Introduction

With the growth of the AI industry in Australia, we, the Lord Mayors of Australia's capital cities, recognise our responsibility to ensure that this transformation is supported by sustainable infrastructure, aligned with community expectations, minimises environmental impacts, and is leveraged to deliver lasting economic and social benefit for our cities and the nation.

Australia is developing and implementing a *National AI Plan* to secure our position as a leading AI-enabled economy, building on strong foundations in research, private investment, data centre growth and workforce capability. In 2024, Australia attracted $10 billion in data centre investment, second only to the United States. More than 1,500 AI companies are operating nationwide. Australia produces 1.9 per cent of global AI research, well above our share of population and GDP, with strengths across medicine, environmental science, agriculture and the social sciences. Demand for AI-skilled workers has tripled since 2015.

Sustainable Data Centres in our cities

Australia's capital cities are at the centre of the nation's digital transformation. We host the majority of Australia's data centres and AI infrastructure, and we recognise their importance to national productivity, research capability, innovation and sovereign resilience.

However, the rapid acceleration of data centre development is generating significant and growing community concern.

Electricity demand and water use from data centres is forecast to increase substantially over the coming decade. Without coordinated national planning and enforceable sustainability requirements, this growth risks placing pressure on water security, electricity prices, grid reliability, renewable energy availability, and local amenity.

Capital cities support the continued growth of digital infrastructure – but that growth must be aligned with Australia's climate commitments and renewable energy transition.

Mandating generation, storage and network capability uplift

The Council of Capital City Lord Mayors calls on the Australian Government to work with state and local governments to develop options that require data centres be neutral or contribute to the stability of the local network. The Commonwealth should, through the development of a national framework, develop approaches to require that new data centres support distribution and transmission network augmentation to mitigate the impact on energy resources and infrastructure.

There are likely to be significant challenges with the location sought for each data centre, and the augmentation required to local Distribution Network Service Providers; augmentation to substations; and potential investment in the transmission network. Without Commonwealth support to develop and put in place a framework to address these challenges, data centres will compete for limited local capacity to the detriment of other energy users, including housing and industry.

Flexible demand is essential to maintaining a stable, responsive and affordable electricity system as Australia increases its share of variable renewable energy. Demand that can respond dynamically to system conditions – reducing load during peak demand events and increasing load during periods of excess renewable generation – helps stabilise the grid, minimise network congestion, and reduce reliance on expensive and polluting, gas-fired peaking plants.

Commonwealth leadership should:

- *Develop options to ensure new renewable energy is brought into the system when required, including through long-term, firmed Power Purchase Agreements (PPAs) or equivalent mechanisms that guarantee additional clean generation capacity*
- *Consider how connections for new data centres can encourage or require participation in demand response and flexibility markets*
- *Require data centre operators to demonstrate genuine load flexibility capability aligned with system demand events*
- *Where operational constraints limit on-site demand reduction, require data centres to underwrite or subsidise equivalent demand response capacity from other network users*
- *Address energy needs in local networks by mandating co-located generation and storage where appropriate*

Resolving the upstream network augmentation required for data centres without compromising other energy users requires urgent national consideration, including through the Energy and Climate Change Ministerial Council.

Sustainable Water Management

Responsible and sustainable water management must underpin the continued growth of Australia's AI infrastructure and data centre investment. As demand increases, careful planning, efficient use and transparent stewardship of water resources are essential to protect community supply, strengthen climate resilience and support long term responsible economic development. Future-ready data centres should be designed to minimise water use or maximise the use of recycled and non-potable water for cooling and operational processes, supported by infrastructure investment and collaboration with local water authorities to reduce dependence on potable supplies and enhance urban water resilience.

Commonwealth leadership should:

- *Develop guidance to support water utilities and local planning departments to require data centres use closed loop cooling systems and develop options for jurisdictions to mandate requirements through connection agreements*
- *Adopt fit-for-purpose water use by prioritising recycled or alternative sources where available and deploying water-efficient technologies where potable water is required*
- *Engage early with local water authorities during site selection and concept design to align on water sourcing, risk management and infrastructure requirements, including investment coordination*
- *Design and operate facilities to remain resilient during drought, climate extremes and supply disruptions*
- *Promote transparency by measuring and disclosing water demand, supply and discharge using consistent metrics across national, state and local levels – recognising that most councils already operate under water use and discharge targets*
- *Undertake integrated water and energy planning to optimise cooling performance, minimise emissions, avoid transferring risk between water scarcity and energy demand, and consideration of demand for water through recycling programs*

Broader National Framework

CCCLM calls for the development of a nationally consistent framework to support sustainable data centres in our cities and nation. When developing the framework, consideration should be given to:

- *Coordinate data centre approvals with national grid planning to manage cumulative impacts*
- *Support geographic diversification of critical digital infrastructure to strengthen national resilience, disaster recovery capacity and strategic redundancy*
- *Establish uniform national reporting methodology and standards for site-specific energy use, renewable sourcing, water consumption and emissions*
- *Prioritise recycled and fit-for-purpose water use or closed loop/water free cooling*
- *Ensure sustainable siting, high-quality urban integration and measurable net community benefit*
- *Include lifecycle considerations such as embodied carbon and circular economy principles*

Our Position

Capital Cities are ready to partner with the Commonwealth to ensure Australia remains a global leader in sustainable digital infrastructure. We recognise the positive benefits of AI and support capturing the opportunity through smart infrastructure and domestic capability, spreading the benefits through adoption and workforce development, and keeping Australians safe through strong safeguards and responsible practice and international engagement.

We must also recognise that data centres and AI infrastructure must strengthen, not undermine, Australia's water security and clean energy transition. Requiring additional renewable energy through enforceable, long-term PPAs, and mandatory energy demand agreements are the most immediate and practical steps to achieving that outcome. Water use must be managed with the same discipline, prioritising efficiency, recycled supply and long-term climate resilience.

Andrew Barr
Chief Minister – ACT

Jane Lomax-Smith
Lord Mayor – City of Adelaide

Clover Moore
Lord Mayor – City of Sydney

Nick Reece
Lord Mayor – City of Melbourne

Anna Reynolds
Lord Mayor – City of Hobart

Bruce Reynolds
Lord Mayor – City of Perth

Adrian Schrinner
Lord Mayor – City of Brisbane

Peter Styles
Lord Mayor – City of Darwin