

16 September 2026

Ms Jo Briskey MP
Chair, Joint Select Committee on Artificial Intelligence
PO Box 6100
Parliament House
Canberra ACT 2600

Via: ai.joint@aph.gov.au

Dear Ms Briskey

RE: Artificial intelligence

The Green Building Council of Australia (GBCA) welcomes the opportunity to provide input to the inquiry into artificial intelligence. We note the Australian Government is taking a series of actions to ensure the financial benefits presented by the data centre boom is balanced with the impacts on the environment and our communities. We commend the approach adopted to date.

GBCA recognises that artificial intelligence is emerging as a key enabler of productivity, innovation and economic growth. Data centres are the backbone infrastructure that underpins AI, providing the computational capacity required to support increasingly data-intensive applications across the economy. As AI adoption accelerates, demand for data centres is expected to grow significantly, alongside broader trends in cloud computing and digitalisation.

Recognising that this is an emerging but fast-growing sector of investment and development in the built environment, GBCA has actively engaged in the consultation process across all levels of governments.

Our Sustainable Data Centres program was launched to explore what best practice sustainability outcomes in the design, construction, and operation of data centres in Australia could look like. It is critical that we set the path for ensuring that these essential facilities are not only resilient and efficient, but also responsibly address energy, water, nature, and community impact. The Sustainable Data Centres program is being delivered in partnership with Data Centres Australia and GBCA members, reflecting cross-sector collaboration across the industry.

This submission is in response to the terms of reference, and makes a case that:

1. The compute infrastructure required to support AI, including data centres and their associated resource use, is an important consideration.
2. The Terms of Reference should be expanded to explicitly consider sustainability. This means explicitly consider AI infrastructure sustainability, including minimum standards for data centres.

3. AI has a potential role in simplifying the way industry interacts with and understands regulations.
4. AI is an opportunity for not-for-profits like GBCA to increase productivity.

1. Data Centres

At any meaningful scale, AI requires computing infrastructure, and today that infrastructure is overwhelmingly provided through data centres. AI does not necessarily require a data centre every time it is used, but the modern AI ecosystem depends on data centres for training, deployment, storage, model updates and large-scale inference.

For this reason, consideration of the risks and harms arising from AI should be paired with consideration of the infrastructure required to support it. Data centres are not incidental to AI deployment; they are the physical assets through which many of AI's energy, water, land use, emissions and community impacts will be felt.

Data centres are an important part of the digital economy. The case for a stronger regulatory approach rests on their potential impacts on infrastructure, communities and the environment. Their sustainability is also an important built environment issue and directly aligns with GBCA's interests.

Land use planning should proactively identify suitable locations for data centres so they are sited where energy, water and communications infrastructure can be accessed efficiently, where complementary industries can co-locate, and where conflicts with surrounding uses can be minimised. This form of planning is justified because data centres provide economic benefits but also create unconventional infrastructure demands and local impacts.

There is currently no sector-specific best practice framework for sustainable data centre design, construction and operation in Australia. International frameworks are useful but do not fully reflect Australian conditions, including climate, grid characteristics and regulatory context. GBCA has established an industry working group to explore the role Green Star could play in supporting sustainable data centre delivery, alongside state and federal action on planning and minimum standards.

What the goal should be

The Federal Government Expectations of data centres and AI infrastructure developers published on 23 March 2026¹ provide a good basis for assessing the effectiveness of regulation in achieving them. The summarised expectations are:

- Prioritising Australia's national interest - work for the benefit of the Australian economy, people and their local communities, minimising adverse effects on local communities wherever possible
- Supporting Australia's energy transition - not place upward pressure on energy prices and should make a positive contribution to Australia's energy transition
- Sustainable and efficient water usage - mitigate the impacts of water disruptions, drought and climate change

¹ [Expectations of data centres and AI infrastructure developers | Department of Industry Science and Resources](#)

- Investment in Australian skills and workforce - help build a pipeline of skilled workers to support the construction and operation of data centres
- Research, innovation and local capability - contribute to building local technical and innovation capability and invest in Australian supply chains

2. Sustainability should be a consideration

The terms of reference should explicitly consider sustainability alongside resilience, productivity growth, economic competitiveness, living standards, data sovereignty, safety and wellbeing. For data centres, key sustainability considerations include energy use, water use and local environmental impacts.

Energy Transition

Data centres have high electricity demand. A single large data centre can require as much electricity as thousands of homes, vastly more than a typical commercial building. This does not need to undermine emissions targets if data centres are supplied by 100 per cent renewable energy. Policy settings should therefore:

- Allow capital investment into renewable energy ahead of predicted electricity demand increases
- Mandate data centres to invest in relevant infrastructure and provide their own renewable energy where possible
- Make enabling and speedy planning decisions so that renewable energy deployment can stay ahead of demand growth
- Encourage data centres to provide demand response, deploy storage, and meet grid-support requirements
- Require energy efficiency standards
- Put in place policies to address embodied emissions across construction and equipment lifecycles
- Support other uses to reduce energy consumption where more energy efficient options exist.

Water Usage

Water is emerging as a strategic planning and infrastructure consideration for data centre development in Australia. Data centres can have high water requirements associated with cooling systems. There are options such as closed-loop systems that use less water, and alternative technology for cooling. Water availability and impacts are very location dependent and could be regulated at a water catchment level. There is also an opportunity to investigate increased use of recycled water and ensure data centres contribute the capital required to expand water systems to accommodate increased demand.

The National Australian Built Environment Rating Scheme (NABERS) has secured funding to develop a NABERS Water tool for data centres. It is essential that this work, along with the further refinement of the NABERS Energy for Data Centres tool, be supported to encourage uptake of this essential industry benchmark.

Local Impacts

Cities are first and foremost labour markets, a place where large numbers of workers and jobs are efficiently matched. Workers are attracted to cities for the range of jobs available, and

employers for the range of workers. This is one of the reasons efficient transport and density is so important to shape the size and efficiency of the labour market.

Data centre location preferences are driven by the right combination of enabling zoning (usually industrial) and capacity to connect to high voltage power grids and fibre-optic networks. Data centres are a low employment land use. City fringe industrial land can often be cheaper than residential zoned land in a similar location, as residential zoning struggles to keep up with demand. In this way the planning system can preference data centres in these locations.

This combination means data centres are attracted to urban environments for the infrastructure rather than the labour market. Where a data centre is close to residential neighbourhoods it can lead to adverse effects on the local community such as noise and air pollution from diesel backup generators as well as other impacts.²

The opportunity is to identify locations where data centres can fund and access connections to power and communications networks, while reducing conflict with nearby residential development and avoiding land better suited to housing, particularly given current shortages and affordability pressures.

This would allow city planners to capture the benefits of data centres while reducing costs borne by the community. Allocating land in this way could also support complementary industries that use data centre outputs, such as waste heat, or provide sustainable inputs, such as recycled water. These industries may otherwise be unable to afford well-located urban land.

Addressing sustainability concerns: The role of planning system and land use regulation

A coordinated regulatory framework is required to ensure the rapid growth of data centres supports Australia's economic, energy and sustainability goals. This submission identifies three components of that framework where federal leadership would be valuable: planning and land use regulation, strategic planning and infrastructure funding and finance tools, and minimum performance standards.

1. *Planning system and land use regulation*
2. *Strategic Planning and Infrastructure Funding and Finance tools*
3. *Minimum performance standards*

Land use regulation has a central role in managing the externalities associated with data centres, which have distinct locational and infrastructure needs. The planning system can help identify and secure appropriate locations for data centre development, both proactively through strategic planning and reactively through assessment of individual proposals. This is important to ensure data centres are located where they can access power and communications infrastructure efficiently while minimising conflicts with surrounding land uses.

² [Communities Are Raising Noise Pollution Concerns About Data Centers | Article | EESI](#)

Land use controls can also be used to place conditions on development so that impacts such as noise, waste, visual intrusion and other amenity effects are managed. The planning framework can also encourage nature-positive outcomes and support the delivery of enabling infrastructure needed for sustainable operation. These tools allow governments to balance the economic benefits of data centres with the need to protect communities, the environment and the efficient functioning of surrounding urban areas. Enabling infrastructure for sustainable operation can include:

- Transmission and firming for renewable energy generation
- Batteries
- Waste heat utilisation
- Recycled water
- DC power connections

Strategic Planning and Infrastructure Funding and Finance tools

Strategic planning and infrastructure funding tools have an important role in ensuring that land and enabling infrastructure are available for data centre development in the right locations. Cities routinely allocate land in advance for different uses, and data centres should be treated in the same way. If they are not planned for explicitly, they can end up competing with housing and other industrial uses for scarce well-located land. This is particularly important in metropolitan labour markets, where zoning and planning systems should reserve suitable space for infrastructure uses such as data centres, especially on metropolitan edges where access to land and major infrastructure corridors can be better aligned.

Strategic planning also intersects with energy system investment. Data centres could become anchor loads that help underwrite renewable generation within Renewable Energy Zones, but only where enabling infrastructure is delivered in step with demand. In practice, this means more timely investment in transmission, firming capacity such as battery storage, and streamlined connection processes so that renewable supply can keep pace with growth in electricity demand. The current wave of data centre investment therefore presents a window of opportunity to address existing system weaknesses while supporting a more coordinated and resilient transition to a low-emissions energy system.

Minimum performance standards

Minimum standards should establish the baseline social licence to operate for data centres. They should set the floor every facility must meet to manage system risks, including energy demand, water use, emissions, resilience and community impacts. For data centres in Australia, risks include:

- Energy demand, including unpredictable demand spikes and sudden drops straining grids
- Emissions trajectory and the risk to net zero targets if energy demand is met by new or retained fossil fuels.
- Water scarcity with water demand creating scarcity or increasing infrastructure costs for residential water users
- Noise and air pollution close to other land users such as residential homes

An important part of establishing minimum standards is transparency, measurement and reporting.

Data should be publicly reported, comparable across facilities, and independently verified to enable effective oversight and system planning. This will create a clear evidence base for policy, improve market accountability, and ensure cumulative impacts are visible.

There should be a structured process to set minimum standards. The process should bring together technical experts, industry, planners and community stakeholders. Standards should be evidence-based, technology-neutral, and calibrated to the Australian system.

3. Simplifying the way industry interacts with and understands regulations

The National Construction Code has become increasingly complex and lengthy over successive revisions, creating challenges for consistent interpretation, implementation and compliance across the industry. These revisions have dramatically improved the code and the outcomes for households.

GBCA has consistently argued that the NCC has become complex and should be streamlined, modernised and made easier to use while maintaining strong sustainability and safety outcomes. An AI agent could help people working with the code identify the provisions relevant to their task and apply complex regulation more consistently. The same principle could apply to many other regulatory systems.

4. Opportunity for not-for-profits like GBCA to increase productivity

AI presents a significant opportunity for not-for-profit organisations such as the Green Building Council of Australia (GBCA) to improve productivity, increase organisational capacity and deliver greater value to members and stakeholders without a commensurate increase in resources.

GBCA is upskilling staff in the use of AI and is using AI to improve the user experience of our tools. Green Star is Australia's most widely used sustainability rating system for the design, construction and performance of buildings – including social infrastructure – fitouts and communities.

For additional clarification of the points made above, please do not hesitate to contact Corwin Wallens, Policy Manager, via email at corwin.wallens@gbca.org.au.

Yours sincerely

A handwritten signature in dark ink, appearing to read 'D. Rooney'.

Davina Rooney
Chief Executive
Green Building Council of Australia

About the GBCA

GBCA's purpose is to lead the sustainable transformation of the built environment. We do this primarily through our core functions:

- We rate the sustainability of buildings, fitouts and communities through Australia's largest national, voluntary, holistic rating system – Green Star.
- We educate industry, government practitioners and decision-makers, and promote green building programs, technologies, design practices and operations.
- We advocate policies and programs that support our vision and purpose.
- We collaborate with our members and other stakeholders to achieve our mission and strategic objectives.