

Our reference: ECM 872362 KR / MB

18 August 2026

Mr Tas Larnach
Committee Secretary
Environment and Communications References Committee
Emailed: ec.sen@aph.gov.au

Dear Mr Larnach

Inquiry Into Artificial Intelligence and Data Centres

LGA South Australia (LGA) welcomes the opportunity to contribute to the Inquiry into Artificial Intelligence and Data Centres.

LGA is the peak body representing all 68 councils across the state. We advocate for the interests of local government at both the state and federal levels and work collaboratively with our members to deliver practical, innovative solutions to the challenges facing local communities.

Artificial intelligence (AI) and the rapid growth of data centre infrastructure present both significant opportunities and emerging challenges for councils. While this is an evolving area that LGA continues to investigate, initial research and feedback from councils have identified several key issues requiring further consideration.

This submission outlines for the Inquiry the potential benefits and impacts of AI and data centre infrastructure on Australian communities with particular focus on the implications for local government in the following areas:

- Energy demand and electricity infrastructure
- Greenhouse gas emissions
- Water consumption and water security
- Land use planning and development assessment
- Waste management and recycling
- Community consultation and social licence
- Local infrastructure and Industry impacts

Local government understands that AI and data centres are critical essential infrastructure for the modern digital economy. They underpin essential services, economic growth, and national

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capability. However, their rapid expansion also presents significant environmental and social challenges that require proactive policy responses.

The Australian Government has [articulated expectations](#) for data centre development, including:

- Supporting the energy transition
- Ensuring water sustainability
- Investing in Australian jobs and skills
- Strengthening research and innovation
- Engaging with communities.

LGA understands that these principles provide a strong foundation for the future development of AI and data centre infrastructure. However, their success will depend on clear implementation mechanisms, robust planning frameworks and meaningful engagement with local government.

LGA urges the Inquiry to address these matters in a way that appropriately balances innovation and economic opportunity with the interests of local communities and the critical role of councils in planning, infrastructure and service delivery.

LGA submission addresses the Terms of Reference of the Inquiry below:

Effectiveness of existing regulatory frameworks in managing the growth of data centres, and existing and future deals between the government and AI companies

In South Australia, data centres can be assessed as 'essential infrastructure' by the State Commission Assessment Panel or the Minister for Planning on behalf of the Crown under section 130 and 131 of the *Planning, Development and Infrastructure Act 2016* (PDI Act). Applications for a data centre must include:

- Advice from SA Water that there is sufficient water supply to meet the requirements of the data centre
- A certificate from the Technical Regulator confirming that it complies with their requirements relating to the reliability, security and stability of the state's power system.

Prior to lodging a development application, proponents are encouraged to engage with the Department of State Development to determine the most appropriate assessment pathway. This includes identifying whether a proposal will be assessed as impact assessed development under section 108 of the PDI Act, sponsored by the Government under section 131 of the PDI Act, or, where required, be subject to an Environmental Impact Statement (EIS). The assessment pathway is determined having regard to the scale and complexity of the proposal, together with its potential environmental, social and economic impacts. Under the *Planning, Development and Infrastructure (General) Regulations 2017* certain preliminary on-site works

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such as excavation and fill (unless in a flood zone or coastal area) and construction of access roads and fencing are exempt from development. Proponents seeking exemptions must do so from a state agency such as the Coordinator General's Office or DSD. A notice is required to be sent to the relevant local council advising of the intended works.

It is also important to recognise that, while the PDI Act provides established assessment pathways for data centre development, the *State Development Coordination and Facilitation Act 2025* (SDCF Act) establishes an additional mechanism to facilitate major projects. Under the SDCF Act, the Coordinator General's Office (CGO) has the authority to coordinate and streamline approval processes across government agencies and, in certain circumstances, modify or displace legislative requirements to expedite project delivery.

Impacts

LGA considers that the current planning and assessment framework gives rise to several potential impacts and concerns:

- The current planning policy framework within the Planning and Design Code is not sufficiently equipped to address and mitigate the unique impacts associated with large-scale data centre developments.
- Statutory consultation timeframes - 15 business days for impact assessed development exceeding \$10 million and four weeks for council referrals are insufficient to enable meaningful community engagement or provide councils with adequate time to assess proposals and influence local outcomes.
- The extent to which council advice and local requirements are reflected in final decisions remains at the discretion of the relevant decisionmaker, creating a risk that important local considerations, including infrastructure requirements and servicing impacts may not be adequately addressed.
- There is no formal mechanism requiring proponents and councils to negotiate broader community benefits, such as through a bi-lateral (or similar) Community Benefits Scheme, limiting opportunities to ensure local communities share in the benefits of major developments.
- The intervention powers available to the Coordinator-General's Office under the SDCF Act may further reduce the influence of councils and local communities in planning and development decisions.

Opportunities

To support the sustainable development of AI and data centre infrastructure, LGA encourages the Inquiry to recommend the following measures:

- Mandate a 'pre-lodgement' process for data centre developments exceeding \$10 million to facilitate early engagement between proponents, state agencies and local

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government, identifying key planning and infrastructure issues and resolve potential risks before a formal application is lodged.

- Develop a national consistent definition of 'data centre' and establish benchmark planning policies to assist states and territories in appropriately assessing and managing the land use, environmental, infrastructure and community impacts of these developments.
- Develop a nationally consistent framework for Community Benefit Schemes that encourages proponents to negotiate community benefit agreements with state and local governments, ensuring that the economic benefits of major developments are shared with affected regional and local communities.
- Consider sustainable funding mechanisms to ensure local government is appropriately resourced to plan for, manage, maintain and renew the infrastructure and services required to support the growth of the AI and data centre sector, recognising the additional costs these developments can impose on local communities.

Future Projects

South Australia's data centre industry is in its early stages of development. However, the state's abundant renewable energy resources, extensive areas of land and low population density, particularly in regional areas, positions it as an increasingly attractive destination for large-scale data centre investment.

LGA understands that there are currently 12 operational data centres across South Australia with the largest operating at approximately 8MW. In addition, four further projects are at various stages of investigation or development, including a proposed 800MW centre at Bunday.

The scale of these proposed developments represents a significant step change for the state and reinforces the need for planning and regulatory frameworks that are equipped to manage their long-term environmental, infrastructure and community impacts.

Potential impacts of AI and data centres on Australian communities, industries and the environment, water and energy

2.1 Energy Use

Impacts

LGA has identified the following potential impacts arising from the energy demands of data centres relating to energy use are:

- [Data centres in Australia](#) currently account for approximately 2–5% of all electricity consumption, with projections reaching 8–15% by 2030 or up to 13% by 2040.

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- Rapid expansion of AI risks placing pressure on electricity grids and may contribute to higher energy prices, if there is not sufficient new supply or if the rollout of new infrastructure is not appropriately aligned with new data centres.
- Local government does not benefit from the rates which might otherwise flow to councils for increased sites used for electricity generation due to the mandatory rate discounts applied to land used for electricity generation.

Opportunities

LGA encourages the Inquiry to consider measures to address these impacts and ensure the sustainable development of the data centre sector, including:

- Requiring data centres to invest in renewable energy, including through long-term power purchase agreements (PPAs), with the right policy settings.
- Investigating centralised data processing, which is more energy efficient than dispersed on-site IT systems.
- Ensuring strong standards for energy efficient data centres and an energy management strategy for peak demand management.

2.2 Greenhouse Gas Emissions

Impacts

LGA has identified the following potential impacts associated with greenhouse gas emissions from data centre developments:

- [Rising data centre emissions](#), with a 16% increase recorded in one year (2024–2025).
- Increased fossil fuel emissions, if these are used to meet demand.
- Environmental impact through challenging waste disposal and increased likelihood of fires, due to lifecycle emissions from hardware manufacturing and disposal (e.g. if lithium-ion batteries are used).

Opportunities

LGA encourages the Inquiry to identify appropriate policy and regulatory measures to manage these impacts, including:

- Transitioning to renewable-powered data centres to significantly reduce emissions intensity. Investment in renewable energy could be a condition for planning approval.

2.3 Water Use

South Australia is the driest state in the driest inhabited continent, making effective water management essential to maintaining quality of life, public wellbeing and the health of the

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state's natural environments¹. Ensuring long-term water security is a key challenge with the state already considering measures to meet the needs of communities over the coming decades².

Local government plays a critical role in water management across South Australia, including through the delivery and operation of community wastewater management systems (CWMS)³ and collaboration with the State Government on stormwater management⁴.

Impacts

LGA has identified the following potential impacts associated with water use by data centre developments:

- The substantial amount of water which data centres use for cooling, with [demand projected to triple](#) by 2030. This is a significant issue with South Australia facing challenges in providing water security for the state, the challenge amplified with climate change projections for reduced annual rainfall.
- The exacerbated impact of many data centres apparently using potable water, impacting on local supplies and potentially increasing salinity.

Opportunities

LGA encourages the Inquiry to consider measures to manage these impacts and support the sustainable development of data centre infrastructure, including:

- Federal Government Research and Development funding and tax benefits to invest in the development of advanced cooling technologies to reduce water consumption.
- Requiring organisations to invest in water recycling infrastructure as part of planning approval, which may also provide co-benefits to local communities.

2.4 Land Use

Impacts

LGA has identified the following potential impacts associated with land use planning and development of data centre infrastructure:

- The use of large sites by data centres (typically 10,000–100,000 m² or more) which are often located near urban infrastructure.
- Development competing with agriculture, biodiversity, and residential land use, all of which are in high demand.

¹ [Department for Environment and Water - Water and dry conditions](#)

² [About the Project | Northern Water](#)

³ [Overview of CWMS | LGA South Australia](#)

⁴ [Stormwater Management Agreement – Stormwater Management Authority](#)

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- Creation of significant noise, visual, and heat impacts of data centres which affect nearby communities, therefore creating additional workload for councils through compliance obligations under the local legislation on nuisance and litter.

Opportunities

LGA encourages the Inquiry to consider measures to appropriately plan for and manage these impacts, ensuring data centre developments are integrated into communities in a way that supports sustainable growth and positive local outcomes, including:

- The potential of data centres to generate high economic output per unit of land, reflecting efficient land use in economic terms.
- Ensuring that any new facility complies with the *Local Nuisance and Litter Control Act 2016*, particularly in relation to noise and lighting.
- Considering a funding model to support expansion of the road network for the building and operation of any AI facility, especially where these may use oversize or over-dimension vehicles to construct and maintain the facility.

2.5 Waste and Recycling

Impacts

LGA has identified the following potential impacts associated with waste management and recycling arising from data centre developments:

- Generation of significant electronic waste (e-waste) from AI and data centres due to rapid hardware obsolescence, which will likely increase to quantity of lithium-ion battery waste due to no current recycling facility in Australia.
- The lifecycle impacts of extracting, manufacturing, and disposing of hardware which contribute to environmental pressures.

Opportunities

LGA encourages the Inquiry to consider measures to manage waste and recycling impacts associated with data centre developments, including:

- Expansion of the sector to support a circular economy, including:
 - Hardware refurbishment
 - Recovery of critical minerals
- Centralised infrastructure reducing duplication of recycling facilities, improving overall resource efficiency.

LGA Recommendations

To maximise public benefit while ensuring potential impacts are appropriately managed, LGA urges the Inquiry to consider the following Recommendations:

Energy and Emissions

- Requirements for new data centres to be powered by additional renewable energy generation.
- Implementation of emissions reporting and transparency frameworks.

Water

- Mandating water efficiency standards and recycling requirements including controls on water capture and reuse.
- Restrictions on development in water-stressed regions.

Land Use and Planning

- Strengthening planning frameworks to assess cumulative environmental, social and economic impacts.
- Ensuring councils are engaged in approvals and management of impacts.
- Defining 'data centre' as a stand-alone land use to facilitate appropriate land use policy.
- Encouraging regional development, where appropriate infrastructure exists.
- Mandating Community Benefit Schemes agreements between proponents and council.

Waste and Circular Economy

- Introducing e-waste recycling and reuse requirements.
- Supporting domestic critical minerals recovery industries through various policy levers.

Social Licence

- Requiring meaningful, timely and informed community consultation.
- Embedding local benefit-sharing mechanisms (e.g. infrastructure upgrades, community funds).

Strategic Coordination

- Developing a national strategy for AI and data centre infrastructure integrating:
 - Energy planning
 - Water management
 - Regional development and
 - Climate targets.
- Learning from experiences in other jurisdictions which are [aligning data centres with energy users](#).

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Thank you for the opportunity to provide this submission.

As AI and data centre infrastructure represent an emerging area, LGA and local government sector will continue to investigate opportunities, challenges and implications for communities. Should the Inquiry require any further information or clarification, please do not hesitate to contact me directly.

Yours sincerely

A handwritten signature in blue ink, appearing to be 'VM' followed by a stylized flourish.

Victoria MacKirdy

Chief Executive Officer

Telephone: (08) 8224 2000

Email: victoria.mackirdy@lga.sa.gov.au