water efficiency programs ([Victorian Government 2026](#)).

*Should data centres be required to demonstrate that proposed water use will not adversely affect local water security, drought resilience, environmental water requirements, or existing water users as part of a plan outlining their compliance?*

Yes. The assessment of impacts on local water security should also take account of cumulative demand from other facilities in the same system.

## **RECOMMENDATION 10: PLACE STRONG LIMITS ON USE OF WATER THAT ACCOUNT FOR THE CHANGING CLIMATE, ACCOMPANIED BY BEST-PRACTICE WATER EFFICIENCY RATINGS AND REPORTING**

In water-stressed regions, data centres should not be permitted to use potable water for cooling – without exception. In other parts of the country, facilities using water-intensive cooling, or exceeding a set annual water volume, should also be required to use recycled or non-potable water – with potable water a time-limited last resort that is covered by a plan to transition to non-potable or recycled water, and fully offset within the same catchment.

All data centres of 30 MW or more, aggregated across portfolios, staged developments and co-located facilities, should meet a design WUE target at approval, no weaker than Victoria's and NSW's (1.0 or lower for potable water, 1.6 or lower for non-potable), and report actual WUE and water use annually. A minimum NABERS water rating should be required once developed.

Proponents should demonstrate, as part of their compliance plan, that their water use will not adversely affect local water security, drought resilience, environmental water requirements or existing users, assessed cumulatively.

Operators should publicly report water demand, sources, efficiency and drought resilience measures.

## 5. Impose no net costs on consumers and communities

The AI standards must ensure the industry and its customers, rather than homes and businesses, absorb any costs associated with integrating new data centres into our electricity and water networks.

*What gaps (if any) exist in electricity and water infrastructure charging and cost allocation arrangements that could result in consumers bearing costs associated with data centre-driven network or infrastructure augmentation?*

In Australia, the National Electricity Rules allocate connection and augmentation costs to data centres if the assets are used exclusively by the data centre. However, we note that the Minister for Climate Change and Energy considers that the nature, scale and speed of future data centre connections may challenge existing frameworks and lead to circumstances where consumers may inappropriately bear the costs and risks of large load connections ([AEMC 2026](#)). The AEMC is currently consulting on rule changes to address these concerns.

Similarly, data centre operators currently fund the water pipeline upgrades that directly benefit their site. However, data centres may push existing water infrastructure to its limits and require upgrades, and new infrastructure to increase recycled water or increase water desalination treatment capacity may be required ([NSW Government 2026b](#)).

### **RECOMMENDATION 11: ENSURE DATA CENTRES PAY FOR THE ENERGY AND WATER INFRASTRUCTURE THEY NEED TO PROTECT HOUSEHOLDS FROM RISING BILLS**

Cost recovery frameworks must be reviewed and amended as required to ensure the industry, rather than homes and businesses, absorbs the costs associated with water and energy network upgrades needed to service data centre demand. We welcome the AEMC's development of rule changes to address concerns in relation to the electricity network.

*What are the barriers to data centres investing in sufficient new renewable energy and storage capacity to mitigate impacts to wholesale electricity costs?*

Action to address delays to the renewable rollout is needed to enable the industry – and the rest of Australia – to access new renewable energy at the pace and scale required. The Government should explore and implement policies that expedite the delivery of new renewable projects, for example by supporting renewable projects to take FID earlier (including through the provision of finance), through policies to alleviate supply chain and

labour force pressures and by achieving faster approvals, including by giving renewable projects priority access to the Government's investor Front Door.

*What requirements should be placed on data centres to operate flexibly to support the operation of the electricity grid and improve system efficiency while protecting consumers from increased energy costs? This could include restrictions on the use of non-renewable back-up generation, and scenarios under which flexibility should be required, for example during specified system stress events and scarcity events?*

Data centres should be integrated as active, flexible participants that enhance grid stability, rather than strain it. For example, NSW's Guidelines include a performance measure for data centres to have the ability to reduce grid-supplied demand by 25% of forecast average load, for up to two hours. They are expected to do this through load shifting first, then on-site or nearby renewable generation and storage, and not through diesel generators ([NSW Government 2026](#)). This should be adopted as the national minimum.

Wherever possible, flexibility should be achieved through load-shifting, for example by scheduling non-critical computing tasks for times of high renewable output. In the US, Google is embedding a range of flexible demand capabilities into its data centre fleet, allowing it to shift or reduce power demand during certain hours or times of the year ([Google 2025](#)). In co-location data centres, however, the ability to provide this type of load flexibility is often determined by customers rather than operators, as tenants control the computing workloads that drive most electricity demand. Flexibility requirements should therefore apply to both operators and their customers.

Where load shifting is not possible or sufficient, data centres would currently rely largely on diesel generators to participate in demand response mechanisms. For example, the proposed 1.2 GW Mamre Road facility would include 852 diesel back-up generators and 18 million litres of diesel storage ([Willowtree Planning 2026](#)). Diesel generation carries significant implications for our climate, the environment and public health. It also creates fuel security risks.

Climate Council estimates that by 2035, a total of between 60 to 120 million litres of diesel could be held on data centre sites.<sup>4</sup> Around 90% of Australia's refined liquid fuel is imported, and this year's global supply disruptions compelled the Government to commit more than \$13 billion to secure more fuel, increase fuel storage and temporarily cut fuel excise and heavy vehicle charges ([Chalmers et al. 2026](#)). Locking large volumes of imported diesel into data centre infrastructure increases Australia's exposure to future supply shocks, particularly as backup generation is most likely to be needed during grid stress events, when fuel supply may also be under pressure. Fossil diesel generation must therefore be

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<sup>4</sup> Range of estimates reflects diesel storage to provide an average of 36 to 48 hours of backup generation per data centre respectively. Projected data centre capacity is based on AEMO's Step Change and Accelerated Transition scenarios respectively.

limited to providing backup power in grid emergencies. It should not be used for demand response or to avoid periods of high electricity prices.

Low emissions alternatives to diesel are available. Some data centre operators in Australia are already investing in storage, including the Supernode Data Centre in Queensland, which will host one of the largest batteries in the NEM. The 750 MW, 2-4 hour battery will provide secure power supply and support Queensland's grid ([Quinbrook 2025](#)). In Laufenburg, Switzerland, the world's largest redox flow battery storage facility is being built alongside a data centre. The battery is recyclable, non-flammable, non-explosive and free from critical minerals – and at 800MW/1.6 GWh, it will be able to store enough energy for hours or even days ([Flexbase 2026](#)). Flow battery technology is also entering the Australian market, with a pilot at the Eraring coal-fired power station in NSW ([Origin 2025](#)). Proponents are also considering cleaner fuels: the Mamre Road campus has flagged renewable diesel as an alternative for its backup generators ([E-Lab Consulting 2025](#)).

However, government settings currently tilt the playing field towards diesel. The fuel tax credits scheme refunds fuel excise – currently 53.7 cents per litre – to businesses that use diesel “off-road”, including data centres, lowering the running cost of diesel backup relative to cleaner alternatives. Assuming the rate stays constant, fuel tax credits on the 60-120 million litres of diesel that could be stored on data centre sites by 2035 could cost the Australian Government between \$32-64 million. Public funds should not be used to subsidise diesel for large technology companies that can afford cleaner backup options, and fuel tax credits for fossil diesel backup generation should be excluded.

### **RECOMMENDATION 12: PHASE OUT FUEL TAX CREDITS FOR THE INDUSTRY TO INCENTIVISE FLEXIBLE DEMAND BACKED BY RENEWABLE SOLUTIONS**

Data centres and their customers should be required to demonstrate the ability to reduce grid demand by at least 25% of forecast average load for up to two hours during peak and system stress events, consistent with NSW's Data Centre Guidelines. This flexibility should be delivered through load shifting, battery storage and on-site renewables rather than diesel. Diesel backup generation should be limited to grid emergencies, with a pathway to lower-emissions backup such as batteries and renewable diesel. Data centre backup generation should also be excluded from the fuel tax credit scheme.

## 6. Engage meaningfully with local communities and councils

Data centre operators and customers have significant capital available to meet strong standards and deliver lasting community benefits. If well coordinated, data centre development can also strengthen the benefits of the renewable energy projects it underpins, including local jobs, support for community services and programs, and direct payments to landholders.

*What does best practice community engagement look like for data centres, including with nearby businesses?*

The growth of the industry must be aligned with community expectations, informed by meaningful engagement, and deliver lasting economic and social benefits.

### **RECOMMENDATION 13: REQUIRE MEANINGFUL COMMUNITY AND FIRST NATIONS ENGAGEMENT AND BENEFIT SHARING**

The expansion of Australia's data centre industry must be underpinned by robust frameworks for community engagement, transparency, benefit sharing and environmental protection. Development should avoid areas of high biodiversity value, protect water resources and cultural heritage. It is essential that any such approach is underpinned by robust frameworks for community and First Nations engagement – including the principles of free, prior and informed consent – along with transparency, benefit sharing, and environmental protection.

*Should states and territories work with energy, water and telecommunications companies to proactively identify sites for data centres that could support future builds away from populated areas? What efforts are already underway?*

The electricity network infrastructure in many regional areas has capacity to accommodate additional large loads like data centres ([Ausgrid, Endeavour Energy and Essential Energy 2026](#)). If done well, and in the right locations, such as renewable energy zones (REZs) and former coal station sites in areas with sufficient water resources, data centres could help reduce network augmentation costs, ease transmission constraints, support regional development, and even unlock additional network capacity ([Baringa and CEFC 2025](#)). Importantly, however, not all REZs will be suitable sites for data centres. Many parts of Australia are already experiencing growing water stress, and data centre development must not be allowed to worsen local water insecurity.

This is not about shifting impacts from metropolitan areas into regional communities, but about identifying locations where data centres can support regional economic development, make productive use of existing infrastructure, and integrate with broader

energy transition objectives, with low environmental impact and without putting additional strain on water resources.

#### **RECOMMENDATION 14: WORK WITH STATES, TERRITORIES AND OTHER STAKEHOLDERS TO ENCOURAGE BEST-PRACTICE REGIONAL DATA CENTRES THAT DELIVER LASTING COMMUNITY BENEFITS**

Government coordination could identify and proactively promote development in suitable regions such as renewable energy zones (REZs) and former coal station sites in areas with sufficient water resources. For example, prioritised approvals and connection processes could be offered for data centres located in suitable regional areas, while still ensuring all environmental, planning and community requirements are fully met. The Government could consider a requirement that only renewable developers that have signed on to the [Developer Rating Scheme](#) are eligible to supply data centres.

## 7. Contribute to building skills and training opportunities

The workforce needed for the construction of the significant volume of new data centres in Australia risks impacting the delivery of important infrastructure including new housing and renewable energy. The Electrical Trades Union (ETU) reports that already, 10% of ETU members are working on data centres ([ETU 2026](#)).

Australia has had a shortage of electricians for nearly half a century, and will require tens of thousands of additional electrical workers to meet growing infrastructure needs in the shift to a clean, modern energy system. Without action, data centres will exacerbate existing skills shortages, and could leave Australia short of around 70,000 licensed electricians by 2030 ([ETU 2026](#)).

*How should data centre operators be required to provide skills and training opportunities, including for under-represented cohorts in skilled workforces, during construction and into ongoing operation?*

A lack of apprenticeship openings is a key barrier to growing Australia's skilled electrical workforce. Climate Council supports the [ETU's recommendation](#) that data centres and related energy projects should be required to take on a quota of apprentices in their build, and pay a levy to expand training capacity.

### **RECOMMENDATION 15: REQUIRE DATA CENTRES TO CONTRIBUTE TO THE ELECTRICAL WORKFORCE THROUGH AN APPRENTICE QUOTA AND A TRAINING LEVY**

New data centres above the 30 MW threshold should be required to take on a quota of apprentices during construction and to pay a levy to expand training capacity, so that data centre construction adds to the skilled workforce rather than diverting electricians from housing and renewable energy projects.

## Conclusion

Australia faces an important choice in how it manages the rapid growth of data centres. Without aligning new demand with additional renewable generation, storage, and system flexibility, this growth will push up power prices, prolong the use of polluting coal power stations, increase gas generation, and derail the progress we are making towards our climate goals. Similarly, without careful planning, water demand from data centres could add to the pressure on this scarce resource.

These outcomes are not inevitable. Data centre operators and customers have significant capital available to invest in electricity and water infrastructure that will benefit both them and the community. With enforceable policy and coordinated planning, data centres can play a positive role in Australia's shift to renewables – supporting new clean energy investment, improving grid efficiency, and contributing to a more resilient, low-emissions system.

The Albanese Government has a critical opportunity to shape this trajectory. By acting fast to set strong standards that apply to every new data centre above 30 MW – including those already in the pipeline – it can ensure that data centre growth does not undermine Australia's energy system, climate targets, or water resources.

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