

A Blueprint for Australia's Sovereign, Sustainable, and Humanity-Centred AI Future

A Submission to the Australian Government Productivity Commission

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Executive Summary

Australia stands at a critical juncture, confronting its slowest productivity growth in sixty years while simultaneously facing the dawn of a new technological era defined by Artificial Intelligence (AI) (Productivity Commission, 2025e). This report presents a comprehensive strategic blueprint for navigating this transformation, arguing that Australia's future prosperity, security, and social cohesion depend on a cohesive national AI strategy built upon three integrated and mutually reinforcing pillars: **Australian AI Sovereignty**, an **AI Public Utility Model**, and a foundational commitment to **Humanity-Centred Principles**. A failure to incorporate these pillars will result in a fragmented, dependent, and untrustworthy AI ecosystem, constituting a historic missed opportunity.

The central thesis of this report is that **Western Australia (WA) provides the ideal real-world laboratory to pilot, prove, and scale this national model**. WA's unique confluence of globally significant industrial expertise in resources and agriculture, combined with the innovation forged from the necessity of delivering essential services across vast distances, has created a mature ecosystem for developing the robust, scalable, and resilient AI solutions the nation requires. **The Western Australian AI Hub (WA AI Hub)**, an independent, collaborative initiative, is uniquely positioned as an orchestrator in this endeavour. As a central node connecting government, industry, and academia, the Hub can effectively translate this pioneering work into national capability, serving as a vital non-government facilitator.

This report details how a humanity-centred approach, built on agile governance and privacy-preserving technologies, is the essential foundation for the public trust required for widespread AI adoption. It then provides a clear vision for an AI Public Utility, demonstrating with concrete examples how AI can revolutionise the delivery of healthcare and education,

particularly for remote and regional Australians, by augmenting the capacity of human professionals rather than replacing them.

Crucially, the report outlines the economic, infrastructural, and human capital policies required to build and maintain Australian AI Sovereignty. This includes a national strategy for unlocking sovereign data, a bold tax reform to incentivise investment in sovereign compute infrastructure, and a dual focus on cultivating specialist AI skills and pervasive AI literacy throughout the workforce. It reveals a unique national opportunity to leverage Australia's renewable energy advantage to become a regional hub for secure and sustainable AI compute.

Finally, the report frames AI as an intergenerational imperative, detailing its critical role as an enabling technology for accelerating the net-zero transition and building long-term climate resilience. It proposes a new paradigm of "Dynamic Stewardship" where AI transforms environmental regulation from a static bottleneck into a continuous, data-driven process that enhances both productivity and environmental outcomes.

The strategic roadmap presented herein is not theoretical. It is an actionable plan, grounded in the proven capabilities and unique context of Western Australia, offering a clear pathway to a more productive, equitable, and sovereign AI future for the entire nation.

The Triad of AI Leadership: Sovereignty, Utility, and Humanity

The successful integration of AI into the fabric of Australian society and its economy cannot be achieved through a piecemeal or purely technology-driven approach. It requires a national vision founded on a triad of core, interdependent principles: a commitment to humanity-centred values, the deployment of AI as a public utility, and the strategic imperative of Australian AI sovereignty. These three pillars form the essential architecture for a stable, trusted, and prosperous AI future. They are not independent policy streams to be pursued in isolation; instead, they are mutually reinforcing components where a weakness in one fundamentally undermines the strength of the others.

Pillar 1: Humanity-Centred AI is the foundational principle, representing the bedrock of public trust upon which all other efforts must be built. This concept transcends mere ethical guidelines; it demands the active embedding of Australian values, fairness, diversity, transparency, contestability, and respect for human rights into the entire lifecycle of AI systems, from data collection and model design to deployment and oversight (Department of Industry, Science and Resources, 2024). With public trust in AI systems currently low in Australia, and only 35% of citizens believing institutional safeguards are adequate, the government has an elevated responsibility to be an exemplar of safe and responsible adoption (Digital

Transformation Agency, 2024; Prime Minister and Cabinet, 2025). **A humanity-centred approach** is therefore not a constraint on innovation but **a prerequisite for the social license needed to unlock AI's full potential.**

Pillar 2: AI as a Public Utility reframes the purpose of this transformative technology. It posits that AI's primary value is not confined to commercial applications but extends to its role as essential infrastructure for delivering societal good and improving core government services for all citizens (CSIRO, n.d.-a; Services Australia, 2025). This model focuses on harnessing AI to solve complex national challenges, from managing the healthcare system and protecting the environment to responding to natural disasters—for the benefit of the entire community (CSIRO, n.d.-a). It is about leveraging **AI to enhance equity, improve access to services, and increase the efficiency and quality of the public sector, ensuring the benefits of the AI revolution are broadly shared.**

Pillar 3: Australian AI Sovereignty is the strategic capacity for the nation to control its own AI destiny. This is a multi-faceted concept that encompasses sovereign data (ensuring models are trained on data that reflects Australian society), sovereign infrastructure (domestic data centres and compute power), a skilled domestic workforce, targeted investment, and the ability to build, deploy, and govern AI models in alignment with our national interests, laws, and cultural nuances (Macquarie Data Centres, n.d.; Salesforce, n.d.). In an era of increasing geopolitical tension, sovereignty is a critical hedge against risk, ensuring that Australia is not merely a passive consumer of foreign technology but an active architect of its digital future (ASPI Strategist, 2025; InnovationAus, 2025). It guarantees that the **AI systems underpinning our critical infrastructure and public services serve Australian, not foreign, priorities** (Macquarie Data Centres, n.d.).

The symbiotic relationship between these three pillars is absolute. An AI strategy that pursues sovereignty without a humanity-centred compact risks creating powerful but unaccountable systems that could erode public trust and civil liberties. A public utility model that is not sovereign becomes dangerously dependent on foreign technology platforms, which may not align with Australian values or needs and could be withdrawn or compromised during a geopolitical crisis, disabling critical national infrastructure (ASPI Strategist, 2025). Similarly, a humanity-centred approach that is not operationalised through a public utility model fails to deliver tangible, widespread societal benefits, leaving AI's potential for social good unrealised. Only by pursuing these three goals in concert can Australia build an AI ecosystem that is resilient, trustworthy, and aligned with the national interest.

The Productivity Imperative and the AI Opportunity

A profound economic challenge underscores the urgency for a cohesive national AI strategy. In the decade leading up to 2020, Australia recorded its slowest rate of productivity growth in 60 years (Productivity Commission, 2025e). This slowdown is compounded by significant structural headwinds, including the fiscal pressures of an ageing population, rising demand for care services, and the immense economic and industrial transformation required to achieve net-zero emissions. This productivity challenge coincides directly with the rapid maturation of AI, a convergence that is not a coincidence but a clear call to action.

AI is not merely another incremental digital tool. It is a foundational, general-purpose technology with the capacity to unlock systemic productivity gains across every sector of the economy and every pillar of the government's agenda. Economic forecasts project that AI could contribute between \$170 billion and \$600 billion annually to Australia's GDP by 2030, presenting a historic opportunity to reverse the nation's productivity slump and secure future prosperity (Department of Industry, Science and Resources, 2024). The Australian Government has recognised this transformative potential, identifying AI as a critical technology capable of reshaping the economy, improving social wellbeing, and delivering more efficient and accurate government operations (Australian Government, 2021; Digital Transformation Agency, 2024).

The Productivity Commission's comprehensive inquiry into the nation's productivity challenges, therefore, arrives at a pivotal moment. The findings and recommendations from this inquiry will shape Australia's economic trajectory for decades to come. This report posits that a cohesive, integrated national strategy for AI is the central, unifying element required to achieve the government's ambitious goals. From transforming service delivery in the care economy to optimising the energy grid for a net-zero future, and from building a dynamic, resilient economy to equipping the workforce with the skills of tomorrow, the responsible development and deployment of AI is the critical enabler. A failure to place AI at the heart of the national productivity agenda would be to ignore the single most powerful lever for progress available in the 21st century.

Western Australia: The Nation's Real-World AI Laboratory

To translate a national AI vision from abstract principles into a practical, scalable reality, a testbed is required, a place where policy, technology, and industry can converge to solve real-world problems. This report identifies Western Australia as the nation's indispensable AI laboratory. In this unique ecosystem, a confluence of industrial strengths and geographical challenges has created the ideal conditions to pioneer the sovereign, humanity-centred, and utility-focused AI model that Australia needs.

A Confluence of Strengths

Western Australia's suitability as a national exemplar stems from two core characteristics: its deep, world-leading industrial expertise and the innovative pressures created by its vast geography. The state possesses profound and globally significant knowledge in sectors such as resources and agriculture. These are not nascent industries; they are highly complex, capital-intensive systems that have long been at the forefront of automation, remote operations, and data science. The resources sector, in particular, has pioneered the use of autonomous vehicles, predictive maintenance, and sophisticated geological modelling, creating a mature ecosystem of specialised talent, practical know-how, and a culture of data-driven decision-making (CSIRO, n.d.-a). This existing capability provides a powerful foundation, allowing for the transfer of proven AI solutions and expertise from these mature sectors into emerging areas of the economy.

Furthermore, the state's geography, often termed the "tyranny of distance", has acted as a powerful and relentless catalyst for innovation. The fundamental challenge of delivering high-quality health and education services across one of the world's largest and most sparsely populated jurisdictions has forced WA to become a leader in telehealth, digital health platforms, and remote learning technologies. This is not innovation by choice, but by necessity. In solving these acute problems of scale, access, and equity, WA has developed robust models for remote service delivery that are directly applicable to regional and remote communities across the entire nation.

This experience has cultivated a unique form of technological resilience. The AI solutions developed to manage systems "at the edge", whether the logistical complexities of a Pilbara mine site or the delivery of healthcare to a remote Kimberley community, are inherently robust, scalable, and designed to function effectively in challenging, often low-connectivity environments. This is a critical distinction. The AI capabilities honed in WA are not merely "mining AI" or "remote health AI"; they are fundamentally **Resilient AI**. This inherent resilience

makes the state's AI ecosystem a perfect incubator for the technologies needed to support national critical infrastructure, which demands the highest levels of reliability and security. This reframes WA's contribution from being sector-specific to being foundational for the nation's economic and strategic security.

The WA AI Hub: The Ecosystem Orchestrator

Acting as the connective tissue within this dynamic ecosystem is the Western Australian AI Hub. Founded by [Josh \(Adi\) Tedjasaputra](#) and [Dr Eunice Sari](#), the Hub is an independent, non-governmental organisation whose core mission is to serve as an "orchestrator" connecting industry, government, academia, and the startup community to accelerate the integration of responsible and innovative AI in society fabric. It is designed to act as a facilitator and translator, channelling the advanced data science capabilities from mature sectors like mining into emerging industries and fostering the data-driven culture necessary for innovation to flourish across the board.

The WA AI Hub's planned activities provide a tangible, working model of the national strategy advocated in this report. Its Industry Transformation Programs, which establish industry-led working groups and co-fund high-potential pilot projects, demonstrate a practical pathway to developing agile, evidence-based governance. Its plans to host a 'Responsible AI Challenge,' facilitate partnerships to align university curricula with industry needs, and advocate for policy settings that accelerate innovation all represent concrete actions that turn strategic vision into reality through multi-stakeholder collaboration.

Through these initiatives, the Hub exemplifies the role of a coordinating body that leverages regional strengths for national benefit. It is not merely a state-level organisation but a national asset, providing a proven model for how to build a collaborative, application-focused AI ecosystem. By serving as the nation's real-world laboratory, Western Australia, with the WA AI Hub at its core, can de-risk and accelerate the development of a sovereign, productive, and equitable AI future for all of Australia.

Pillar I – A Humanity-Centred Compact: Building Trust in the AI Era

The widespread adoption and ultimate success of AI in Australia are contingent on one non-negotiable factor: **public trust**. Without it, even the most technologically advanced systems will face resistance, and their potential benefits will remain unrealised. Building this trust requires a deliberate and proactive approach to governance that places human values at its core. This involves creating an agile regulatory environment that fosters innovation while protecting citizens, modernising our privacy laws to be fit for the digital age, and ensuring that all AI systems are transparent, contestable, and accountable.

Agile Governance for Innovation

In a field evolving as rapidly as AI, rigid, prescriptive, and technology-specific legislation is a recipe for obsolescence. Such an approach risks stifling innovation, deterring investment, and putting Australian businesses at a competitive disadvantage before the laws are even enacted. The independent WA AI Hub, therefore, strongly endorses the proportionate, risk-based, and technology-neutral approach to AI regulation advocated by the Productivity Commission and reflected in the Australian Government's current direction (Productivity Commission, 2025c). This agile posture, which combines voluntary AI Safety Standards with the consideration of mandatory guardrails for genuinely high-risk applications, contrasts favourably with more rigid, top-down models such as the European Union's AI Act (European Parliament, 2024). It provides the flexibility needed for innovation to flourish while addressing legitimate community concerns about safety and ethics.

A key barrier to AI integration is regulatory uncertainty; businesses are hesitant to make significant investments when the legal frameworks are unclear. An agile, principles-based framework provides the certainty required for enterprises to innovate with confidence. It is therefore critical to support the Commission's recommendation to pause the implementation of new mandatory guardrails until comprehensive, sector-by-sector analyses of existing regulatory frameworks are completed (Productivity Commission, 2025c). Rushing to create new AI-specific laws without fully understanding the capacity of current legislation in areas like consumer protection and privacy could lead to a patchwork of duplicative rules that create unnecessary compliance burdens without materially improving safety.

To accelerate the development of this essential evidence base, the WA AI Hub's proposed plan to establish co-funded pilot projects in key sectors offers a powerful and practical solution. These pilots, facilitated by the Hub in partnership with industry and research bodies, would provide a controlled environment for businesses to trial high-potential AI applications in industries with complex regulatory landscapes, such as mining automation, remote diagnostics in healthcare, and autonomous systems in agriculture. Within these controlled environments, industry participants, regulators, and research institutions can collaboratively co-design and test governance frameworks, ethical guidelines, and compliance mechanisms in a real-world context. This process would generate invaluable, practical evidence to inform national policy, ensuring that future regulation is well-calibrated to actual risks and is genuinely innovation-enabling.

Information Request 2.1 (Creating a more dynamic and resilient economy):

The PC would like to hear specific examples of regulations that you think align with the categories [of regulatory failure] above, and that could easily be fixed by government.

Response:

A clear example of regulatory failure is **regulatory delay**, which creates uncertainty and acts as a significant brake on productivity. The slow, uncertain, and complex approvals processes for new green infrastructure are a critical bottleneck to the net-zero transition, with projects referred under the *EPBC Act* taking over 500 days on average for a decision (Productivity Commission, 2025d). This can be fixed by mandating the use of **AI-powered "RegTech" platforms** to rapidly analyse project documentation and environmental data, reducing assessment times from months to weeks and accelerating the deployment of essential infrastructure.

Privacy by Design: The Shift from Compliance to Trust

Realising the immense productivity benefits of AI requires vast amounts of data, but unlocking this data requires robust privacy protections that earn public trust. Australia's current privacy framework, anchored in the *Privacy Act 1988*, is struggling to keep pace. Its heavy reliance on a "notice-and-consent" model has led to widespread "consent fatigue," where individuals are conditioned to agree to lengthy, unreadable privacy policies (Productivity Commission, 2025c). This creates a culture of box-ticking compliance that imposes a significant burden on businesses without effectively empowering individuals or protecting their privacy.

For these reasons, this report strongly supports the Productivity Commission's recommendation to introduce an alternative, outcomes-based compliance pathway within the Privacy Act (Productivity Commission, 2025c). Such a pathway would shift the focus from prescriptive processes to demonstrated outcomes, giving organisations the flexibility to innovate while holding them to a higher, more meaningful standard of accountability for protecting personal information.

Technology itself provides the means to meet this higher standard. The development and adoption of Privacy-Enhancing Technologies (PETs) offer a practical and powerful way for organisations to meet the obligations of an outcomes-based privacy regime. Techniques such as

Federated Learning, which allows models to be trained on decentralised data without the raw data ever leaving its source; Differential Privacy, which adds statistical "noise" to datasets to make re-identification mathematically impossible; and Homomorphic Encryption, which allows computation on encrypted data, are central to the practice of "responsible AI" (CSIRO, n.d.-a). These technologies elegantly resolve the apparent conflict between the need for vast data to train powerful AI and the non-negotiable requirement to protect individual privacy.

An outcomes-based pathway in the Privacy Act would create a powerful incentive for Australian businesses to invest in and adopt these cutting-edge techniques. The co-funded pilot projects proposed by the WA AI Hub create the perfect environment to accelerate this process. High-risk sectors like health and mining are often hesitant to share sensitive data due to both regulatory uncertainty and privacy concerns. The pilots provide a "safe harbour" where companies can experiment with PETs to meet stringent privacy and security requirements. For example, competing mining companies could use Federated Learning within a pilot project to pool operational data and train a shared predictive maintenance model, improving safety and efficiency for all without revealing proprietary information. This process directly accelerates the adoption of privacy-preserving AI, moving PETs from academic concepts to industry best practice. To further facilitate this, the WA AI Hub's offer, as a leading independent AI body, to partner with the Office of the Australian Information Commissioner (OAIC) to develop a national Code of Practice for the use of PETs in AI systems should be supported, as it would provide a tangible and innovative route to compliance under the proposed new privacy pathway.

Information Request 3.1 (Harnessing data and digital technology):

The PC is seeking feedback on implementation issues, including how an alternative compliance pathway should be embedded in the *Privacy Act 1988* (Cth).

Response:

An alternative compliance pathway should be designed as a new defence within the existing *Privacy Act*, rather than a complete overhaul. This pathway would be framed around a clear **best interest obligation**, requiring entities to prioritise the privacy interests of individuals. This shifts the onus from individual "consent fatigue" to organisational accountability. Enforcement would be the responsibility of a well-resourced OAIC, supported by a national Code of Practice for Privacy-Enhancing Technologies (PETs), which the WA AI Hub is willing to help develop. This provides a practical, technology-enabled route to compliance, fostering innovation while genuinely protecting privacy.

Embedding Australian Values: Transparency, Contestability, and Accountability

The governance frameworks for AI must be explicitly aligned with Australia's national values and ethical principles. The Australian Government's AI Ethics Principles, which include human-centred values, fairness, privacy protection, reliability, transparency and explainability, contestability, and accountability, provide the essential moral compass for this endeavour (Department of Industry, Science and Resources, 2024; Digital Transformation Agency, 2024). These principles must be more than aspirational; they must be operationalised through concrete governance mechanisms.

The public rightly expects the government to be an exemplar in the safe and responsible use of AI, holding itself to a higher standard of ethical behaviour (Digital Transformation Agency, 2024). Frameworks such as the WA Government's AI Policy and Assurance Framework (Government of Western Australia, 2025) and the federal Digital Transformation Agency's (DTA) Technical Standard for Government's Use of Artificial Intelligence (Digital Transformation Agency, 2024) provide practical models for how this can be achieved. These frameworks require government entities to conduct rigorous self-assessments of AI projects, appoint accountable officers, and ensure that systems are transparent, explainable, and contestable. For example, individuals must be made aware when an AI system materially affects a decision concerning them, and the decision-maker must be able to generate clear reasons for that decision (Joint Committee on Public Accounts and Audit, 2025). By embedding these practices into public sector procurement and operations, the government can lead by example, building public trust and setting a high standard for the private sector to follow.

Pillar II – An AI Public Utility: Delivering for All Australians

Viewing AI as a public utility shifts its focus from a purely commercial tool to a powerful instrument for enhancing the quality, efficiency, and equity of essential public services. This model is particularly resonant in a country like Australia, with its vast geography and commitment to universal service provision. By strategically deploying AI in critical sectors like healthcare and education, Australia can address long-standing challenges, improve outcomes for all citizens, and unlock productivity gains that are measured not just in dollars but in human wellbeing. Western Australia, with its acute experience in overcoming the challenges of distance, provides a compelling case study for how this public utility model can be realised.

Revolutionising Remote and Regional Healthcare

The Australian care economy faces immense pressure from rising demand, workforce shortages, and a fragmented system that struggles to provide integrated, person-centred care (Productivity Commission, 2025a). These challenges are magnified in remote and regional areas. AI offers the essential enabling technology to move the healthcare system from a reactive, siloed model to a

proactive, integrated, and preventative one.

The vision of "collaborative commissioning" between Local Hospital Networks (LHNs), Primary Health Networks (PHNs), and Aboriginal Community Controlled Health Organisations (ACCHOs) is a central plank of health reform. Still, it depends on the ability to share and analyse data to facilitate joint planning (Productivity Commission, 2025a). AI-powered predictive analytics can break down these data silos, providing the shared intelligence required for effective collaboration. There are numerous proven examples of this potential in action. The CSIRO's Patient Admission Prediction Tool (PAPT), used by the Queensland Government, forecasts demand on hospital beds and staff with approximately 90% accuracy, enabling more efficient resource allocation and reducing wait times. In a rural NSW health district, a machine learning model successfully identified individuals at high risk of unplanned hospital readmission with 70% accuracy, allowing for targeted post-discharge support that keeps people healthier in their communities.

These applications demonstrate a fundamental shift towards preventative health. By analysing vast datasets, AI can identify at-risk populations long before they require acute care, enabling targeted, cost-effective interventions. This provides the rigorous, evidence-based foundation needed for a National Prevention Investment Framework to succeed (Productivity Commission, 2025a).

A critical insight is that the primary value of AI in these settings is *capacity augmentation*. The healthcare sector is labour-intensive, and a significant portion of a clinician's time is consumed by administrative tasks, contributing to burnout and reducing time for direct patient care (Productivity Commission, 2025a). AI systems that automate appointment scheduling, predict patient no-shows, or convert free-text pathology reports into structured data can alleviate this immense administrative burden. This does not replace nurses and doctors; it liberates their most valuable resource, their time and expertise, to focus on high-empathy, complex, and uniquely human interactions with patients. This is the key to unlocking productivity in the care sector in a way that simultaneously improves the quality of care and the sustainability of the workforce.

Given its unique experience in delivering services across vast distances, Western Australia is the ideal national testbed for these integrated, AI-driven care models. By championing investment in a secure, federated health data platform powered by AI analytics, WA can pioneer new models of proactive, place-based care that can be scaled nationally, ensuring that all Australians, regardless of their location, can benefit from a more intelligent, more personalised healthcare system.

Information Request 1.1 (Delivering quality care more efficiently):

What should a standardised reporting framework for providers look like? How could technology be used to support a standardised reporting framework?

Response:

A standardised reporting framework should identify a common set of quality and safety indicators across aged care, NDIS, and veterans' care, allowing providers to "report once, use often" (Productivity Commission, 2025a). Technology is the key enabler: an AI-powered system could continuously ingest and analyse data from providers in a standardised format (e.g., incident reports, clinical notes, consumer feedback) and store it in a shared data repository. This would not only reduce the reporting burden but also enable regulators to identify systemic risks proactively and allow for more meaningful public comparison of service quality.

Transforming Education for Equity and Excellence

Australia's school system faces the dual challenges of high teacher workload, much of it on non-teaching tasks, and significant variation in student ability within classrooms. These issues are particularly acute in remote and disadvantaged communities, creating persistent equity gaps (Productivity Commission, 2025b). AI provides a powerful pathway to address both challenges simultaneously, delivering on the long-held promise of personalised education at scale.

The "Two Sigma Problem," a concept from educational research, has long demonstrated that one-on-one tutoring can dramatically improve student performance. Still, it has been prohibitively expensive to implement universally. AI-driven adaptive learning platforms can effectively solve this problem, acting as a "personal tutor for every child." These systems can adjust the difficulty of content in real-time, provide instant feedback, identify knowledge gaps, and allow every student to learn at their own pace. For students in remote areas who may lack access to specialist teachers, these AI-powered tools can provide auxiliary access to high-quality educational resources and specialised instruction, directly addressing educational inequity.

Just as in healthcare, AI in education serves as a powerful tool for capacity augmentation. Pioneering generative AI chatbots like South Australia's 'EdChat' and NSW's 'EduChat' are already demonstrating how AI can reduce teacher workload by generating draft lesson plans,

creating differentiated learning materials for students of varying abilities, and automating administrative duties (Productivity Commission, 2025b). This frees up significant time for teachers to focus on high-impact instruction, small-group work, and building strong relationships with their students—the very activities that have the greatest impact on learning but are often crowded out by administrative burdens.

To harness these benefits effectively, a coordinated national approach is essential. A national online platform for high-quality, curriculum-aligned lesson materials, enhanced with AI capabilities, and a coordinated national strategy for procuring and quality-assuring AI EdTech tools would prevent a fragmented, state-by-state duplication of effort and ensure equitable access for all Australian students (Productivity Commission, 2025b). The WA AI Hub's commitment to facilitating partnerships between WA's universities and schools provides a valuable model for how to align curricula with industry needs and create new work-integrated learning opportunities. By embracing AI as a public utility in education, Australia can empower its teachers, enhance equity, and better prepare all students for the future.

Information Request 1.1 (Building a skilled and adaptable workforce):

Which agency in the existing national education infrastructure is best placed to take on responsibility for the assessment and development of lesson planning materials and the assessment and procurement/development of advanced edtech tools?

Response:

A national education body such as Education Services Australia (ESA), in collaboration with the Australian Education Research Organisation (AERO), is best placed to lead this initiative (Productivity Commission, 2025b). ESA has experience managing the national Scootle platform, while AERO can provide the evidence-based quality assurance framework. A national approach is critical to coordinate acquisition, leverage the combined purchasing power of all states and territories, and ensure equitable access to the best AI-powered educational tools for all Australian students, preventing a digital divide.

Pillar III – A Sovereign Capability: Securing Australia's Digital Future

For Australia to be a creator and shaper of AI technology, rather than merely a consumer, it must build and maintain a sovereign AI capability. This is not a call for technological isolationism but a strategic necessity to ensure our economic resilience, national security, and cultural

identity in an AI-driven world. Achieving sovereignty requires a deliberate, multi-faceted strategy focused on three foundational elements: unlocking sovereign data, building sovereign infrastructure, and cultivating a sovereign workforce.

Fueling the Engine: A National Strategy for Sovereign Data

Access to large, diverse, and high-quality datasets is the single most critical input for developing, training, and refining robust and effective AI models. Without a national strategy to unlock this data, Australia's ability to build its own AI capabilities will be severely constrained, leaving the nation reliant on international models trained on foreign data. Such models may be biased, irrelevant to our unique industrial and environmental contexts, or embed cultural values that do not align with our own (Sovereign Australia AI, 2025).

This report therefore strongly supports the Productivity Commission's call for new, lower-cost, and flexible regulatory pathways to expand data access for individuals and businesses (Productivity Commission, 2025c). The strategic value of this enhanced data access extends across three distinct orders of benefit. The first-order benefit is the direct utility gained by individuals and businesses; for example, a farmer in Western Australia gains the ability to integrate real-time telematics data from different brands of agricultural machinery to optimise irrigation and boost on-farm productivity. The second-order benefit is the emergence of new, innovative data-driven services, such as a platform that allows mining companies to share anonymised geological data to support sustainable development that balances humanity's needs with environmental protection and community wellbeing.

The third-order benefit is the most strategically significant: the creation of a national AI capability. The aggregated, anonymised data generated through these new access pathways becomes the essential training fuel for sophisticated, Australian-specific AI models. A national dataset on rental payments could train a model to predict housing stress with unprecedented accuracy; pooled agricultural data could power AI models that manage water resources at a catchment level. This progression, from individual data access to innovative services to national AI-powered insights, is the strategic pathway that data policy must enable. Within this framework, it is also critical to respect and incorporate the principles of Indigenous Data Sovereignty, which advocates for Indigenous control over the protection and use of data collected from their communities, ensuring that AI development is inclusive and empowering for all Australians (CSIRO, n.d.-b).

Information Request 2.2 (Harnessing data and digital technology):

What should the readiness review process look like? How should sectors and data holders be identified to undergo the readiness review?

Response:

The readiness review should be led by a body like the ACCC or Data Standards Body, assessing a sector's digital maturity, the value of its data, and the technical capacity of data holders (Productivity Commission, 2025c). Sectors should be prioritised where data sharing offers high benefits for relatively low cost. Initial candidates include agricultural machinery (to enable farmers to integrate telematics data), retail loyalty programs (for consumer budgeting tools), and tenancy data (to streamline rental applications) (Productivity Commission, 2025c). The WA AI Hub is well-placed to help pilot these high-value use cases, leveraging its experience in translating data science from mature sectors like resources, energy, green computing, healthcare, and education.

Building the Foundations: Incentivising Sovereign Infrastructure

A sovereign AI capability cannot exist without sovereign physical infrastructure. This means building and controlling our own secure data centres, cloud platforms, and high-performance computing resources. The corporate tax system is one of the most powerful levers available to the government to stimulate the necessary private sector investment in this critical infrastructure.

The Productivity Commission's bold proposal to pivot the corporate tax system towards a mix of a lower company income tax and a new net cashflow tax is particularly well-suited to this goal (Productivity Commission, 2025e). The defining feature of the net cashflow tax, allowing for the full and immediate deduction of capital expenditure, directly addresses the primary financial characteristics of AI investment. Developing sophisticated AI capabilities requires substantial upfront capital expenditure on specialised hardware like GPU clusters, data infrastructure, and intangible assets like proprietary software. By allowing immediate expensing, the tax reform fundamentally lowers the after-tax cost of this capital, creating a powerful incentive for businesses to invest in the foundational technologies of a sovereign AI ecosystem (Productivity Commission, 2025e). This is a far more targeted and efficient mechanism for stimulating AI investment than generic R&D tax incentives, as it specifically rewards the tangible and intangible capital formation that underpins national capability.

This tax reform should be viewed as a cornerstone of a national strategy to build what are now being termed "AI Factories", state-of-the-art domestic AI data centres, and "Sovereign AI Clouds" located within national borders (Salesforce, n.d.). Such investments would reduce our strategic dependence on a small number of overseas technology providers, enhancing economic resilience and ensuring that the value generated by Australian data is retained within our economy (ASPI Strategist, 2025).

A powerful, self-reinforcing dynamic exists between this proposed tax reform, investment in sovereign data centres, and Australia's significant renewable energy advantage. The net cash flow tax makes the construction of capital-intensive data centres more financially attractive. Simultaneously, Australia's abundant solar and wind resources make it possible to power these facilities with cheap, sustainable energy, a major competitive advantage, as AI computation is increasingly energy-intensive (CSIRO Alumni, 2025; Lawton, 2025). This combination of a strategic policy lever (tax reform) and a natural advantage (renewables) creates a unique global value proposition. It positions Australia not just as a user of sovereign AI, but as a potential *regional hub for secure and sustainable AI compute*, capable of attracting significant international investment and talent. This transforms the sovereignty discussion from a defensive necessity into a proactive economic and geopolitical opportunity.

Information Request 1.1 (Creating a more dynamic and resilient economy):

The PC is interested in views on further information about the interaction between the proposed cashflow tax (i.e. the net cashflow tax) and Australia's dividend imputation system.

Response:

Regarding Australia's dividend imputation system, the report notes its complexity but states that the primary objective of any tax reform, including the proposed net cashflow tax, is to encourage both domestic and foreign capital flow into high-growth Australian ventures like AI startups. For small businesses, especially those that might eventually scale and attract external investment or distribute profits, the interaction between the net cashflow tax's incentive for reinvestment and the dividend imputation system's treatment of distributed profits would need careful consideration to ensure overall tax stability and predictability. This stability is crucial for attracting the long-term capital necessary for a sovereign AI industry, and for small businesses to grow from initial investment to sustained profitability without facing disincentives from a convoluted tax structure. The aim is to create a tax environment where the upfront investment encouraged by the net cashflow tax can eventually lead to profitable ventures that can either retain earnings for further growth or distribute them efficiently within the imputation system, without creating new barriers for small businesses.

In the context of small businesses with a turnover of less than \$75,000, the benefit of the net cashflow tax would need to be made especially accessible. This could be achieved through: (1) Simplified Compliance and Reporting: For very small businesses, the complexity of any new tax system, even one with a net

cashflow component, can be a barrier. Simplified reporting frameworks and streamlined processes would be essential to ensure they can easily claim immediate deductions for AI-related capital expenditures (e.g., purchasing AI software licenses, cloud compute credits for AI model training, or specialised hardware). (2) Education and Advisory Support: Proactive government-funded education campaigns and accessible advisory services (perhaps through small business associations or digital platforms) would be vital to inform these businesses about how the net cashflow tax specifically benefits their AI investments and how to leverage it. (3) Integration with Existing Small Business Support: The benefits of the net cashflow tax for AI investment should be integrated into existing small business support programs and grant schemes, making it easier for eligible businesses to understand and apply.

The Human Element: Cultivating a Sovereign AI Workforce

The final, and most important, component of AI sovereignty is human capital. The current shortage of AI-specialist talent is arguably the single greatest handbrake on AI adoption and productivity growth in Australia. Addressing this skills gap requires a multi-faceted, long-term national commitment to education and training.

This commitment must follow a two-pronged approach. First, Australia must increase the pipeline of specialist AI talent. This involves modernising tertiary education and Vocational Education and Training (VET) pathways to produce more data scientists, machine learning engineers, and AI safety auditors. Reforms that improve credit transfer and Recognition of Prior Learning (RPL) processes are crucial, and AI-powered assessment tools can be used to make these processes more efficient and consistent, particularly for mature-aged workers and skilled migrants (Productivity Commission, 2025b).

Second, and more profoundly, Australia must focus on creating pervasive AI literacy across the entire workforce. The landmark report from Jobs and Skills Australia confirms that AI is far more likely to **augment existing roles** by automating certain tasks than it is to eliminate jobs. A geologist is more productive when augmented with an AI that can analyse seismic data; a nurse is more effective when an AI handles their administrative scheduling. This reality of job augmentation demands a fundamental shift in skills policy. The focus must move beyond simply managing workforce displacement to actively enabling workforce augmentation.

This requires embedding AI literacy and data skills across *all* primary, secondary, tertiary, vocational, professional, corporate and community education, not just confining them to specialist computer science degrees (Department of Industry, Science and Resources, 2024). Every future professional, from tradespeople and healthcare workers to lawyers and accountants, will need the skills to work effectively and safely alongside AI systems. This

necessitates a national commitment to lifelong learning, supported by accessible micro-credentials and industry-led upskilling programs. Organisations like the WA AI Hub are at the forefront of this movement, organising workshops and training programs to democratise AI knowledge and build the sovereign human capability that will power our AI future.

Information Request 2.1, 2.3 & 2.4 (Building a skilled and adaptable workforce):

How do challenges in credit transfer and RPL impact different groups? What is the most effective way to encourage SME training?

Response:

Poor credit transfer and RPL processes disproportionately impact groups more likely to use VET pathways, including regional and Aboriginal and Torres Strait Islander students (Productivity Commission, 2025b). A coordinated approach using **AI-powered assessment tools** can make RPL more efficient, consistent, and accessible (Productivity Commission, 2025b). For SMEs, the most effective way to encourage training is to **focus on pervasive AI literacy and competency that enables workforce augmentation**, not just specialist skills. Embedding AI skills across all VET and tertiary qualifications, supported by industry-led micro-credentials, will address critical capability gaps and ensure the entire workforce can leverage AI to boost productivity.

An Intergenerational Imperative: AI for a Sustainable and Resilient Nation

The strategic deployment of AI is not only a matter of immediate productivity and economic competitiveness; it is an intergenerational imperative. AI is a critical enabling technology for achieving long-term national goals of sustainability and climate resilience. By leveraging AI to accelerate the net-zero transition and proactively adapt to the unavoidable impacts of climate change, Australia can secure a more prosperous and sustainable future for generations to come.

Powering the Net-Zero Transformation

Australia's transition to a net-zero economy is both a profound challenge and a significant productivity opportunity. Achieving emissions targets at the lowest possible cost will free up resources for more productive activities across the economy (Productivity Commission, 2025d). AI is an indispensable tool for addressing the core complexities of this transition.

The shift to an energy system dominated by variable renewable sources like solar and wind introduces unprecedented levels of complexity. Maintaining grid stability and reliability is a vast,

dynamic optimisation problem that is computationally impossible to solve efficiently without advanced AI. Across Australia, AI is already being deployed to forecast renewable generation with high accuracy by analysing weather data, managing the charging and discharging of large-scale batteries to balance the grid, and enabling smart grids that can increase renewable energy utilisation by up to 30% (Wipro, 2021). Furthermore, AI-driven predictive maintenance is being used to monitor wind turbines and solar panels, reducing operational costs by up to 25% and increasing the power output of these critical assets.

However, one of the most significant brakes on the transition is not technological but regulatory: the slow, uncertain, and complex approvals processes for new green infrastructure (Productivity Commission, 2025d). The finding that it takes over 500 days on average for projects referred under the *Environment Protection and Biodiversity Conservation Act 1999* to receive a decision is a stark illustration of this critical bottleneck (Productivity Commission, 2025d). AI offers a direct and powerful solution. AI-powered platforms can rapidly analyse vast quantities of project documentation, satellite imagery, and ecological survey data to assess environmental impacts, potentially reducing the assessment phase from months or years to weeks. Mandating the use of such platforms for priority renewable energy projects would significantly reduce approval times, lower costs for developers, and accelerate the deployment of the clean energy infrastructure Australia urgently needs.

This application of AI points to a new paradigm for environmental regulation, which can be termed "Dynamic Stewardship." Traditional environmental regulation is often static, based on historical data and fixed rules, and can be adversarial. AI enables a dynamic model where regulation becomes a continuous, data-driven process. For example, instead of a one-time approval for a major project, an AI system could continuously monitor satellite imagery, sensor data, and water quality to ensure compliance in real-time, allowing regulatory conditions to adapt as environmental conditions change. This approach has the potential to reduce the regulatory burden, a key productivity goal, while simultaneously delivering superior environmental outcomes, resolving a long-standing tension between economic development and environmental protection.

Building Climate Resilience through AI-Powered Adaptation

Beyond mitigation, Australia must adapt to the unavoidable impacts of climate change. This is fundamentally a data problem, requiring the analysis of complex, large-scale datasets to understand and predict localised risks (Productivity Commission, 2025d). AI is the essential technology to move Australia from a reactive to a proactive stance on climate adaptation.

The Productivity Commission's recommendation for a central climate-risk information database can be powered by AI (Productivity Commission, 2025d). AI models can process terabytes of climate projection data, topographical information, and hydrological models to provide granular, property-level assessments of risks such as flood, bushfire, and coastal inundation. This

analytical engine provides households, businesses, and governments with the detailed information needed to make informed decisions and invest effectively in resilience. This aligns directly with the work of national bodies like the CSIRO, which are already using AI to model and predict the impact of natural disasters like bushfires (CSIRO, n.d.-a).

Furthermore, AI can be used to model the effectiveness of various adaptation measures—such as different building materials or the placement of urban green infrastructure- in reducing damages from extreme weather events (CSIRO, n.d.-a). This modelling is crucial for developing the evidence-based, outcomes-focused national climate resilience rating system for housing recommended by the Commission (Productivity Commission, 2025d). In the agricultural sector, which is critical to regional Western Australia, AI-powered tools can provide farmers with tailored advice on crop selection and soil management to adapt to changing climatic conditions, building resilience from the ground up. By leveraging AI for adaptation, Australia can better protect its communities, infrastructure, and natural environment, ensuring a more resilient and sustainable future.

A Strategic Roadmap for Australia

The analysis presented in this report leads to an overarching conclusion: Artificial Intelligence is not a peripheral issue for a future productivity agenda; it is the central, enabling technology that must power Australia's next wave of economic and social progress. The five pillars of the government's productivity agenda - data and digital technology, a dynamic economy, a skilled workforce, quality care, and the net-zero transition - are deeply interconnected. AI is the common thread that can weave them into a cohesive and mutually reinforcing national strategy.

A Call to Action: A Coordinated National Effort

Seizing the AI opportunity requires a bold, coordinated national effort. It demands a true partnership between government, industry, the research community, and civil society, working together to build the necessary infrastructure, skills, and governance frameworks. The vision outlined in this report, of an AI future that is sovereign, serves the public good, and is grounded in humanity values, provides the blueprint for this effort. We urge the Productivity Commission and the Australian Government to embrace the transformative potential of Artificial Intelligence and to place it at the core of Australia's strategy for a more dynamic, resilient, and productive future.

The WA AI Hub as National Exemplar

Western Australia, through the coordinating efforts of the independent WA AI Hub, is uniquely positioned to lead aspects of this national endeavour. The Hub's vision is for WA, and by extension Australia, to become a globally recognised leader in the *application* of responsible

and innovative AI, moving beyond theoretical research to the practical deployment of solutions that solve real-world problems. As a collaborative entity, the WA AI Hub serves as a national exemplar, providing a clear, actionable model for how to pilot and scale the key initiatives required for a successful national AI strategy that can be replicated and supported across the nation.



Table of Recommendations

The following table synthesises the report's analysis into a strategic roadmap. It provides a clear, actionable summary that aligns the core principles of a successful AI strategy with the key national challenges, the exemplary initiatives that can be pioneered in Western Australia, and the corresponding national policy recommendations required to scale these solutions for the benefit of all Australians.

Table 1

Strategic Roadmap: Aligning Principles with Action for a Sovereign Australian AI Future

Core Principle	Key National Challenge	WA-Led Initiative (Exemplar Role)	National Policy Recommendation
Humanity-Centred	Low public trust in AI, regulatory uncertainty hindering innovation, and outdated privacy laws creating compliance burdens without protecting citizens (Prime Minister and Cabinet, 2025).	The WA AI Hub facilitates co-funded pilot projects in WA for high-risk sectors (e.g., health, mining automation) to co-design agile, evidence-based governance frameworks, demonstrating effective multi-stakeholder collaboration.	Endorse a technology-neutral, outcomes-focused approach to AI regulation. Legislate an outcomes-based pathway in the Privacy Act and support the development of a national Code of Practice for Privacy-Enhancing Technologies (PETs) (Productivity Commission, 2025c).
Public Utility	Inequity in remote service delivery, workforce shortages and administrative burdens in healthcare and education;	Leverage WA's expertise in remote service delivery to develop and test integrated, AI-driven models for remote healthcare and personalised	Fund the development of a national secure, federated health data platform to support collaborative commissioning and preventative

	fragmented public service systems (Productivity Commission, 2025a, 2025b).	education, augmenting human professionals.	health. Co-invest in a national AI EdTech initiative to ensure equitable access to personalised learning tools (Productivity Commission, 2025a, 2025b).
Sovereignty	Dependency on foreign technology; extraction of value from Australian data; critical shortage of AI-specialist skills and pervasive AI literacy (ASPI Strategist, 2025).	The WA AI Hub pioneers sovereign compute investment by demonstrating the interplay between the proposed net cashflow tax, data centre construction, and WA's renewable energy advantage (Lawton, 2025), showcasing pathways for infrastructure development.	Implement the net cashflow tax to incentivise investment in sovereign AI compute infrastructure specifically. Embed AI literacy across all VET and tertiary qualifications to enable workforce augmentation (Productivity Commission, 2025b, 2025e).
Sustainability	Slow regulatory approvals for renewable energy projects act as a bottleneck to the net-zero transition; there is a lack of granular data for climate risk adaptation (Productivity Commission, 2025d).	Deploy AI for grid optimisation and climate risk modelling, leveraging WA's resources sector expertise in complex systems management and environmental monitoring.	Mandate the use of AI-driven platforms for environmental impact assessments to accelerate approvals for priority renewable energy projects. Invest in an AI-powered national climate risk database to inform adaptation strategies (Productivity Commission, 2025d).

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