



Australian Government

OFFICIAL: SENSITIVE

Getting it right: Building AI infrastructure that works for Australia

Consultation Paper - September 2026

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Introduction

Data centres are critical infrastructure for the modern economy. There are data centres in every state and territory around Australia, helping power online services like banking, how we communicate with our friends and family and how we do business.

As artificial intelligence (AI) adoption grows and more companies build and test new AI capabilities, our data centre infrastructure will need to grow larger and more complex too. Sovereign AI capability – developing AI here, partnering with leading AI firms which are developing frontier AI models, and adopting AI across sectors – relies on secure, onshore data centre infrastructure.

Australia has become one of the world's leading destinations for data centre investment – but it must be on terms that work for Australians. Large data centres cannot drive up energy bills for Australian families and businesses, threaten scarce water resources, or be built without meaningful engagement with the communities in which they are located.

At the same time, we cannot afford to forgo data centre investment. It is essential to our national security, business productivity, science and innovation and resilience. With the right settings, and as a trusted Five Eyes member, Australia can be the infrastructure partner for our region.

To realise opportunities and minimise potential harms, the Australian Government is seeking views on a proposed set of requirements to guide the sustainable development of large data centres and AI training infrastructure. This consultation will help inform a nationally consistent approach. Getting this right is an economic imperative— Australia must attract the investment needed to build the AI infrastructure that will underpin our AI capability in the coming decades, while ensuring energy bills do not rise, water security is not undermined and it does not become more costly for other industries to do business here.

Development of Australian standards for AI complements Australia's National AI Plan and established AI safety priorities, which include a digital duty of care, improved privacy safeguards, consumer protections and workplace measures. Australia's AI Safety Institute is collaborating with international partners on safety testing for emerging AI models.

Purpose and scope

On 15 July 2026, the Prime Minister announced that the government will introduce AI laws in Australia's interests. This consultation will inform the design of nationally consistent AI standards to give effect to that commitment. This will help provide certainty about large data centre development, avoid inconsistent rules across jurisdictions, build public trust, provide clear investment signals and ensure AI infrastructure is built and operated in the national interest.

The AI standards are proposed to cover two related but distinct issues. First, they would set mandatory minimum requirements for large data centres, including how projects manage energy, water, costs, community engagement, location and workforce impacts. Second, they would set conditions for frontier AI training in Australia, including how training activity supports national security and safety, future industries and skills, research and innovation, and Australian creators, media and other rightsholders.

The Commonwealth will legislate the national AI standards for large data centres, while preserving state and territory responsibility. The AI standards will complement, not duplicate, existing processes for approvals and obligations – such as those for planning, the environment, energy, water, connectivity, foreign investment, national security and critical infrastructure.

Large data centres will be increasingly critical to the economy and our way of life. Central to getting our policy settings right is positioning Australia to capture the upside, while minimising the downside. To this end, the AI standards will build on the national [Expectations of data centres and AI infrastructure developers](#), released in March 2026, and align with [National Cabinet's decision](#), delivered in August 2026.

This consultation paper is about getting those standards right. Input from members of the public, industry, and other relevant organisations is important to ensure legislation for the AI standards is appropriately targeted. This paper seeks views on nationally consistent AI standards that will protect Australians' way of life and security, without duplicating or impacting what's already working. This will ensure Australia can continue to attract investment into AI data centres and training, support Australia's competitiveness in digital services and AI-related trade and maximise the commercial and social benefits of technological change.

Structure of this consultation paper

Submissions for this consultation paper are open until 9 October 2026. During this period, the government will also conduct targeted engagement with stakeholders on the requirements for large data centres and the conditions for AI training.

The paper is structured in 3 parts:

- Part 1 – Managing growth in large data centres and the AI training opportunity
- Part 2 – Requirements for large data centres
- Part 3 – Conditions for AI training

A list of consultation questions has been provided to support submissions via the online form at www.pmc.gov.au

Managing growth in large data centres and the AI training opportunity

The [National AI Plan](#) sets out Australia's broader ambition to build an AI-enabled economy that is competitive, productive and resilient, while ensuring the benefits of AI are shared across regions, industries and communities, and potential harms are mitigated. A central part of that ambition is making sure Australia can host and shape AI training on its own terms. This will require the digital and physical infrastructure, compute capacity, and governance settings to train, develop and use AI in ways that serve Australia's national interest.

As frontier AI capabilities advance, Australia has an opportunity to capture more of the economic value and technical capability created through AI training, while strengthening our capacity to deal with emerging risk. By attracting the right investment in large data centres and frontier AI model training, Australia can strengthen national security, business productivity, science, innovation and resilience.

Australia is already well placed to attract this investment. Our stable institutions, skilled workforce, trusted partnerships and strategic position in the region give us natural advantages. But those advantages will only translate into lasting national benefit if investment in AI infrastructure and AI training is developed for the benefit of Australians. The national *Expectations of data centres and AI infrastructure developers* provide the foundation for building public confidence for new data centre developments, but more needs to be done to build public trust that investment will occur in a sustainable way. Mandatory requirements will help build confidence that data centre siting will be well considered with input from local communities, that energy supply will continue to be reliable and bills will not rise, that water security is maintained, and that investment benefits will be shared among all Australians.

The task for Australian governments is to make the most of our comparative advantage. Hosting large-scale AI training data centres and encouraging frontier AI model training in Australia will ensure industries of the future and innovative business can be created locally, research capabilities can be deepened and remain world-class, and Australia can influence how this transformative technology develops.

The development of AI infrastructure should not be at the cost of efforts to deliver a reliable, affordable and lower emission energy system. AI infrastructure development should use water efficiently, avoid shifting costs onto households, businesses or communities, promote meaningful engagement with local communities and councils, and build skills and training opportunities.

Large data centres will underpin Australia's AI capability, strengthen our digital economy and support future productivity growth. As investment accelerates, there is an opportunity to establish nationally consistent settings that support sustainable development, provide certainty for investors and ensure

communities share in the benefits. A coordinated approach will help position Australia as a competitive destination for AI and digital infrastructure while supporting broader economic, environmental and social objectives.

Data centre investment is already delivering major benefits to Australia's economy, with some estimates suggesting it could amount to around \$150 billion in investment by 2030.¹

AI training investment offers a step-change in benefits

Australia's existing data centres, and much of the immediate pipeline of data centre projects, primarily support cloud computing services and inference activities, i.e. hosting of pre-trained models for AI applications used by Australian people and businesses.

While inference activities are expected to contribute to productivity growth as businesses and sectors adopt AI, the real step-change comes from attracting investment to support AI training in Australia.

Australia is already a top global destination for data centre investment, but to date this has not been for frontier AI training. Without access to sufficient compute infrastructure to scale domestic industry, and large companies to anchor talent and skills, Australia risks being shaped by AI, rather than having a role in shaping it. Incentivising AI training has national security, strategic and economic benefits – but must be on terms that reflect our national interest. Having a stake in the development of frontier AI would give Australia a seat at the table in global AI safety and security standard setting, enable Australia to attract and retain AI talent and inbound investment, and create more opportunities for Australian innovation, collaboration and research. Additional investment in Australian data centres – including for facilities to support AI training – where carefully managed can also deliver benefits for Australian communities, such as by supporting investment in additional renewable energy supply and firming capacity.

Existing regulatory and approval functions for data centres in Australia are shared across governments

States and territories

In Australia, the authority for most regulatory approvals for data centres sits with state and territory governments. Planning laws, development consent, zoning, water allocation and management, and most environmental approvals are handled under state and territory legislative regimes. States and territories play a central role in managing local impacts associated with data centre development, including land use, energy and water considerations.

¹ Commonwealth Bank of Australia, 2026, [Australia's data centre boom: a \\$150 billion investment opportunity](#).

Commonwealth

The Commonwealth is responsible for some regulatory approvals concerning data centres. These include aspects of environmental regulation and approvals under the reformed *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Under the EPBC Act, proposed actions that are likely to have significant impact on nationally protected plants, animals and places must be referred for potential assessment and approval. Data centres are typically developed in urban and industrial locations that are less likely to have impacts on nationally protected matters under national environment law.

Data centre investments may be subject to existing foreign investment and national security screening to operate in Australia. Under Australia's Foreign Investment Framework, foreign investors in Australia may need to notify the Treasurer of their investment. Approval is subject to a range of factors, including the size and type of the investment, the level of control that would be obtained by the foreign investor, and whether the investor is a private or foreign government investor.

Australia's Foreign Investment Policy outlines that investment proposals involving data centres and cloud providers are subject to greater scrutiny due to potential national security threats such as espionage, sabotage and foreign interference activity. The government is currently developing reforms to the *Foreign Acquisitions and Takeovers Act 1975* (the FATA) to further strengthen and streamline the foreign investment review process, building on reforms it implemented in 2024.

Data centres are subject to the *Security of Critical Infrastructure Act 2018* (the SOCI Act) if they are critical data storage or processing assets as defined by the SOCI Act. Entities responsible for these data centres are subject to the SOCI Act's positive security obligations. Critical data storage or processing assets refer to assets that are owned or operated by a data storage or processing provider, and either:

- used wholly or primarily to provide data storage or processing services on a commercial basis to a government entity (including Commonwealth, state and territory governments), or
- used wholly or primarily to provide data storage or processing services on a commercial basis to an entity responsible for another critical infrastructure asset and related to business-critical data.

The Independent Review into the SOCI Act identified that, as the threat environment continues to evolve, the legislative framework requires ongoing refinement. The government has publicly consulted on reforms to streamline and modernise the SOCI Act. This includes reforms to critical data storage or processing assets captured under the SOCI Act.

Data centres or cloud services that host security classified Australian Government information and data (classified as OFFICIAL: Sensitive or PROTECTED) are required to be certified by the Australian Government Hosting Certification Framework.

The deployment of fibre optic and submarine cables, underpinning domestic and international connectivity for data centres, are often enabled through the Commonwealth's *Telecommunications Act 1997*. However, planning laws can play an important role in determining how telecommunications infrastructure for data centres is deployed and integrated with local land use, amenity considerations and community impacts.

Data centres may also have emissions and energy reporting requirements under the *National Greenhouse and Energy Reporting Act 2007* (NGER Act). Recent reforms to the NGER Act introduced into the Australian Parliament will, if passed, establish a rule-making power for regulators to publish more granular emissions and energy data at the facility level. Following passage of the reform bill, regulations will be developed and consulted on to improve the transparency of data centres' emissions and energy reporting.

The AI standards will complement, not duplicate, state and territory planning and approval processes

The Commonwealth will set nationally consistent mandatory minimum requirements for large data centres, while preserving state and territory responsibility for local planning and approvals, including by allowing each jurisdiction to set requirements above the mandatory minimum. This will set a baseline for jurisdictions across shared concerns about energy, water and community engagement. The AI standards will provide clear rules for data centres wherever they are built in Australia. This will guide investment decisions and ensure AI-related infrastructure is built and operated in the national interest. It will also ensure all states and territories are attractive for foreign investment and sustainable development opportunities.

Many states and territories are working to manage local impacts of data centres in harmony with the Commonwealth's approach. The New South Wales Government has developed comprehensive Data Centre Guidelines that build on the national *Expectations of data centres and AI infrastructure developers*. The South Australian Government is developing legislation to facilitate and manage long-term growth in data centre and AI infrastructure. Similarly, the ACT Government has announced the development of a Data Centre Framework, building on the national standards agreed by National Cabinet. Other jurisdictions are also working to ensure sustainable data centre investments.

The Commonwealth is consulting with states and territories, and industry, to develop a national regulatory framework that implements minimum requirements for data centres and AI training under the AI standards. The key objective is to ensure that all new developments across Australia meet the national *Expectations of data centres and AI infrastructure developers* by legislating a consistent national approach with minimum requirements.

Nationally consistent AI standards will deliver greater certainty and transparency for communities, governments and industry

Australia is one of the leading destinations for data centre development in the world. We have the benefit of international experience to inform proactive policy action in Australia. The task for all Australian governments is to turn our attractive investment settings into a genuine comparative advantage that supports our national interests. A fragmented regulatory approach across jurisdictions and levels of government may not adequately address community concerns nor provide certainty for investors. For example, differing (or potentially contrary) requirements across jurisdictions could create challenges for how we manage key resources, particularly in states and territories that share energy or water infrastructure across borders. National mandatory minimum standards for data centre projects will deliver greater certainty for proponents and more predictable and transparent processes for communities and governments when considering proposals for data centres. This will help build public confidence that these projects are being developed and operated responsibly.

Thresholds for application of the AI standards

Establishing appropriate capacity thresholds for new data centres is critical to ensuring the AI standards are proportionate, risk-based and targeted at projects with the greatest potential impacts. Thresholds should provide regulatory certainty for investors while avoiding unnecessary burden on smaller facilities.

The government recognises that larger facilities can present materially different impacts and opportunities than smaller developments. We are seeking views on thresholds aligned to energy systems to ensure sufficient energy generation capacity is brought forward to meet the energy requirements for new data centres, without driving up prices for Australian households and businesses. This approach considers that energy may be the most suitable threshold for ensuring appropriate coverage of the sector under the AI standards, but we want to understand whether this would be appropriate from other perspectives (such as water and siting).

The government can see merit in adopting a tiered approach that excludes small facilities below 30MW from the national AI standards and introduces baseline requirements for facilities with an ultimate electricity network connection capacity between 30-100MW. More substantial requirements could be established for large data centres above 100MW, or a cumulative portfolio equivalent of 150MW.

Application thresholds across the United States, including for California and New York, rely on monetary thresholds (revenue or compute costs) and units of measurement for compute, such as floating-point operations per second (FLOPS). However, these thresholds are designed for data centres conducting AI training activities.

The tiered approach the government is proposing draws on the capacity tiers outlined by the Australian Energy Market Commission's (AEMC) draft access standards for large loads like data

centres that want to connect to the grid in the National Electricity Market (NEM). The AEMC's draft access standards proposed moving away from the existing 5MW threshold to a more nuanced approach that recognises actual grid impact. Tier 1 connections are loads up to 30MW, Tier 2 are loads between 30-100MW, while Tier 3 applies to facilities 100MW or greater. The AEMC's approach applies requirements commensurate with the system impacts represented by the size of the connecting energy load. This approach is the starting point for consultation.

An important question is whether these are the right thresholds for all new mandatory requirements associated with large data centres. We also want to understand whether different or additional thresholds are needed for AI training activities.

While unlocking data centre investment will drive economic benefits, governments are determined that large energy loads do not strain grids or drive up costs for households. One way to avoid undue stress on electricity grids could be to support staged connection arrangements, allowing large sites to commence operation within agreed limits that could be increased as additional generation, storage or network infrastructure is delivered.

Consultation questions on capacity thresholds for application of the AI standards

- 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?
- Does a tiered approach sufficiently capture different types of facilities and ensure proportionate obligations relating to Australia's energy transition, water management, and communities?
- What can Australia learn from other jurisdictions that regulate large data centres, particularly in designing obligations that are proportionate to potential community impacts while maintaining incentives for investment?

Approach to the application of the AI standards

There are several large data centre projects currently progressing through approvals and development processes that may be operational before the AI standards are introduced. To ensure the AI standards apply to data centres that are yet to connect to the electricity system and materially contribute to high demand growth, the government is considering at what point the standards should apply to projects that are not yet operational at the time the AI standards commence.

Applying the standards to projects in the development pipeline will provide early regulatory certainty for proponents, ensure new large energy loads coming through the planning process contribute to the objectives of the AI Standards, and help reassure communities that the impacts of data centre growth are being proactively managed.

The government proposes that data centres above a certain capacity threshold be obliged to submit plans for how they will meet their mandatory requirements, and provide assurance that they will be able to comply, at a reasonable point along their development pathway. One way of boosting transparency and confidence that data centre development is being appropriately managed could be to require the publication of plans for data centres above a significant threshold.

The government proposes to legislate obligations for large data centres above a certain threshold to confirm that all necessary approvals (for example, building permission and energy connection approval) are in place at a particular point in development and approvals processes. Requirements could account for the fact that a data centre's ultimate capacity may differ from its initial energy demand, with some facilities scaling up consumption over time. Certain obligations could be linked to this growth to ensure regulation is proportionate.

Data centres and AI training facilities can involve multiple entities, including facility owners, operators, tenants and AI developers. Given the range of operating models, the government is considering whether different requirements should apply to different entities depending on their ability to influence the delivery, maintenance, operation and output of data centres and AI training facilities. For example, some requirements may be most appropriately applied at the data centre level, while AI training obligations may be more appropriately applied to organisations undertaking AI training activities. The government is working with key stakeholders to identify the best distribution of responsibilities.

Consultation questions on the approach to the application of the AI standards

- At what point in development processes should mandatory requirements apply for large data centres?
- What can be learned from approaches taken in other jurisdictions to ensure very large data centres currently in development pipelines are appropriately captured?
- 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?
- 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?
- 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?

Requirements for large data centres

Australia's AI standards will support the following requirements to ensure large data centres can be developed in a sustainable way in relation to energy and water, are well-sited, bring benefits for communities and align with Australian interests.

Make a positive contribution to Australia's energy transition

The Commonwealth's mandatory standards will require large data centres to:

- Bring forward new renewable generation to fully offset their energy demand (with appropriate firming through gas, batteries or hydro), with jurisdictions able to use state-owned generation, transmission and distribution where it has clear benefits to grid stability and lower customer prices.
- Provide demand flexibility.
- Operate in ways that minimise costs for businesses and consumers.

Data centres are large and fast-growing users of energy. The Australian Energy Market Operator (AEMO) recently projected that data centre electricity consumption in the National Electricity Market (NEM) is forecast to increase from approximately 5 terawatt hours (TWh) in 2025-26 to 34 TWh by 2035-36 in its *Step Change* scenario, increasing from around 3% to approximately 13% of electricity supplied through the grid.² Without additional new supply, this significant new energy demand will drive up prices for Australian households and businesses.

The expansion of data centres is occurring at the same time as Australia is transforming its electricity system to reduce emissions, modernise the electricity grid and maintain secure, affordable supply for all electricity users. Meeting the sector's growing electricity demand without driving up energy costs will require additional renewable generation with firming, network and storage infrastructure, and more efficient processes for connecting and integrating new large loads into the energy system.

Mandatory requirements for data centres will define how they contribute to the energy transition and maintain Australia's energy reliability and affordability as overall energy demand increases. In particular, the AI standards will require data centres to invest in new renewable electricity supply to offset their consumption, and have sufficient firming supply. The standards will also require data centres to manage their demand to support grid operation stability and network utilisation.

The energy-related obligations under the AI standards will build on complementary reforms already underway instigated by the Energy and Climate Change Ministerial Council (ECC), which has been working to progress a national approach to manage the implications of rapid data centre growth in

² AEMO, 2026 Electricity Statement of Opportunities (ESOO)

collaboration with energy market bodies. This broader reform package includes proposed changes to the National Electricity Rules (NER) that govern all NEM participants. The proposed new rules should require large data centres to bring their own energy resources, pay their fair share of network costs, and connect to and operate in the energy system in ways that strengthen system reliability, security and affordability for all electricity consumers.

Rule change proposals must be assessed by the Australian Energy Market Commission (AEMC) through a rigorous consultation process before any decisions on a new rule change are made, so the public will have an opportunity to provide input on those aspects of the package through the AEMC's statutory process.

The AI standards will operationalise the requirement for large data centres to invest in new renewable electricity supply. Commonwealth legislation will also provide a mechanism to ensure that all jurisdictions are subject to consistent national minimum standards, taking into account state-owned generation as considered by National Cabinet, including where they may sit outside the NEM or where jurisdictional arrangements may not yet meet the standards.

Supporting investment in new renewable energy through a renewable electricity obligation

The government intends to create an obligation for data centres subject to the AI standards to match their energy demand with new renewable electricity capacity. This would ensure that growth in data centre electricity demand supports the energy transition by bringing forward new clean energy sources, while also ensuring there is sufficient electricity supply to prevent upward pressure on prices and support reliable electricity for all consumers. Requiring data centres to bring on additional renewables and firming will ensure that power prices are not increased.

The Renewable Electricity Guarantee of Origin (REGO) scheme is the Australian Government's enduring mechanism for certifying electricity that is generated from renewable sources such as solar and wind. The REGO scheme operates alongside the Renewable Energy Target (RET) until the RET ends in 2030.

REGO certificates are created when a registered generator or storage facility dispatches renewable electricity. The certificates provide detailed information about when, where and how renewable electricity was produced. REGO certificates can be created for renewable electricity generated from eligible energy sources, and for renewable electricity dispatched from storage facilities such as batteries and pumped hydro.

The renewable electricity obligation for data centres could require covered facilities to retire renewable electricity certificates equivalent to their annual electricity consumption from the time they begin operating.

Recognising that the energy transformation is still underway and new renewables projects take time to build, some REGO certificates or Large-scale Generation Certificates (created under the RET) could come from existing renewable generation and storage capacity initially. The remainder could come from new renewable generation and storage capacity. This could ramp up so that after a certain period all of a data centre's electricity consumption would be sourced from new renewable capacity. For example, Ireland provides a six-year 'glide-path' to achieve generation of at least 80 per cent of electricity from renewable sources.

In practice, data centres could procure renewable electricity certificates in a number of ways. Certificates could be bundled with power purchase agreements signed directly with renewable electricity facilities, from the spot market, or through contracts with electricity retailers.

The renewable electricity obligation could be designed to achieve two complementary objectives:

- incentivise investment in new renewable electricity supply by gradually increasing the share of a data centre's electricity use that must be matched with certificates from new renewable electricity capacity
- encourage renewable electricity to be available when it is needed most, by requiring data centres to match their electricity use during certain periods.

Different obligations and implementation pathways could apply to different types of data centres, reflecting their relative impacts on energy supplies and the electricity system. For example, obligations for peak period matching could be higher for larger data centres, reflecting their greater impact on the grid.

The scheme could be administered by the Clean Energy Regulator, which would assess compliance and apply penalties if a data centre did not retire the required level of certificates.

It is proposed that data centres procuring electricity from state-owned operators could apply to the Australian Energy Regulator (AER) to seek a modification to their renewable electricity requirement if they can demonstrate their alternative energy mix would result in clear benefits for grid stability and lowering electricity prices for customers.

Consultation questions on renewable electricity certificate obligations for data centres

- How could obligations be phased in to account for the time needed to build data centres and new renewable projects?
- How should 'new' renewable capacity be defined in relation to data centre investments?
- At what capacity threshold should an obligation to retire or surrender renewable energy certificates apply?

- Should the information on REGO certificates be used to time-match electricity use in certain periods? If so, what should these periods be?
- Are there any complexities in how data centres could acquire certificates to meet a renewable electricity obligation?
- 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?
- 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?
- What unintended consequences or implementation challenges should the government consider in designing a renewable electricity framework for data centres?

Energy efficiency

The Commonwealth could set minimum standards to support transparency and drive efficiency for data centre energy use, or simply require transparency from data centres about how they will meet energy and water efficiency metrics set by states and territories, or in accordance with industry best practice. Data centres track their operational energy efficiency with the Power Usage Effectiveness (PUE) metric, which measures energy use for computing output versus overall facility energy use (including cooling, lighting). Data centres pursue lower values (closer to 1) to maximise their energy use to power computing versus their overheads. PUE is calculated using total facility energy in MWh divided by IT equipment energy in MWh.³ The National Australian Built Environment Rating System (NABERS) has developed a voluntary energy rating tool, based on operational PUE, to enable a comparison of data centre energy performance across Australia.⁴

Data centres also calculate their prediction of efficiency through a design PUE metric. A design PUE assumes optimal conditions, like maximum load or rated capacity and peak performance, unlike an operational PUE which reflects fluctuations in real energy use and inefficiencies.

PUE needs to be considered in combination with Water Usage Effectiveness (WUE) as there are trade-offs between water and energy use in cooling system choices. For example, the increased use of recycled water for cooling can reduce the need for energy. Global energy standards also propose different PUE/WUE thresholds depending on whether potable or non-potable/recycled water is used, and the policy outcome being incentivised.

³ Water Services Association of Australia, 2025, Data Centres and Water Use in Australia.

⁴ Water Services Association of Australia, 2025, Data Centres and Water Use in Australia.

Consultation questions on making a positive contribution to the energy transition

- 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
 - A minimum NABERS data centre rating once operational (e.g. 5-star = 1.34 operational PUE).
- 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?
- 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?
- 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?

Use innovative, efficient and sustainable solutions to minimise water use

The mandatory standards will include requiring data centres to:

- minimise their water use, prioritising efficient cooling technologies, non-potable water and recycled water opportunities
- pay their fair share for water infrastructure and servicing costs, so costs, risks or reduced services are not shifted onto communities, households, industries, utilities or the environment
- build operational resilience to mitigate the impacts of water disruptions, drought and climate change
- meet water efficiency standards and transparently report their water use.

Data centres can use substantial volumes of water for cooling, and water demand is expected to grow as capacity expands. National Cabinet has agreed that large data centres cannot threaten scarce water resources, undermine water security or drive-up water bills.

In 2025, Australian data centres consumed an estimated 5.5 gigalitres of water for cooling, which equalled around 0.04 per cent of Australia's total industrial water use.⁵

While national water use by data centres currently represents a relatively small proportion of Australia's total industrial water consumption, local impacts can be significant where multiple facilities are concentrated within a single water supply system or catchment. Sydney Water estimates data centres could consume up to 20 per cent of Sydney's drinking water by 2035. Data centre water use

⁵ Mandala, 2025, [Data Centres as Enabling Infrastructure](#).

has the potential to place additional pressure on water resources in regional and remote communities, particularly in areas containing agriculturally significant land and established irrigated agriculture (e.g. the Murray–Darling Basin), where competition for water may affect agricultural productivity, economic activity, and community resilience.

Water-efficient cooling, including closed-loop liquid cooling, can significantly reduce consumption, but limited data across Australia makes it harder for utilities and regulators to assess impacts and encourage more sustainable practice. Facility location will be an important factor that influences the suitability and use of different cooling technologies and water sources.

The Water Ministerial Council is focused on a national approach to managing the sustainable water use of data centres. In August 2026, it agreed to [minimum requirements](#) for data centres which included minimising water use, building operational resilience to manage climate change, meeting water efficiency standards, reporting water use transparently, and paying their fair share of water infrastructure costs. These requirements will inform the development of the AI standards for water.

Water efficiency and transparency

The government intends to set minimum standards that support transparency and drive efficiency for data centre water use – including, but not limited to, potable water use. Globally, data centre water efficiency is measured by Water Usage Effectiveness (WUE), under ISO/IEC 30134-9:2022 *Information technology — Data centres key performance indicators Part 9: Water usage effectiveness*. WUE is calculated using annual water use in litres divided by annual IT energy use in kilowatt-hours (kWh). There are a range of derivatives that can be included in the WUE calculation to measure impact and strengthen transparency. Derivatives include Energy Water Intensity Factor for measuring water used in energy production, or regional water stress factors. WUE changes over time, based on building design, operational capacity, data centre load, and climate. While PUE is widely reported, there is less reporting of WUE.⁶ WUE can also be attributed to operational and design calculations, much like PUE.

Consultation questions on using innovative, efficient, and sustainable solutions to minimise water use

- Should data centres be required to meet performance metrics or ratings for water usage and efficiency in data centres?
- 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)?
 - Should a minimum NABERS data centre rating, based on WUE and agreed by states and territories, be required once a facility is operational?

⁶ Water Services Association of Australia, 2025, [Data Centres and Water Use in Australia](#).

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

Impose no net costs on consumers and communities

The Australian Government will ensure no net costs are imposed on consumers and communities from the development of large data centres as part of minimum requirements including:

- Requiring data centres to manage grid-connected energy consumption during peak periods, to reduce costs across a network
- Promoting fair and equitable pricing of power purchase agreements
- Data centres covering transmission costs, network and other utility services costs so that prices do not increase for other energy and water users as a result of data centre activity.

While major data centre projects can support economic growth and digital capability, they can also create additional costs for the wider community if their increased demand for electricity, water, land, transport and supporting infrastructure is not proactively managed. The “no net costs” principle is intended to make sure developers are responsible for alleviating pressures their projects create, rather than those costs being borne by households, other businesses or governments through higher prices, subsidies or reduced service reliability. To achieve this, the AI standards could require data centres to demonstrate how they will pay for required infrastructure, manage energy and water demand, avoid adding to local and system constraints, and provide enduring benefits to hosting communities, before they are developed.

Consultation questions on imposing no net costs on consumers and communities

- 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?
- What are the barriers to data centres investing in sufficient new renewable energy and storage capacity to mitigate impacts to wholesale electricity costs?
- What are the barriers to data centres investing in initiatives that would mitigate impacts to other water users, such as using recycled water?
- 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?
- What barriers would prevent data centres from adopting demand flexibility measures to support the wider electricity system?
- What tools could be used by governments to require data centres to adopt demand flexibility?
- Aside from infrastructure and network augmentation costs attributable to their energy and water demand, are there other significant potential costs from data centre activity, and how might accountability be provided for managing these?

Engage meaningfully with local communities and councils

Mandatory standards will include:

- Engaging meaningfully with communities, First Nations peoples and councils to make sure communities can participate in planning and assessment processes
- Drawing on local suppliers and content where possible
- Be located away from sensitive community areas where impacts cannot be appropriately avoided or managed.

The standards aim to ensure that large data centres do not significantly affect nearby communities through construction impacts, traffic, noise and concerns about energy and water use.

Data centres typically require large plots of land – with an increasing number of large data centres seeking to develop on significant parcels of land that can accommodate staged campus-style developments. This competes with other key land uses such as housing and agricultural production.

Reliable, high-capacity fibre connectivity is also critical for data centres to function, and the connectivity requirements may exceed the capacity of existing telecommunications networks, requiring major network upgrades.

For many kinds of services enabled by data centres, low latency (that is, the time it takes for a request to receive a response) and proximity to end users is relevant to data centre performance. This, alongside access to an infrastructure bundle (land, energy, water and critically, high-capacity telecommunications) explains the tendency for data centres to be clustered near population centres. By contrast, AI training and certain other compute-heavy “deep thinking” AI applications are less constrained by the need to communicate with end users or be in proximity to population centres, provided they have reliable energy, telecommunications, and water connectivity.

Decisions around location and siting of data centres are made through state planning and approval processes. Siting decisions must consider customer needs, construction costs, workforce availability, supporting infrastructure, high-capacity connectivity, energy and water supply, the timing of grid connections, and alternative uses of the land – but they also need to consider input from local communities and industries (e.g. irrigated agriculture), First Nations peoples, and councils to ensure data centres are built in the most appropriate locations.

For data centres hosting AI training, once a location is selected and facilities are constructed, they are difficult and costly to relocate. As frontier AI models continue to increase in scale, the infrastructure required to support them also needs to grow. Early decisions will determine where future AI training activity, capability and associated industries are anchored and how they might expand.

Consultation questions on meaningful engagement with communities and councils

- What does best practice community engagement look like for data centres, including with nearby businesses?
- What role should the Commonwealth’s mandatory requirements play in relation to location and community engagement? For example, the Commonwealth could promote transparency around where new data centres are being developed or plans for community engagement.
- How can communities and industry work together to ensure data centres deliver lasting community benefits? How can upfront commitments be reflected in state and territory planning processes or community engagement?
- Should data centres be required to locate a minimum distance away from sensitive sites such as schools or residential homes? If so, what should the mandatory minimum distance be? Which level of government is best placed to issue and administer location requirements?
- How important is proximity to population centres for data centre operators given improvements in connectivity and advances in fibre optics?
- How should competing land uses be managed and prioritised, for example where land is also suitable for housing or agriculture?

- 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?
- What are the expected domestic and international telecommunications connectivity requirements for data centres, and what are the challenges in upgrading existing or deploying new networks?
- Should data centre proponents be required to explore options with government and industry to uplift community telecommunications connectivity alongside their own investment?

Contribute to building skills and training opportunities

Mandatory standards will include:

- Demonstrating support for training of workers involved in the construction and operation of data centres.

Large-scale data centre projects depend on occupations that are already in short supply across the Australian economy. Demand for occupations such as electricians, engineers, heating, ventilation and air conditioning (HVAC) technicians, cyber security specialists, Information and Communication Technology (ICT) specialists and other technical workers are expected to increase as investment grows. This could draw labour away from other sectors that are critical to Australia's prosperity and national security, such as housing, energy, telecommunications, and defence. It may also weaken public confidence in data centre development if local workforce needs are overlooked and opportunities to create jobs, apprenticeships and skills pathways for Australian workers are not realised. To address these risks, clear requirements are needed to ensure major digital infrastructure projects do not merely rely on a limited pool of skilled workers but make a meaningful contribution to expanding Australia's workforce capability and capacity, including boosting representation of diverse and underrepresented cohorts in skilled workforces.

A requirement for data centre operators to support skills and training opportunities could draw on other Australian and international policy approaches to skills and training. For example, the Australian Skills Guarantee and Victoria's Major Projects Skills Guarantee currently require minimum proportions of labour hours on eligible government projects to be undertaken by apprentices, trainees and cadets. There is also precedent for this internationally: Amazon Web Services has partnered with Virginia's community college network to deliver training programs for essential occupations, while Google has invested in expanding electrical apprenticeship training capacity to support the workforce needed for digital infrastructure.

Consultation questions on building skills and training

- 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?
- What broader workforce development obligations should apply to data centre operators during ongoing operations?

Conditions for AI training

Australia's security and safety will benefit from AI training

AI models present safety and security risks that governments and industry must identify, understand and mitigate. AI is also a strategic capability that can play a role in strengthening Australia's security, resilience and technological sovereignty. Hosting cutting-edge AI technologies domestically will help Australia capture the benefits of AI while deepening partnerships and improving our ability to understand, influence, manage and respond to emerging risks. This includes enabling risks to be addressed during the early stages of AI model design, including the development and training phases.

The government has established the Australian AI Safety Institute, which has commenced frontier model testing, along with early research priorities on model alignment and multi agent risk.

Further, the government has announced its AI consumer safety and regulatory priorities including A Digital Duty of Care, strengthening privacy protections, regulation of Automated Decision Making within federal agencies, AI safety in the workplace, and examining consumer risks including agentic commerce and retail surveillance pricing.

The Australian Government wants to attract AI investment that supports Australia's values, the safe development, deployment and use of models in Australia, and our capacity to address emerging frontier AI risks and harms, particularly for vulnerable cohorts. With this in mind, frontier labs who are granted authorisation to undertake large scale AI training in Australia will be required to adhere to specific, minimum-security and safety expectations, such as by disclosing defined reportable AI incidents to relevant Australian authorities. These requirements will support Australia's visibility of AI risks and harms helping to safeguard Australia's interests, people and infrastructure.

Australia has strong existing, largely technology-neutral legal frameworks, including sector-specific guidance and standards, that can apply to AI and other emerging technologies. As Australia seeks to capture the AI opportunity, we want to minimise excessive regulatory burden on data centre operators and frontier labs by leveraging existing frameworks and policy levers whenever possible, such as the SOCI Act and the FATA.

Consultation questions on security, safety and transparency

- What international approaches, including regulatory and non-regulatory frameworks, should inform the type of safety, transparency or security conditions Australia applies to developers of frontier AI models?
- How should safety and security conditions for AI training be designed to keep pace with rapid technological change, while providing sufficient legal certainty for investors and operators?

- What information should AI developers be required to share with the Australian Government and how? For example, AI developers could be:
 - legally obliged to proactively provide the Australian Government;
 - subject to an obligation to provide to the Australian Government on request; or
 - subject to an obligation to publish in a specified form.
- What safeguards should apply?

Invest in local capability, skills, research and innovation

Australia cannot simply be a destination for infrastructure investment – we must and will leverage these advantages and translate them into long-term benefits for the Australian economy and people. Investment in Australia's AI ecosystem will be crucial to maximising the spillover benefits of hosting AI training in Australia. These spillovers could include increased research and development activity, developing and attracting world-class AI talent, creating new pathways for learners and workers to upskill in digital and AI-related roles, and the creation and commercialisation of Australian-owned intellectual property. These benefits can be amplified by improved and equitable access to compute capacity and the capabilities needed to use it, including models, storage, networking, and technical support, alongside other research and innovation contributions. Access should support Australian start-ups, innovative small businesses, researchers, research institutions, vocation education and training (VET) system stakeholders, and not-for-profit organisations, and be delivered through nationally consistent mechanisms that balance support for Australia's research and innovation system with proportionate and practical obligations for industry.

Frontier AI developers are uniquely positioned to contribute to local research capability, technical talent development, university, TAFE and registered training organisation partnerships, and innovation ecosystems that cannot be fostered through investment in AI infrastructure alone. Investing in future industries and research and innovation, will help Australia build an enduring research base, strengthen local capability and capture more of the intellectual property and commercial value arising from AI training. Without mechanisms to encourage onshore research activity and investment in the broader research and innovation ecosystem, Australia risks hosting AI infrastructure and training activity while the associated research outputs, model development, intellectual property and commercial returns accrue offshore.

Consultation questions on investing in local capability, skills, research and innovation

- What contributions would add the greatest value to Australia's future industries and research and innovation system? For example: sourcing local AI solutions, access to compute capacity, locally based research and engineering staff, investing in Australian research presence, university and public research organisation partnerships, investing in the VET system, and commercialisation activity.

- What mechanisms should the government consider for securing these contributions? For example: negotiated in-kind contributions, a compute reservation scheme, a public-interest research payment, or other approaches.
- Are frontier AI developers best placed to make contributions in these areas? Should other actors be considered – for example, hyperscalers and neocloud providers.
- If frontier AI developers or other actors reserved some compute for Australian research, innovation and public-interest purposes, what conditions or terms should apply?
- What indicators could best demonstrate contribution to Australian research, innovation and public interest purposes? For example: locally based research and engineering staff, university and public research organisation partnerships, research outputs and commercialisation activity, or other approaches.
- How should frontier AI developers measurably support skills, training and education opportunities beyond what is required of data centre operators (as outlined earlier in this paper) to create a sustainable workforce and contribute to the required workforce adaptations?

Support Australian writers, musicians, artists and journalists, and others working in the creative and media sectors, to thrive

Facilitating AI training in Australia is not just critical to support our national and economic security and sovereignty. It's also a key element of the government's plan to get a better deal for our creative and media sectors.

At present, frontier AI models are being trained on content around the world, under legal frameworks developed overseas and with limited visibility or payment for Australians. This is not a good outcome for our writers, musicians, artists, journalists and other creators.

The government is committed to ensuring Australian creators are able to exercise control and receive payment. To do so, Australia needs to help shape AI development and incentivise AI training in accordance with our values.

Copyright plays a critical role in supporting Australia's creative, cultural and media sectors to thrive. How copyright treats AI training, provides regulatory certainty for AI companies to invest in Australia and includes strong protections for creators and rights holders will be a key part of the AI standards.

The Attorney-General has policy responsibility for copyright and will continue to lead stakeholder consultation on options to incentivise AI training while providing strong copyright protections.

Australia's AI standards will provide a simple and consistent regulatory approach to increase clarity, speed up approvals and streamline compliance while promoting investment

The AI standards will be designed to incentivise investment while managing any costs that occur alongside investment. Investment should demonstrate that it is adding overall value to Australia and resulting in real benefits for Australians. At the same time, the costs of complying with mandatory requirements cannot outweigh the benefits the AI standards promote. If obligations are too onerous or uncertain, frontier AI firms and large data centre developers may substantially reduce their investments or direct investment elsewhere, thereby minimising the expected benefits that come with investment. The government will seek to balance these priorities, by avoiding duplicating state and territory regulatory approval processes wherever possible while requiring large data centres and AI training facilities to meet the Commonwealth's baseline requirements in line with Australians' expectations.

Consultation questions on providing a simple, consistent national framework

- The Commonwealth proposes reporting and transparency requirements at a federal level for large data centres, so that impacts and benefits to communities are transparent and trusted. Where might this proposed approach interact with existing legislation? Please note if these are Commonwealth, state and territory, or local government legislation.
- What additional regulatory reforms or incentives would encourage frontier AI training in Australia?

How to make a submission

AI will influence many aspects of Australia's future. We want to hear from a wide range of voices. This will help to ensure our standards meet community expectations and support broad economic and social benefits.

We welcome contributions from anyone with an interest in Australia's AI future.

This includes:

- members of the public
- industry peak bodies
- Australian businesses
- technology developers and providers
- researchers, academics and educational institutions
- workers and professional associations
- consumer and community organisations.

Complete the online submission form to share your views on AI infrastructure and AI training in Australia. Submissions close at 5 pm AEDT on Friday 9 October 2026.

Next steps

This consultation is one of several ways the government is gathering feedback. Responses received through the submission form will be considered alongside targeted stakeholder engagement and ongoing work with Commonwealth, state and territory governments. Together, this feedback will help inform the development of Australia's AI Standards.

Note: We may use artificial intelligence (AI) tools to summarise and compare submissions to support policy work. This includes using AI tools to analyse sentiment to help us understand patterns and trends in submissions. We only use AI where it is appropriate for the task and the information involved. For more information refer to our [AI transparency statement](#).

Key terms

Data centre: A physical building or group of buildings that collects, distributes, processes or stores electronic data.⁷ Data centres:

- enable cloud computing, which underpins applications ranging from email to enterprise software
- support AI inference, AI training and machine learning processes, which require significant computational resources
- host critical services such as banking, healthcare, education, and government platforms
- ensure business continuity through data backup, disaster recovery, and cybersecurity.

Data centres vary in type, scale and function. They are classified according to purpose and operating model, though facilities can often be a mix of types serving multiple purposes for different tenants. Scale, measured by IT load capacity, is the characteristic most relevant to resource consumption, infrastructure requirements, and regulatory thresholds.

Large data centre: A data centre which has a design capacity of 30MW or greater.

Small data centre: A data centre which has a design capacity of below 30MW.

Data centre owner: For the purposes of the AI standards, a data centre owner captures all entities who are establishing or operating a large data centre in Australia. An owner of a data centre may include a person with a freehold, leasehold, or equitable interest in the land where a large data centre is located. Where a data centre owner is multiple entities, the owner will be those entities jointly.

Data centre user: A person who uses compute supplied by a data centre.

Compute: Short for “computational power”. A measure of the capacity to perform calculations, run software or process data. AI training and inference require compute.

AI training: AI training builds an AI model using large volumes of data and significant computing power. It includes pre-training, which establishes the model’s core capabilities, and post-training, which refines how it performs. In simple terms, training is how AI is built.

Inference: When a trained AI model is used to generate outputs such as answers, predictions or recommendations. It applies what the model has learned from new inputs without changing its underlying structure. In simple terms, inference is when the AI is run.

Frontier AI: Refers to the most advanced artificial intelligence models available at any given time.

⁷ NSW Government Department of Planning, Housing and Infrastructure (DPHI), 2025, [*State significant development warehouses and data centres*](#).