

8 May 2026

Data Centre Consultation Team
Infrastructure NSW
NSW Government

Via email: cg@infrastructure.nsw.gov.au

Dear Data Centre Consultation Team

RE: NSW Data Centre Consultation Paper

The Green Building Council of Australia (GBCA) welcomes the opportunity to provide a submission on the NSW Data Centre Consultation Paper (the consultation paper). We support designing a transparent policy framework that facilitates data centre investment in NSW while managing risks for the community.

GBCA recognises that demand for data centres is increasing both in Australia and the Asia Pacific region. This is mainly due to increasing data generation and storage demand, growing adoption of cloud computing services, and advancements in technology (including Artificial Intelligence). In 2024, Australia was a top investment location for data centres with \$6.7 billion USD¹, second only to the United States. The Investment Delivery Authority's (IDA) projects, which are collectively worth AUD \$51.9 billion, show the continued demand for data centres.

Data Centres are fast becoming the backbone of the digital economy. They enable connectivity, storage and processing of data, particularly in Artificial Intelligence (AI), healthcare and finance. However, their potential impacts on infrastructure and the environment makes it critical that governments carefully the regulatory approach to data centres.

The five principles in the consultation paper, as well as the five national data centre expectations published by the Australian Government, provide a good base to develop regulatory approaches to manage data centres. The key step will be translating the principles into standards, including for sustainability, that can be measured and enforced. GBCA has a strong contribution to make in this process through work we are currently leading in collaboration with industry and government stakeholders, both in Australia and internationally, to develop best practice standards.

NSW sustainability

NSW has great examples of promoting sustainability through:

- Setting emissions reduction targets and establishing an independent Net Zero Commission to monitor progress
- A major policy to transition NSW to clean, reliable and affordable energy
- Circular economy policy
- Non-residential development sustainability requirements.

¹ <https://content.knightfrank.com/research/2982/documents/en/data-centres-global-report-2025-12054.pdf>

It is likely that enabling and managing data centre growth will require a mix of:

- Land use planning to manage externalities
- Minimum building standards
- Best practice frameworks and leadership examples
- Enabling infrastructure provision (such as grid-provided renewable energy)
- Consideration of embodied carbon and waste reduction in the supply chain.

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 advocate policies and programs that support our vision and purpose.
- 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 collaborate with our members and other stakeholders to achieve our mission and strategic objectives.

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. Green Star aims to transform the built environment by:

- reducing the impact of climate change
- enhancing our health and quality of life
- restoring and protecting our planet's biodiversity and ecosystems
- driving resilient outcomes for buildings, fitouts, and communities
- supporting and rewarding the development and use of sustainable products and materials
- contributing to market transformation and a sustainable economy.

Data centres – define and deliver best practice

At the heart of our digital economy, data centres are critical to Australia's future – but their environmental and social impact is growing just as fast as their demand. Recognising that this is an emerging but fast-growing sector of investment and development in the built environment, GBCA is partnering with Data Centres Australia, as we launch our Sustainable Data Centres program² 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 GBCA is a founding member of the Greening AI Data Centres Coalition (GADCC)³ — a new global initiative to set clear, credible standards for sustainable data centre development as AI-driven demand for computing power accelerates worldwide.

The GADCC will develop transparent benchmarks that define what “green” genuinely means for data centres, helping investors, operators, communities and policymakers cut through greenwashing and

² <https://new.gbca.org.au/green-star/green-star-strategy/sustainable-data-centres/>

³ <https://new.gbca.org.au/news/gbca-media-releases/worlds-leading-building-and-climate-organisations-launch-coalition-to-green-ai-data-centres/>

direct capital toward facilities that reduce emissions while protecting water resources, energy systems and local communities.

GBCA's vision is for a positive, resilient and responsible digital built environment. We aim to deliver on this vision through the following actions:

Bring industry together

Establish an industry working group of key stakeholders to advise on the development of resources and guidance, ensuring the future digital built environment is fit for purpose.

Deliver an issues paper

Expand industry knowledge on sustainable data centre design, construction, and operation through the development of an issues paper and working with pilot projects. This will be supported by targeted education, media engagement, and guidance documents.

Develop best practice standards

Develop guidance for the design, construction, and operation of sustainable data centres, driving innovation and value for investors, operators, and communities, and enabling Green Star certification.

Advocate for leadership

Deliver a clear set of policy positions for government to implement to drive sustainable digital infrastructure in our country.

Collaborate for impact

Collaborate with initiatives like Climate Bonds Initiative, Australian Sustainable Finance Institute, Global Real Estate Sustainability Benchmark (GRESB), and others to ensure sustainable finance flows toward high-impact digital infrastructure projects that meet our climate and resilience goals.

GBCA sees a role for the Green Star rating system in ensuring that data centres have an option to pursue and demonstrate sustainable solutions to their potential environmental and wellbeing impacts. This would be alongside state and federal regulatory action such as planning rules and minimum standards.

The important step will be translating principles into the rules and approaches that will deliver the intent. GBCA provides the following comments regarding the principles detailed in the consultation paper:

Principle 1: Investment in data centres should enable a wider technology ecosystem that drives job creation and propels economic growth

Workforce considerations such as whether the data centre sector provides good quality employment, and especially the extent that local communities can benefit from training and experience are important. The different stages of a project are likely to require different skills. Data centre demand should be factored into existing skills training initiatives with a view to adding more places for relevant trades if demanded.

The key question to consider here is how can data centre development best support local businesses and economic activity? For the build and operation this can be through creating skills partnerships with TAFEs and universities, especially where multiple projects are expected within a wider local job market. For the planning system this could be enabling zoning and infrastructure for clustered, mixed-use precincts. This could allow co-location of technology firms and research and development facilities.

Another avenue is asking how the construction can create employment opportunities for disadvantaged communities and groups and support small and medium sized enterprises to diversify the supply chain.

This can be measured through looking at how much of the building's total contract value has been directed to generate employment opportunities for disadvantaged and underrepresented groups.

Microsoft has announced that in Australia, by the end of 2029, the company will invest A\$25 billion (USD 18 billion) in new digital infrastructure, alongside new commitments to national cyber defence capability and workforce skilling programs. Their National AI Plan references capturing the economic opportunities of this transformative technology, [Microsoft will train three million Australians](#) with workforce-ready AI skills by 2028.⁴

Principle 2: Data centre developers and operators need to fund their infrastructure requirements, in addition to what is already planned and funded, so as to not increase prices for households

Data centres should fully fund their infrastructure requirements, and this can be achieved through a combination of upfront contributions, ongoing payment for services and bespoke agreements. Ensuring the mechanisms exist for data centre electricity demand to translate to renewable supply ahead of time will be important for ensuring renewable electricity and climate commitments are met at a state and national level. This is required to ensure data centre demand leads to additional renewable supply rather than procuring existing renewable energy and displacing other users to non-renewable generation.

Where there are economies of scale in infrastructure provision, if appropriate funding and financing is in place, increased demand should not increase costs to other network users. If networks cannot recover costs through charges, and state funding is used, then this will limit data centre growth, constrain state budgets and limit other investments.

GBCA supports the consultation paper finding that cost recovery regimes should be reviewed at the respective national and state levels to ensure upgrades required for data centre connections are paid for by data centres.

Principle 3: Data centres need to be efficient and make sustainable use of our energy and water systems as well as the environment

Data centres have high electricity demand. A single large data centre can require as much electricity as thousands of homes. This is vastly more than a typical commercial building. This does not have to have negative implications for emissions targets. Data centres can be powered through 100% renewable energy. This means policy settings need to be in place to:

- Allow capital investment into renewable energy ahead of predicted electricity demand increases
- Encourage data centres to invest in relevant infrastructure and provide their own renewable energy where possible, and to the extent possible noting that this can assist with the NSW Renewable Energy transition
- 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 very high 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

⁴ [Microsoft deepens commitment to Australia with A\\$25 billion investment in AI infrastructure, security, and skills - Source Asia](#)

- Detailed and ongoing consideration by Infrastructure NSW and other parts of the NSW government to set up the frameworks for policy in these areas, as they are complex and evolving.

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 dependant and could be regulated at a water catchment level.

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, is supported and appropriately resourced to encourage uptake of this essential industry benchmark.

A NABERS rating for data centres provides an indication of the operational energy efficiency and environmental impact of a data centre. NABERS will likely need more stable and targeted funding and resourcing as data centre ratings continue to scale up. Additional funding could support assessor capacity and consistency, as well as methodology evolution. As ratings are used as a regulatory instrument, the bar for transparency, governance and dispute resolution will rise.

NABERS covers operational energy and water performance. The Green Star rating tool in development will most likely include whole-of-life sustainability, resilience, community and supply chain outcomes.

GBCA supports the inclusion of circular economy considerations. As the consultation paper notes, the NSW Government should collaborate with industry to investigate measures to drive better circular economy, carbon, and broader sustainability outcomes for data centres.

Embodied Carbon

Embodied carbon is an important component of the built environment, including data centres. GBCA recommends embodied carbon within this principle as an important impact of data centres.

Data centres are large users of copper, they also use steel, concrete and aluminium. There are already examples where those commissioning data centres have partnered with companies to source lower-carbon copper⁵ and are investing in next-generation carbon-free energy technology⁶.

Refrigerant choice and use

Data centres generate large amounts of heat in operation, so cooling is critical to maintain performance. GBCA has developed the discussion paper *Freeze Frame: Refrigerants as long-term building infrastructure*⁷ in collaboration with the Australian Institute of Refrigeration, Air Conditioning and Heating (AIRAH). The paper addresses the critical role refrigerants play in modern buildings and illuminates the challenges that the built environment must confront to mitigate environmental and health risks associated with refrigerant use.

Data centre developers and policy makers in this area should:

- Reduce refrigerant use through passive design and energy efficiency solutions.

⁵ <https://www.riotinto.com/en/news/releases/2026/rio-tinto-and-amazon-web-services-collaborate-to-bring-low-carbon-nuton-copper-to-u-s--data-centres>

⁶ <https://international.austrade.gov.au/en/news-and-analysis/news/australia-apacs-rising-regional-hub-for-green-data-centres>

⁷ <https://gbca-web.s3.amazonaws.com/media/documents/freeze-frame-discussion-paper-nov-2025.pdf>

- Demand and provide low-impact refrigerant systems unaffected by phase-downs and PFAS pollution.
- Design buildings, plant rooms and systems to allow best practice leak mitigation and easy, low-disruption future upgrades.

Principle 4: Data centre approval and compliance must be based on reliable and transparent data

Governance transparency and accountability are important at the planning, design, delivery and operational stages of a project. Reporting frameworks and standards should form part of operational transparency and accountability. Reporting can cover activities including time and source of power use, water use and disposal, and emissions.

Reliable and transparent data is the cornerstone of supporting all the above.

Principle 5: Regulatory and planning settings must take account of differences in the size and location of data centres, and community needs

GBCA agrees that flexibility should not reduce standards or transparency. Many of the impacts of data centres are felt at, and must be managed at, local and community level.

The size of a data centre is likely to determine the level of some impacts. A larger data centre will draw more power and create more noise. Regulatory and planning settings should address impacts and therefore may be different depending on the size and location of data centres. Minimising environmental impacts and moving to a net positive environmental impact will also look different depending on the location of a data centre.

Allowing greater flexibility for data centres outside the greater Sydney region can support regional economic development and reduce pressure on heavily constrained urban systems. This flexibility should be enabling the supporting infrastructure that both attracts data centres but also effectively manages impacts.

Next steps

GBCA recommends that once the principles are finalised and adopted, important actions for the NSW Government will include:

- Embedding minimum efficiency and reporting requirements in planning instruments
- Requiring NABERS and Green Star pathways for large facilities
- Ensuring infrastructure cost recovery rules are explicit at approval stage.

GBCA welcomes the opportunity for further discussion. To arrange a meeting, a briefing on our work to date regarding data centres, or 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



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