

Submission by the Australian Nursing and Midwifery Federation

Artificial intelligence and Data centres

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**Australian
Nursing &
Midwifery
Federation**



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Introduction

1. The Australian Nursing and Midwifery Federation (ANMF) is Australia's largest national union and professional nursing and midwifery organisation. In collaboration with the ANMF's eight state and territory branches, we represent the professional, industrial and political interests of more than 356,000 nurses, midwives and care-workers across the country.
2. Our members work in the public and private health, aged care, and disability sectors across a wide variety of urban, rural and remote locations. We work with them to improve their ability to deliver safe and best practice care in each and every one of these settings, fulfil their professional goals, and achieve a healthy work/life balance.
3. Our strong and growing membership and integrated role as both a trade union and professional organisation provides us with a complete understanding of all aspects of the nursing and midwifery professions and see us uniquely placed to defend and advance our professions.
4. Through our work with members, we aim to strengthen the contribution of nursing and midwifery to improving Australia's health and aged care systems, and the health of our national and global communities.
5. The ANMF thanks the Environment and Communications References Committee for the opportunity to make this submission.
6. Nurses, midwives and carers form the largest part of the health workforce and are present in every community, including regional, rural and remote areas. Our members observe the health consequences of environmental change and hold a professional and ethical commitment to protecting the health of individuals, communities and the environment that sustains them.
7. The benefits of AI and data infrastructure can be realised alongside the protection of health, water and climate, provided that robust safeguards are established.



Summary of ANMF recommendations

1. Establish a nationally consistent, legislated regulatory framework for data centres and AI infrastructure that embeds environmental and public health protections, with independent monitoring and enforcement.
2. Australian data, and especially health data, must be governed in the public interest and must not be appropriated for the private profit of the companies that operate or supply data infrastructure.
3. Require data centre operators and their customers, including global technology and AI companies, to match their electricity demand with new and additional renewable generation and storage capacity.
4. Apply the precautionary principle by placing the burden of proof on developers to demonstrate that projects will not harm health, water security or the environment, and by requiring comprehensive social, environmental, health and infrastructure risk assessments before approval.
5. Protect water security and quality through mandatory efficiency standards, requirements to prioritise recycled and alternative water sources, and cost recovery arrangements that prevent water scarcity and infrastructure costs being shifted onto households and communities.
6. Minimise reliance on diesel back-up generation and establish enforceable emissions and air quality safeguards to protect community respiratory and cardiovascular health.
7. Require transparent, nationally consistent public reporting of energy use, water use, emissions and electronic waste, and apply extended producer responsibility and circular economy requirements to reduce electronic waste.
8. Mandate genuine, resourced and ongoing community engagement, including self-determined engagement with Aboriginal and Torres Strait Islander communities and



structured engagement with the health workforce, including nurses, midwives and carers, workers, unions and affected communities.

9. Establish a national public sector data sovereignty framework that ensures public data remains under Australian control and cannot be used to train or improve proprietary AI systems without clear public benefit, transparency and accountability.
10. Invest in sovereign Australian AI capability, including domestic computing infrastructure, research, and specialised AI systems that strengthen national capability, reduce dependence on multinational technology providers, and deliver demonstrable public benefit.

Term of reference (a) - The effectiveness of existing regulatory frameworks in managing the growth of data centres in Australia, including in relation to existing and future deals between the Government and global artificial intelligence (AI) companies.

Fragmented governance and the need for a national framework

1. The ANMF maintains that data is a public good. The data generated by Australians, and health data in particular, holds significant public value and should be treated as a national asset held in stewardship for the community, not as a private commodity. Health data is especially sensitive: it is generated through the care relationship, it reflects people at their most vulnerable, and its use carries direct consequences for privacy, trust and equity.
2. The current governance structure is spread across multiple frameworks, agencies and pieces of legislation. This fragmentation makes the regulatory environment complex to navigate and creates risks for data companies to exploit inconsistencies between jurisdictions and regulators.
3. Given the many overlapping issues and policy areas affected by AI and data centres, including environmental sustainability, infrastructure, privacy and industrial relations, there is a clear and urgent need for a nationally integrated approach. Harmonisation between state and



federal legislation and regulation is essential for cohesive oversight and governance.

4. The Australian Government's Expectations of Data Centres and AI Infrastructure Developers Framework sets out the government's expectations of data centres and infrastructure developers.¹ However, it is not supported by dedicated legislation governing either the growth of data centres in Australia or the introduction of AI technologies and may lack appropriate regulatory monitoring or enforcement capacity.
5. The Australian Energy Market Commission has proposed stricter grid connection requirements for large data centres.² However, ultimate responsibility for compliance and oversight is distributed across multiple regulatory bodies, contributing to a fragmented governance framework.
6. A nationally integrated and legislated approach is required to enable cohesive oversight of the environmental and health impacts of the sector, with independent monitoring and enforcement.
7. The absence of nationally consistent and enforceable requirements is particularly significant given the speed and scale of current development. While Commonwealth expectations address the national interest, the energy transition, water use, Australian skills and local capability, they remain policy expectations rather than a comprehensive statutory framework. Without common performance measures, reporting requirements and enforcement mechanisms, environmental protections and community safeguards may vary between jurisdictions and projects.³

¹ Australian Government. Expectations of data centres and AI infrastructure developers [Internet]. Canberra: Department of Industry, Science and Resources; 2026 [cited 2026 Sep 7]. Available from: <https://www.industry.gov.au/publications/expectations-data-centres-and-ai-infrastructure-developers>

² Australian Energy Market Commission. AEMC proposes new grid standards for data centre connections [Internet]. Sydney: Australian Energy Market Commission; 2026 [cited 2026 Sep 7]. Available from: <https://www.aemc.gov.au/news-centre/media-releases/aemc-proposes-new-grid-standards-data-centre-connections>

³ Ashurst Perkins Coie. (2026, July 9). *Australia's evolving data centre landscape: Policy meets pipeline*. <https://www.ashurstperkinscoie.com/en/insights/australia-evolving-data-centre-landscape-policy-meets-pipeline/>



Assessment of projects

8. While streamlined investment processes, for example the Commonwealth Government's Investor Front Door pilot, may be appropriate for some categories of projects, AI related developments require cautious and rigorous assessment. Given their scale and potential systemic impacts, AI and data centre projects should require a comprehensive social, environmental and infrastructure risk assessments and be subject to thorough scrutiny.
9. Existing and future deals between government and global AI companies should be transparent and made conditional on environmental, health and community safeguards, including renewable energy matching, water protection and genuine community engagement.
10. Regulatory approaches to new technologies have historically been reactive rather than preventative or anticipatory. Social media illustrates how the consequences of rapid, largely unrestrained innovation may not be fully understood until long after widespread adoption and/or significant consequences have occurred.
11. The application of the precautionary principle, which is well established in environmental and public health policy, should be applied to AI and data centre governance. The burden of proof should be placed on companies and developers seeking to profit from AI technologies to demonstrate that their systems are safe and unlikely to cause harm before implementation. Developers should be responsible for providing evidence that risks have been adequately assessed and mitigated prior to approval, rather than scientists and communities proving definitive harm well after the fact.
12. The assessment of individual projects may not adequately capture the cumulative effects of multiple data centres concentrated within one region. These developments can place combined pressure on electricity networks, water supplies, transport infrastructure, air quality, emergency services and community amenity.
13. In New South Wales, the proposed Mamre Road Data Centre Campus at Kemps Creek



demonstrates the scale of projects under consideration. NSW planning documents describe a proposed campus with a power capacity of one gigawatt, comprising six four-storey data centre buildings, 936 cooling units, 852 diesel back-up generators and 14,430 kilolitres of diesel storage. Public submissions published via the NSW Planning Portal raise concerns about energy and water demand, noise, generator emissions, traffic, emergency planning, nearby schools, and the concentration of data centres in Western Sydney.⁴ Further, large-scale diesel storage and associated battery systems for backup power constitute a significant and under-acknowledged fire hazard, particularly as climate change intensifies fire risk.

Artificial Intelligence and Data sovereignty

14. Artificial intelligence is becoming embedded in public administration, health care, research, workplaces and critical infrastructure. This increases the importance of determining who controls the data, computing infrastructure, and AI systems on which essential services depend. Data sovereignty is often reduced to the physical location of servers, but storing data in Australia does not establish sovereignty where an overseas entity retains access to the data, controls the infrastructure or model, determines the contractual terms, or can use Australian data to improve a proprietary product. Effective data sovereignty requires Australian jurisdictional and operational control over data, infrastructure and the conditions under which data is accessed, processed, transferred and used.
15. This is particularly important for public sector data. Information generated, collected or held through publicly funded services is a public asset. It includes some of Australia's most valuable and sensitive datasets, including health, disability, aged care, employment and social services information. The Australian Government's *National AI Plan* describes Australia's high-quality and comprehensive datasets as assets that can support locally relevant AI systems, public goods and a globally competitive AI sector. It also identifies opportunities to expand access to selected government datasets, including large

⁴ NSW Department of Planning, Housing and Infrastructure. (2026). *Mamre Road Data Centre Campus: State Significant Development SSD-92743706*. <https://www.planningportal.nsw.gov.au/major-projects/projects/mamre-road-data-centre-campus>



unstructured datasets, for AI training.⁵ The OECD has identified transparency, accountability, data governance, and trustworthy institutional arrangements as central to the responsible use of AI by governments.⁶

16. Using public data to train, fine-tune, test or improve proprietary AI systems raises issues that are not resolved by conventional privacy protections alone. Privacy law regulates personal information, while data sovereignty also concerns ownership, control, economic value, institutional capability and national resilience. Even where data can be lawfully shared or de-identified, questions remain about who captures the value generated when those datasets contribute to the development of proprietary AI systems. Where public data is used to improve a product that government must later licence from its developer, public investment may subsidise the creation of a private asset while increasing reliance on an external provider.
17. The *National AI Plan* proposes expanding access to government-held data to support AI development, including possible access to Australian Bureau of Statistics economic datasets and large unstructured datasets.⁷ Any expansion of access needs to preserve public ownership, specify the permitted purpose and duration of use, prevent unauthorised incorporation into proprietary models, and establish how resulting intellectual property and commercial benefits will be shared. Without these protections, valuable public data may be transformed into privately controlled products without an equivalent return to the Australian community.
18. The risks extend beyond the original data supplied to an AI system. Prompts, outputs, embeddings, user interactions, diagnostic logs, inferred information, model telemetry and other system-generated records may contain personal or sensitive information. The Office of

⁵ Department of Industry, Science and Resources. National AI plan [Internet]. Canberra: Australian Government; 2025 [cited 2026 Sep 7]. Available from: <https://www.industry.gov.au/publications/national-ai-plan>

⁶ Organisation for Economic Co-operation and Development. Governing with artificial intelligence: are governments ready? Paris: OECD Publishing; 2024. (OECD Artificial Intelligence Papers; No. 20). doi:10.1787/26324bc2-en

⁷ Department of Industry, Science and Resources. National AI plan [Internet]. Canberra: Australian Government; 2025 [cited 2026 Sep 7]. Available from: <https://www.industry.gov.au/publications/national-ai-plan>



the Australian Information Commissioner has confirmed that the *Privacy Act 1988* applies to personal information used to develop and train generative AI models, including information obtained from publicly available sources. It advises that using information for a secondary AI-related purpose may require consent or another lawful basis and that sensitive information generally requires consent.⁸ The OAIC also recognises that AI-generated or inferred information about an identifiable person constitutes personal information and must be handled in accordance with the Australian Privacy Principles.⁸

19. Engaging an external provider does not transfer a public agency's accountability for this information. AI and cloud contracts may involve developers, hosting providers, subcontractors, offshore support services, and related corporate entities. These arrangements can make it difficult to determine where information is processed, which entities can access it, whether it is retained, and whether it contributes to model development. The Australian Signals Directorate makes clear that an Infosec Registered Assessors Program assessment does not certify, endorse or authorise a system as secure. Responsibility remains with the system owner to assess the effectiveness of relevant controls and determine whether the residual risk is acceptable.⁹ The OAIC similarly identifies vendor due diligence, access arrangements, privacy and security risks, and human oversight as relevant considerations when adopting commercial AI.⁸

20. Domestic data storage offers limited protection if an overseas corporation retains operational control, permits remote access from other jurisdictions, or can change the contractual or technical arrangements without effective Australian oversight. Public sector arrangements need to account for data transmitted through application programming interfaces, technical support systems, model telemetry, system logs, backups, prompts, and

⁸ Office of the Australian Information Commissioner. Guidance on privacy and developing and training generative AI models [Internet]. Sydney: Office of the Australian Information Commissioner; 2024 [cited 2026 Sep 7]. Available from: <https://www.oaic.gov.au/privacy/privacy-guidance-for-organisations-and-government-agencies/guidance-on-privacy-and-developing-and-training-generative-ai-models>

⁹ Australian Signals Directorate. IRAP consumer guide [Internet]. Canberra: Australian Cyber Security Centre; 2025 [cited 2026 Sep 7]. Available from: <https://www.cyber.gov.au/sites/default/files/2024-08/IRAP%20consumer%20guide.pdf>



outputs. Control over encryption keys, identity and access management, audit records and disclosure decisions is as important as the location of the primary server.

21. Australia's dependence on a small number of multinational cloud and AI providers creates further risks. Essential public functions may become exposed to service withdrawal, changed licencing arrangements, vendor lock-in, foreign legal demands, or geopolitical disruption. Government agencies may also lack the technical access needed to inspect a model, understand how it processes information, adapt it to Australian requirements, or transfer a service to another provider without substantial disruption.
22. Public agencies may retain legal ownership of their data while losing practical control where information cannot be extracted in a usable format, essential workflows depend on proprietary software, or changing providers would interrupt service delivery. The *AI Plan for the Australian Public Service 2025* identifies central model-brokerage services, the reuse of intellectual property and the prevention of vendor lock-in as part of the Commonwealth's approach to AI infrastructure.¹⁰ Data portability, interoperability, open standards and workable exit arrangements are integral to public sector resilience and the Commonwealth's capacity to change providers.
23. The ACTU's submission to the Senate inquiry defines sovereign AI capability in terms of accountability to the Australian people, consistency with Australian laws and social expectations, retention of economic value in Australia, and the creation of secure, safe and well-paid employment. ANMF supports its call for a coordinated national initiative involving unions, universities, researchers, industry and investors to build Australian capability across the AI technology stack.¹¹ This extends sovereignty beyond data residency to include Australia's capacity to develop, understand, govern and derive value from AI.

¹⁰ Digital Transformation Agency. AI plan for the Australian Public Service 2025 [Internet]. Canberra: Australian Government; 2025 [cited 2026 Sep 7]. Available from: <https://www.digital.gov.au/policy/ai/australian-public-service-ai-plan-2025>

¹¹ Australian Council of Trade Unions. Artificial intelligence and data centres: submission to the Environment and Communications References Committee inquiry. Melbourne: Australian Council of Trade Unions; 2026.



24. Australia does not need to reproduce the largest overseas models to develop meaningful sovereign capability. The ACTU identifies the potential for smaller and specialised models suited to Australian economic, cultural and public service needs.¹¹ The *National AI Plan* similarly notes that locally developed models may better reflect Australian cultural or language contexts, support innovation, and mitigate data security risks. It identifies domestic computing infrastructure and GovAI, a secure Australian-based platform for government AI applications, as part of the national capability agenda.¹² Health care is a key area in which specialised systems could draw on Australian research expertise and respond to clearly identified public needs.
25. Australian projects provide early examples of domestically available high-performance computing. Austrade reports that the MAVERIC supercomputer being developed through Monash University, Dell Technologies, NVIDIA and CDC Data Centres is intended to support research in drug discovery, genomics, climate science, renewable-energy modelling and advanced materials. Its architecture is designed to enable local model training while sensitive data is stored privately on premises. Austrade also reports that computing infrastructure being deployed at Macquarie Data Centres' IC3 Super West facility in Sydney is intended to support Australian enterprise and government workloads, including generative AI, cybersecurity analytics and digital-twin simulations.¹³
26. Governments cannot exercise meaningful control over systems if they do not know what data has been used, where processing occurs, which subcontractors are involved, how information is retained, or how a system has been tested. The *National AI Plan* recognises the importance of robust data governance, privacy protections, documentation, human oversight and legal compliance. It also connects responsible AI with high-quality data, strong stewardship and clear documentation of how systems have been built.¹² The ACTU proposes

¹² Department of Industry, Science and Resources. National AI plan [Internet]. Canberra: Australian Government; 2025 [cited 2026 Sep 7]. Available from: <https://www.industry.gov.au/publications/national-ai-plan>

¹³ Australian Trade and Investment Commission. Dell bolsters Australia's sovereign AI ambitions with high-performance computing infrastructure [Internet]. Sydney: Austrade; 2025 Nov 18 [cited 2026 Sep 7]. Available from: <https://international.austrade.gov.au/en/news-and-analysis/success-stories/dell-bolsters-australia-s-sovereign-ai-ambitions-with-high-performance-computing-infrastructure>



greater transparency about training datasets, lawful sourcing, risk-management frameworks and reportable incidents.¹⁴ Commercial confidentiality cannot displace the information required by public agencies and regulators to assess legality, safety, security and public impact.

27. Trust is particularly important where AI is used in public decision-making. AI systems may influence access to health care, social security, disability support, education, employment and other essential services. The OECD identifies accountability, transparency and trustworthy institutional arrangements as necessary for public sector AI.¹⁵ The *National AI Plan* states that human decision-makers remain accountable for key decisions made with AI assistance.¹⁶ Nurses, midwives and other registered health practitioners retain legal and professional responsibilities for their practice and must be able to understand, scrutinise and challenge systems that influence clinical care or professional decisions.

28. Aboriginal and Torres Strait Islander Data Sovereignty is distinct from Australian data residency. The *Framework for Governance of Indigenous Data* places Aboriginal and Torres Strait Islander peoples at the centre of decisions about data relating to them and directs Australian Government agencies to work in partnership across the data lifecycle.¹⁷ The Maiam nayri Wingara principles affirm Indigenous peoples' right to control data ecosystems, including data creation, development, stewardship, analysis, dissemination and infrastructure, and require those systems to be accountable to Indigenous peoples.¹⁸ Data

¹⁴ Australian Council of Trade Unions. Artificial intelligence and data centres: submission to the Environment and Communications References Committee inquiry. Melbourne: Australian Council of Trade Unions; 2026.

¹⁵ Organisation for Economic Co-operation and Development. Governing with artificial intelligence: are governments ready? Paris: OECD Publishing; 2024. (OECD Artificial Intelligence Papers; No. 20). doi:10.1787/26324bc2-en

¹⁶ Department of Industry, Science and Resources. National AI plan [Internet]. Canberra: Australian Government; 2025 [cited 2026 Sep 7]. Available from: <https://www.industry.gov.au/publications/national-ai-plan>

¹⁷ National Indigenous Australians Agency. Framework for governance of Indigenous data: practical guidance for the Australian Public Service [Internet]. Canberra: Australian Government; 2024 [cited 2026 Sep 7]. Available from: <https://www.niaa.gov.au/sites/default/files/documents/2024-05/framework-governance-indigenous-data.pdf>

¹⁸ Maiam nayri Wingara Indigenous Data Sovereignty Collective. Indigenous data sovereignty principles [Internet]. [place unknown]: Maiam nayri Wingara; 2018 [cited 2026 Sep 7]. Available from: <https://www.maiamnayriwingara.org/mnw-principles>



can remain physically located in Australia while being used in ways that undermine Indigenous authority, cultural protocols or collective interests.

29. The increasing recognition of Indigenous Data Sovereignty within Australian Government policy provides an important precedent for understanding sovereignty as authority over the entire data lifecycle rather than the physical location of data alone. Indigenous governance arrangements must extend to the use of Indigenous data, knowledge, language and cultural material in the development, training and operation of AI systems, including decisions about access, interpretation, benefit sharing and commercial use.

Term of reference (b) - *The potential impacts of AI and data centres on Australian communities, industries and the environment, water and energy.*

Data centres, climate change and health consequences

30. Major data centres require significant amounts of electricity and water to operate, placing increasing pressure on existing energy and water infrastructure. As AI and data storage infrastructure continues to expand, environmental concerns including risks to energy security and water availability, pressure on water systems, potential impacts on water quality and greenhouse gas emissions from backup diesel generators used during grid shortfalls must be addressed as a priority.
31. AEMO's *2026 Electricity Statement of Opportunities* forecasts that data centre electricity consumption in the National Electricity Market could rise from approximately 5 terawatt hours in 2025–26 to approximately 34 terawatt hours in 2035–36. This would increase data centres' share of operational demand from approximately 3 per cent to 13 per cent. Electricity network businesses reported 225 prospective data centre projects, although AEMO acknowledges uncertainty about how many will proceed.¹⁹
32. Modelling indicates that wholesale electricity prices could be more than 20 per cent higher

¹⁹ Australian Energy Market Operator. (2026). *2026 electricity statement of opportunities*. https://www.aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/nem_esoo/2026/2026-electricity-statement-of-opportunities.pdf



in 2035 if increasing data centre demand is not matched by new renewable generation and storage. It also cites modelling suggesting that National Electricity Market emissions could be 14 per cent higher in 2035 than they otherwise would be without additional renewable capacity.²⁰

33. Data centres use significant volumes of water for cooling, and this demand is rising as Australia's climate becomes hotter and drier. The carbon and water footprints of data centres are expected to grow with AI.²¹ Competition for water affects drinking water security, food production and ecosystems, with disproportionate effects on regional, rural and remote communities, including many Aboriginal and Torres Strait Islander communities.
34. Industry-commissioned analysis estimates that Australian data centres used 5.5 gigalitres of potable water annually at the time of reporting and forecasts this increasing to 17 gigalitres by 2030. In NSW, it projects that the sector's share of Sydney's water supply could rise from 0.7 per cent to 1.9 per cent over this period (Mandala, 2025).²² The Climate Council also reports that Sydney Water has received enquiries from individual facilities seeking capacity of up to 40 million litres per day, although these requests may represent maximum rather than routine requirements.²³
35. Data centres could contribute to water and energy infrastructure where appropriate requirements are in place. Mandala reports that the sector could invest between \$500 million and \$1.1 billion in recycled-water infrastructure by 2030 and states that data centre operators had invested \$3.1 billion in electricity grid infrastructure since 2020, with a further \$7.2 billion forecast by 2030.²²
36. Data centres intersect with climate change through their large and rising demand for electricity and water, which, if met by fossil fuels, risks increasing emissions. Nurses,

²⁰ Climate Council of Australia. (2026a, August 31). *Seizing the opportunity to do data centres right*. <https://www.climatecouncil.org.au/what-does-the-data-centre-boom-mean-for-australias-switch-to-renewables/>

²¹ De Vries A. The carbon and water footprints of data centers and what this could mean for artificial intelligence. *Patterns*. 2025;6:101430. doi:10.1016/j.patter.2025.101430

²² Mandala. (2025). *Data centres as enabling infrastructure*. Report commissioned for Data Centres Australia, AirTrunk, Amazon Web Services, CDC and NEXTDC. <https://mandalapartners.com/uploads/Data-Centres-as-Enabling-Infrastructure.pdf>

²³ Climate Council of Australia. (2026a, August 31). *Seizing the opportunity to do data centres right*. <https://www.climatecouncil.org.au/what-does-the-data-centre-boom-mean-for-australias-switch-to-renewables/>



midwives and carers are already responding to the health effects of climate change. Extreme heat is intensifying. Heatwave intensity in Australia has increased by approximately 37 per cent over the past two decades.²⁴ In 2024, people in Australia were exposed to an average of 8.1 heatwave days, of which 5.4 days would not have been expected without climate change. Heat is a significant and rising cause of death. Between 2012 and 2021, Australia recorded an estimated 980 heat-related deaths each year, an increase of 83 per cent on the average for the 1990s.²⁴ Older people, infants, pregnant women and people with chronic illness are most at risk. Extreme heat reduces the capacity to work safely. In 2024, heat exposure caused the loss of approximately 175 million potential labour hours in Australia, at an estimated cost of around 8.2 billion Australian dollars.²⁴

37. Further, backup diesel generators used during grid shortfalls emit greenhouse gases and local air pollutants.²⁵ Diesel exhaust is a recognised respiratory and cardiovascular hazard.
38. The proposed Project Ares development in the Northern Territory demonstrates the risks associated with allowing data centre development to rely on fossil fuels.²⁶ The Climate Council reports that the proposed one-gigawatt facility would initially rely on gas and could release more than one million tonnes of greenhouse gas emissions annually. Its analysis estimates that the development could continue to require approximately 76 terajoules of gas each day after its proposed solar and battery components became operational.²⁶
39. NSW provides a relevant example of how data centre requirements can be linked to infrastructure costs and access to streamlined assessment. In August 2026, the NSW Government reported that 19 data centre projects valued at \$50.3 billion were in the State Significant Development pipeline, in addition to more than 60 facilities operating or under construction. The NSW Data Centre Policy Framework requires projects seeking streamlined assessment to meet performance measures covering environmental efficiency, no net cost

²⁴ Beggs PJ, Woodward AJ, Trueck S, Linnenluecke MK, Bambrick H, Capon AG, et al. The 2024 report of the MJA – Lancet Countdown on health and climate change: Australia emerging as a hotspot for litigation. *Med J Aust*. 2025;222(6):272-96. doi:10.5694/mja2.52616

²⁵ Greenpeace. Energy vampires: the AI data centres draining Australia [Internet]. Sydney: Greenpeace Australia Pacific; 2026 [cited 2026 Sep 7]. Available from: <https://www.greenpeace.org.au/static/planet4-australiapacific-stateless/2026/05/1032fdf5-data-centres-report-greenpeace.pdf>

²⁶ Climate Council of Australia. (2026a, August 31). *Seizing the opportunity to do data centres right*. <https://www.climatecouncil.org.au/what-does-the-data-centre-boom-mean-for-australias-switch-to-renewables/>



- to consumers and communities, additional energy and water supply, community infrastructure and amenity, supply-chain investment, and skills and training. The NSW Government also announced reforms to recover electricity network costs from data centres and an Independent Pricing and Regulatory Tribunal review of water pricing for the sector.²⁷
40. The NSW framework provides a useful model for national requirements, particularly its principles that data centres fund the additional energy and water infrastructure they require and do not shift costs to households and small businesses. However, access to faster assessment must remain conditional on verified performance throughout construction and operation, rather than commitments made only at the application stage.
41. Waste is also a problem of AI and data centres. Wang et al. (2024) found that electronic waste from generative artificial intelligence could increase, potentially reaching a total accumulation of 1.2-5.0 million tons from 2020-2030.²⁸ Their research found that extending the life span of data servers and reusing reusable parts could reduce e-waste generation by 16-86%. In 2019 Australia created 511,000 tonnes of e-waste. On average, each Australian household produced 20 kg of e-waste. This is much higher than the global average of 7 kg. By 2030, Australia's e-waste is expected to grow by almost 30%, to 657,000 tonnes (Australian Government, 2026). Electronic waste contains hazardous materials that pose risks to environmental and human health. Subsequently, extended producer responsibility and circular economy requirements should apply to data centre infrastructure to reduce this burden.

Term of reference (c). Impacts on communities and stakeholder engagement

Stakeholder engagement

42. Genuine community engagement is essential to the responsible development of data centres and AI infrastructure in Australia. Engagement should be resourced, ongoing and capable of influencing decisions, rather than tokenistic.

²⁷ NSW Government. (2026, August 17). *Nation-leading framework to harness NSW data centre investment*. <https://www.nsw.gov.au/ministerial-releases/nation-leading-framework-to-harness-nsw-data-centre-investment>

²⁸ Wang P, Zhang L, Tzachor A, Chen W. E-waste challenges of generative artificial intelligence. *Nat Comput Sci*. 2024;4:818–23. doi:10.1038/s43588-024-00712-6



43. Nurses, midwives and carers are trusted members of the communities in which they work and are often the first to observe the health effects of environmental change. The health workforce should have a formal role in the assessment, monitoring and community engagement processes associated with data centre development. This helps ensure that health impacts are identified early and that community concerns are heard and acted upon.
44. Ensuring that Aboriginal and Torres Strait Islander communities have self-determined engagement in decisions that affect their Country, water and cultural heritage is pivotal. Engagement should be grounded in the principles of free, prior and informed consent, and should include transparency, benefit sharing and environmental protection. Water security and connection to Country are determinants of health for these communities, and their leadership should be central to decisions about projects that affect these determinants.
45. Social licence is especially important where governments provide investment facilitation, coordinated approval processes, or shortened assessment periods. Communities require access to reliable information about projected and actual energy use, water consumption, emissions, noise, back-up generation, infrastructure costs, and local employment benefits.
46. Residents in areas that host data centres, particularly in regional and rural Australia, should be engaged early and provided with clear, accessible information on the energy, water and environmental implications of proposed projects and for community concerns to influence project design, assessment and approval conditions.
47. Finally, workers and their representatives should be recognised as a distinct stakeholder group and engaged early, formally and on an ongoing basis in the assessment, planning and monitoring of data centre projects, given their direct knowledge of workplace health, safety and environmental condition.

Determinants of health and social benefit

48. Without a comprehensive regulatory framework, the widespread adoption of AI has the potential to exacerbate existing social and economic inequalities. Without consideration, significant workforce displacement resulting from the rapid implementation of AI



technologies may contribute to higher levels of unemployment and economic insecurity with broader implications for social cohesion and stability.

49. Unemployment and economic insecurity are recognised determinants of poor health outcomes. These matters reinforce the case for careful, anticipatory regulation that considers social as well as environmental impacts on health.
50. Claims about employment and economic benefits also require scrutiny. Construction activity may generate significant short-term employment, but public support for data centre and AI infrastructure needs to be linked to enduring Australian benefits, including secure jobs, workforce development, research access, local supply chains, taxation, domestic computing access, and the retention of intellectual property and economic value in Australia.