The Economic Contribution of the Data Centre Industry in Australia

Prepared by Mandala

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MANDALA

Note: All dollar figures are Australian dollars unless indicated otherwise.

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Contents

This is the third report in a series examining the unfolding role of data centres in Australia. The first, released in 2024, uncovered the extent to which data centres serve as essential infrastructure underpinning the everyday lives of Australians. The second, released in 2025, examined their role across Australia's energy and water systems and the economic value they generate relative to the energy they consume.

THE ECONOMIC OPPORTUNITY FOR AUSTRALIA

Australia has a real opportunity to capture these economic benefits by 2030...

$19.8
billion
Economic contribution from construction

18,930
Construction jobs supported

$5.6
billion
Annual economic contribution from ongoing operations

23,040
Ongoing operational jobs each year

If Australia could capture the additional export opportunity, this could represent...

1.9 - 2.9GW
Additional compute demand

up to
$52
billion
Uplift to investment

up to
$4.1
billion
Annual economic contribution from ongoing operations

up to
17,120
Additional operational jobs each year

Executive summary

Data centres provide the essential digital infrastructure for enabling Australia's economic growth. They underpin the digital economy by supporting everyday services used by people, businesses, and governments, ranging from internet use to critical services such as emergency response, transport, banking and hospitals. Data centres are now driving a new wave of growth as AI and technological innovation reshape how Australians live and work. The investment in data centres has the potential to unlock a lasting uplift in productivity and support Australia's long-term economic growth.

Data centres already deliver large, measurable benefits to Australia by supporting economic activity, local businesses, and local jobs.

DC Byte reports that Australia has 1.6 gigawatts (GW) of operational data centre capacity. Our analysis finds that this currently generates $2.3 billion in annual economic activity and supports around 9,450 ongoing jobs in total in the data centre industry and across the supply chain. The construction of this existing capacity contributed a further $13.8 billion in economic activity and supported more than 9,000 jobs.

Operational data centre capacity in Australia is set to more than double by the end of 2030 to 3.9GW, according to DC Byte projections.

Building this pipeline will require around $42 billion in total investment. This is being driven by Australian businesses and consumers rapidly adopting AI tools, and constrained domestic supply. Our modelling indicates that construction of the projected 2.3GW of additional capacity will add $19.8 billion in economic activity by 2030 and 18,930 jobs. Once operational, Australia's 3.9GW capacity will generate $5.6 billion annually in economic activity and support 23,040 ongoing jobs annually. Data centre jobs are highly skilled and well paid, sitting well above the Australian median wage. This investment multiplies through domestic supply chains, into the businesses and workers who build and operate these facilities, generating economic impact that flows into the regions and well beyond the sector itself.

Becoming an exporter of compute to the APAC region and the world could multiply these benefits.

Not all AI compute needs to sit near the customer it serves. Australia could build capacity to serve so-called 'latency-tolerant' compute demand from further afield. Investors are already choosing Australia for AI infrastructure because of its land, renewable energy potential, skilled workforce, and the credibility that comes with political stability and Five Eyes membership. Positioning Australia to develop the infrastructure to serve latency-tolerant AI compute demand from APAC and beyond could capture up to 2.9GW of regional and global demand. Our modelling indicates that serving this workload in addition to DC Byte's projected domestic capacity of 3.9GW could deliver an additional $4.1 billion in economic activity each year by 2030 and sustain 17,120 ongoing jobs annually for as long as the facilities remain in operation.

Beyond this economic contribution, data centre investment unlocks further benefits.

Hosting critical infrastructure can boost national security and confer on Australia the soft power to shape standards that others follow. It also deepens the broader innovation ecosystem, drawing global AI talent and investment into a connected network of data centre operators, start-ups and research institutions.

Australia is best positioned to deliver this regional AI compute demand sustainably, creating the opportunity to export clean energy embedded in it.

Australia's projected emissions from serving the export opportunity are the lowest in the Asia Pacific region, less than half those of its nearest regional competitor and almost four times lower than the highest-emitting market in the region.

Few emerging industries offer Australia an opportunity of this scale. Data centres sit at the intersection of several of Australia's structural advantages.

The compounding nature of digital infrastructure means the benefits of early, well-positioned investment could extend well beyond the sector itself, flowing into construction, energy, and the broader digital economy. Achieving this will require a principled and proportionate approach from government and industry.

1 Australia is attracting global investment for data centres that is delivering broader economic benefits domestically

Demand from Australian consumers and businesses adopting cloud and AI tools is absorbing data centre capacity as fast as it comes to market. Vacancy rates are low and pre-leasing of capacity under construction remains elevated, reflecting genuine domestic need for compute services rather than speculative development. This build-out is meeting the real needs of Australian consumers and businesses.

To help accommodate this demand, Australia's operational data centre capacity is expected to more than double by the end of 2030 from 1.6GW to 3.9GW. Australia is expected to deploy around $42 billion in total investment to build this pipeline.

1.1

Increasing demand for cloud services and growing AI adoption among Australian businesses and consumers is driving data centre growth

Australia's data centre capacity is expanding rapidly in response to growing demand for cloud and AI services from businesses and consumers. Spending by Australian businesses on public cloud services has grown rapidly at 23 per cent per year since 2024 and is forecasted to reach $33.6 billion in 2026.[1] This rapid acceleration in enterprise cloud and AI adoption is translating directly into demand for data centre capacity, as the infrastructure required to deliver these services scales alongside it. This growth is being further reinforced by data security, privacy, and sovereignty requirements which are driving the desire for data to be stored domestically.[2] These requirements are captured in regulatory instruments such as the Security of Critical Infrastructure Act 2018 (SOCI), which governs the security of data infrastructure and the Hosting Certification Framework (HCF) which sets guidelines for government data hosting.

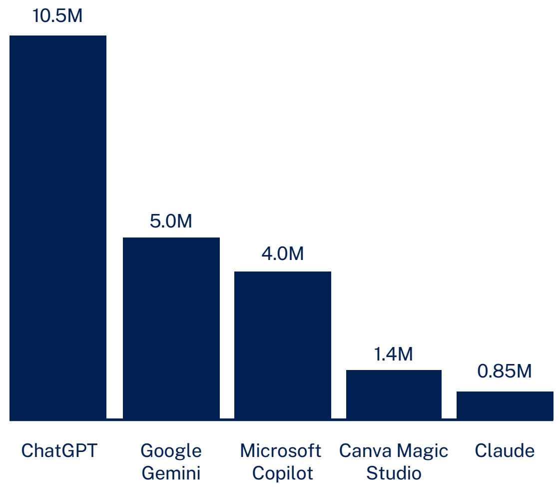
According to the National AI Centre,[3] more than two in five (44 per cent) Australian small and medium-sized enterprises (SMEs) had adopted AI in their business operations by February 2026. Beyond the overall increase in adoption, a notable trend is the growing depth and sophistication of AI use across businesses. Organisations are also moving beyond limited applications of AI towards broader and more integrated adoption. Between July 2025 and February 2026, the proportion of businesses using AI for only a small number of use cases fell from 22 per cent to 16 per cent, while the share applying AI broadly across business functions increased from 3 per cent to 8 per cent. This shift highlights AI's increasing importance as a core business capability and underscores its importance to the operations and competitiveness of Australian businesses.

AI tool adoption now reaches millions of Australians. Of these AI tools, ChatGPT is the most popular, reaching over 10 million Australians as shown in Exhibit 1. However, Australia is the world's most prolific user of Anthropic's Claude AI tool, ranking first in Claude usage per capita as of June 2026.[4] This high level of individual adoption, combined with accelerating enterprise uptake, is translating into sustained and growing demand for the compute infrastructure that underpins it. The significance of this shift is not lost on Australia's political leadership, with Prime Minister Anthony Albanese speaking to how deeply embedded AI has become in Australian life in a July 2026 address at the University of Sydney.[5]

EXHIBIT 1

Top 5 AI tools used by Australians

Australians ages 14+ using each tool, 2026



> From smartphones to rooftop solar, Australians have always been enthusiastic adopters of new technology. And AI is of course already part of our daily lives. Not as a novelty, or a search tool.
>
> It's changing the way our universities teach and the way students learn. It's helping small business owners cut the time they spend on paperwork. It's driving productivity and it's driving discovery. It's building new screening tools for cancer and disease. It is a critical – and urgent - innovation priority for our defence force and security agencies.
>
> No Government can turn back the clock, or press pause on all of this.
>
> Nor would we want to.
>
> **Anthony Albanese**
> Prime Minister | July 2026

Note: Based on survey data collected over an average four-week period in January – March 2026
Source: Roy Morgan (2026) *AI tools in Australia;* Anthropic (2025) *How Australia Uses Claude*; Mandala analysis.

1 Gartner (2026) *Gartner Forecasts Australian Organizations Will Spend More Than A$33 billion on Public Cloud in 2026*
2 Dentons (2025) *Data centre series: Implications of data security and sovereignty trends for the Australian data centre market*
3 National AI Centre (2026) *AI adoption insights: December 2025 to February 2026*
4 Anthropic (2026) *Anthropic Economic Index*
5 The Prime Minister of Australia (2026) *AI in Australia's interests*

1.2

Demand is outstripping supply, with very limited availability in Australia's data centre capacity

There is strong demand for Australian capacity which has led to a constrained supply market. Across both operational and pipeline capacity, Australian data centres are operating at near-full leasing commitments. Data centre vacancy rates across Australia have fallen sharply from around 24 per cent in 2022 to just 7 per cent nationally in 2026. This is starker in Sydney and Melbourne, with vacancy rates of 4 per cent and 3 per cent respectively.

Australia's under-construction capacity is also experiencing strong demand, as evidenced by high pre-leasing rates across Sydney and Melbourne capacity. Pre-leasing is the mechanism by which data centre tenants commit to occupying data centre capacity before a facility is complete, often years in advance of it becoming operational. It is a strong signal of genuine, contracted demand rather than speculative development. It gives developers and financiers the confidence to commit to new builds. A high pre-leasing rate means that by the time a new facility opens its doors, much of its capacity is already allocated to paying tenants under a long-term contract.

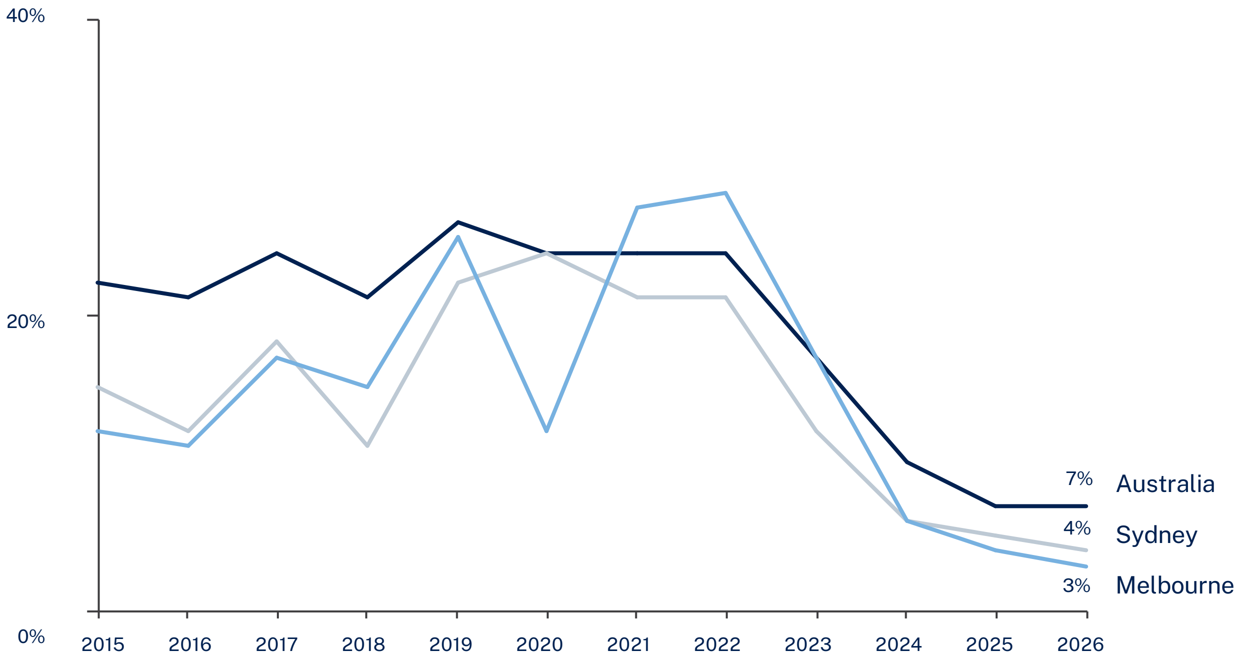
Melbourne and Sydney's pre-leasing rates of 97 per cent and 83 per cent respectively place them among the top 20 most tightly committed markets in the world.[6] For developers, high pre-leasing rates de-risk construction and unlock financing. For tenants, they secure access to scarce capacity. High pre-leasing rates are a strong indicator that the pipeline of new development is not getting ahead of demand but struggling to keep up with it.

Given these supply constraints, meeting future demand will depend on Australia continuing to deliver new data centre capacity.

EXHIBIT 2

Australian data centre vacancy rates

% of MW vacant, 2026



Source: DC Byte (2026)

6 Extrapolated from Cushman & Wakefield (2026) *2026 Global Data Centre Market Comparison*

1.3

The benefits of data centre investment extend beyond infrastructure spending, generating economic, workforce, and strategic value in Australia

Australia's data centres are already delivering substantial economic benefits, with further growth set to add to this contribution. Investment in the 2.3GW of additional data centre capacity forecast to become operational by 2030 supports economic activity through both construction and, once built, ongoing operations, as shown in Exhibit 3. For construction, investment is estimated to generate $19.8 billion in economic activity and support 18,930 construction jobs to 2030. Operational capacity at this point will deliver $5.6 billion in economic activity and 23,040 ongoing jobs each year. Investment into Australian data centre capacity also unlocks an export opportunity, positioning Australia to serve regional compute demand and capture up to $4.1 billion in additional economic activity each year by 2030.

Beyond this economic contribution, data centre investment unlocks two further benefits. It builds sovereignty and strategic weight in Australia, as hosting critical infrastructure has historically given countries greater influence over how that infrastructure is governed. It also deepens the broader innovation ecosystem, with hub status drawing global AI talent and investment into a connected network of data centre operators, start-ups and research institutions.

Together, these benefits show that the true value of Australia's data centre pipeline reaches far beyond the capital invested today and sets the stage for the choices that will determine whether Australia captures it.

The remainder of this report describes these benefits in more detail. Chapter 2 models the headline economic contribution of this investment, detailing the jobs supported and the contribution that extends through the domestic data centre supply chain; Chapter 3 analyses the additional economic benefits that could be unlocked from exporting AI compute and the opportunity as a regional hub to influence the governance of AI infrastructure; and Chapter 4 summarises the potential size of the prize should Australia balance priorities and policy settings effectively.

EXHIBIT 3

Economic and downstream benefits of data centres

Investment	Data Centre Activity	Downstream
Investment spending: Capital deployed into data centre construction and operation drives economic activity, jobs and export potential, and in turn supports Australia's sovereignty and ecosystem positioning.	**Economic activity.** By 2030, the data centre pipeline will have added $19.8 billion in construction value, with operational capacity at that point generating $5.6 billion each year across the full supply chain.	**Sovereignty:** Hosting compute at scale gives Australia jurisdiction over how that infrastructure is governed, shaping the terms on which others access it and reducing reliance on terms set by others.
	Jobs. By 2030, the pipeline will have supported 18,930 construction roles, with operational capacity sustaining 23,040 ongoing jobs each year in positions that are technical, highly skilled and pay well above the national median.	**Enhanced ecosystem spillover:** As data centre activity builds Australia's hub status, this creates a cluster effect that attracts global AI talent, deepens domestic workforce capability, and strengthens links across start-ups and universities.
	Export opportunity. Growing capacity opens the potential to serve regional compute demand, worth up to $4.1 billion in additional economic activity each year by 2030.	

Quantified in this report

2 Data centres will generate $5.6 billion in domestic economic activity each year by 2030, supporting local jobs and businesses

2.1

Building and operating data centres supports economic activity for Australian suppliers across each stage of the supply chain

Building and running a data centre is a multi-step process (see Exhibit 4). This process splits into two distinct phases. The construction phase for each individual data centre is finite and time-bound, but with a pipeline of projects forecast to run well into the 2030s, construction activity is expected to remain a significant and ongoing source of investment. It draws on a broad range of trades and professional services, from engineering, planning and project management through to community and local government engagement, pre-cast concrete manufacturing, landscaping and sustainability expertise, with workers moving from project to project rather than remaining on a single site. Operations follow once a facility is built and generate an ongoing direct and indirect contribution for as long as the data centre runs, supported by facility management roles such as security personnel and site operations staff.

EXHIBIT 4

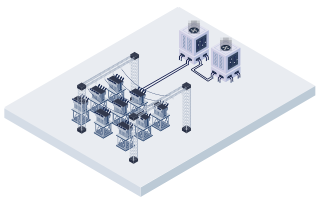
Data Centre Lifecycle

1 **Engineering, planning, and procurement**

Design the facility, submit planning applications, and coordinate procurement.

2 **Energy infrastructure**

Build energy infrastructure including substations, power distribution and backup generation.

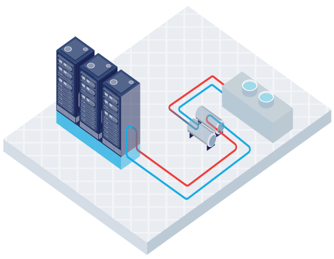


3 **Build-out**

Stand up the physical steel building and supporting electrical and plumbing work.

4 **Cooling systems**

Install cooling hardware, ventilation, and air conditioning systems.



5 **IT infrastructure**

Fit out the white space with servers, racks, and power distribution units.

6 **Facilities management**

Operate the data centre alongside administrative buildings and security infrastructure.

Source: Expert interviews; Mandala analysis

2.2

Data centre construction has already contributed $13.8 billion in economic activity to Australia and supported over 9,000 jobs across the economy

The construction of Australia's 1.6GW data centre capacity to date has contributed $13.8 billion in economic activity and supported more than 9,000 jobs (see Exhibit 5).

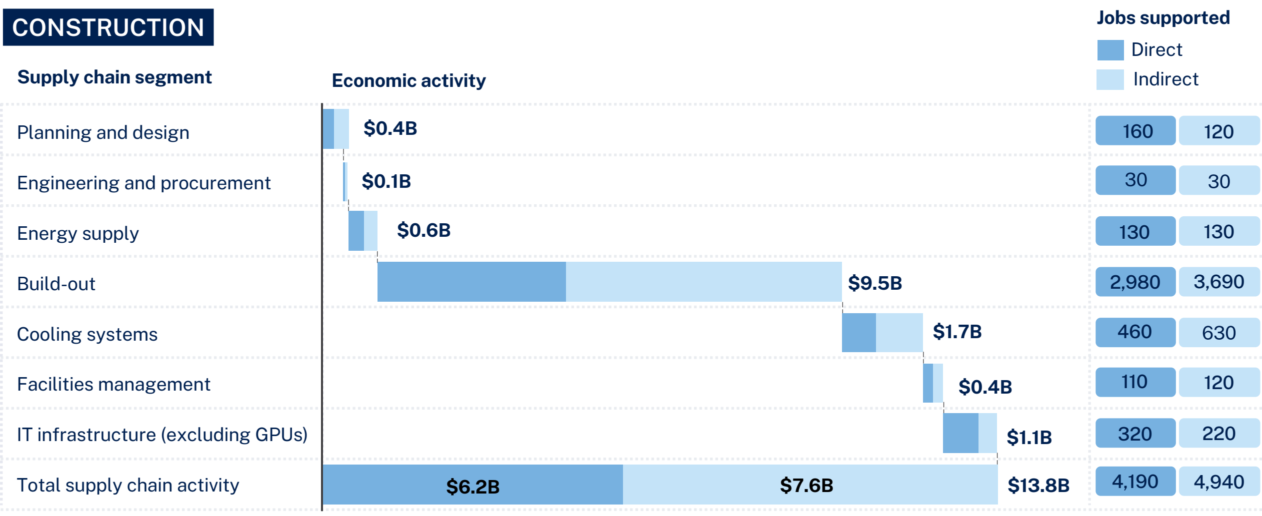
This contribution comprises direct and indirect effects. Direct effects reflect economic activity within the data centre industry itself, generated by the data centre and associated on-site activities, including contractors. Indirect effects reflect activity supported across the wider supply chain, and account for the larger share of total construction economic activity, at $7.6 billion of economic activity (55 per cent) and 4,940 of the 9,130 jobs supported (54 per cent). This reflects the scale of the broader ecosystem the data centre industry supports, and the benefit that flows to it.

The build-out represents the largest share of economic activity ($9.5 billion, 6,670 jobs) as it attracts the largest share of spending, reflecting the scale and intensity of activity required to build a data centre, and because a large share of this spend is retained in Australia. Cooling systems are the next-largest contributor, supporting $1.7 billion in economic activity and 1,090 jobs, ahead of IT infrastructure ($1.1 billion, 540 jobs), energy supply ($0.6 billion, 260 jobs), planning and design ($0.4 billion, 280 jobs), facilities management ($0.4 billion, 230 jobs), and engineering and procurement ($0.1 billion, 60 jobs).

EXHIBIT 5

Cumulative economic activity and jobs supported from data centre construction completed to date

$AU billions; number of jobs supported, as at 2026



Note: Direct effects comprise the economic activity generated by the data centre and associated contractors on-site activities, while indirect effects comprise the economic activity supported across the supply chain. Construction jobs to date are estimated based on current operating capacity and average build times, adjusted for the strong growth in data centre capacity since 2020. Jobs supported includes the full-time and part-time employment that would be associated with any given expenditure. The exact mix of full-time, part-time and seasonal employment would reflect specific industry employment characteristics. This metric is not equivalent to full-time equivalent (FTE) employment supported.

Source: Mandala analysis

Australia's operational data centres generate $2.3 billion in annual economic activity and support 9,450 ongoing operational jobs

Based on 2026 operational capacity, Australia's data centres are generating $2.3 billion in annual economic activity and supporting around 9,450 ongoing jobs (see Exhibit 6).

As with construction, this contribution spans direct and indirect effects. Unlike construction, however, the operational phase generates a larger share of direct economic activity, reflecting less reliance on outsourced and subcontracted inputs.

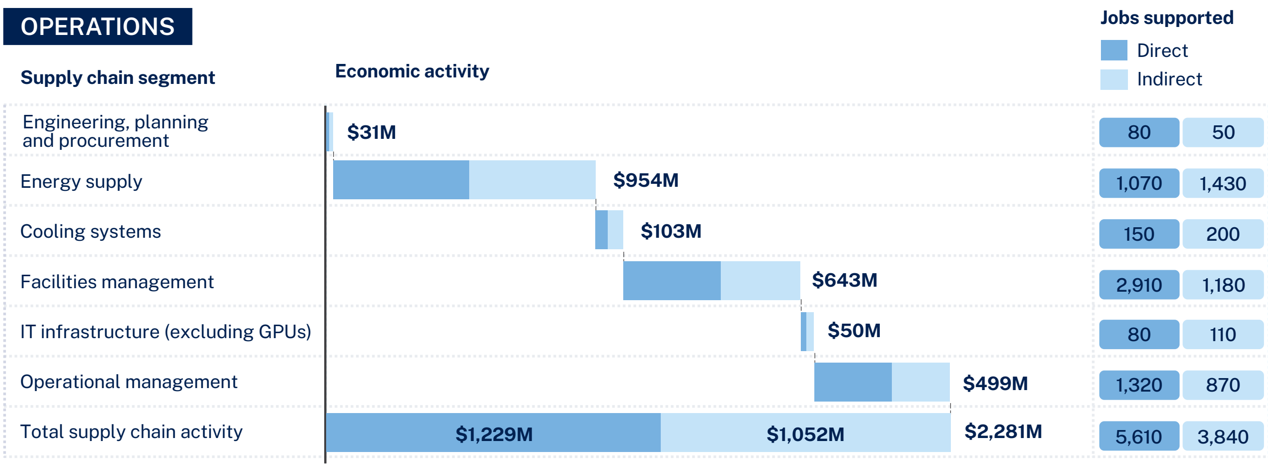
Energy supply contributes the largest share of economic activity, generating $954 million, followed by facilities management ($643 million), operational management ($499 million), cooling systems ($103 million), IT infrastructure ($50 million) and engineering, planning and procurement ($31 million). Facilities management stands out for jobs, supporting 4,090 direct and indirect jobs, the highest of any operational segment, reflecting the labour-intensive nature of on-site security, cleaning and maintenance work.

Unlike construction, which delivers a one-off contribution once a facility is built, this operational contribution recurs annually for as long as a data centre continues to run, and scales as more capacity becomes operational.

EXHIBIT 6

Annual ongoing economic activity and jobs supported from data centre operations as of 2026

$AU millions; number of jobs supported, 2026



Note: Direct effects comprise the economic activity generated by the data centre and associated contractors on-site activities, while indirect effects comprise the economic activity supported across the supply chain. Jobs supported includes the full-time and part-time employment that would be associated with any given expenditure. The exact mix of full-time, part-time and seasonal employment would reflect specific industry employment characteristics. This metric is not equivalent to full-time equivalent (FTE) employment supported.

Source: Mandala analysis

2.3

Constructing Australia's data centre pipeline will add $19.8 billion in economic activity, and once operational, $5.6 billion in annual economic activity and 23,040 ongoing jobs each year

An additional 2.3GW of data centre capacity is forecast to become operational by the end of 2030, bringing Australia's total capacity to 3.9GW according to industry projections by DC Byte.

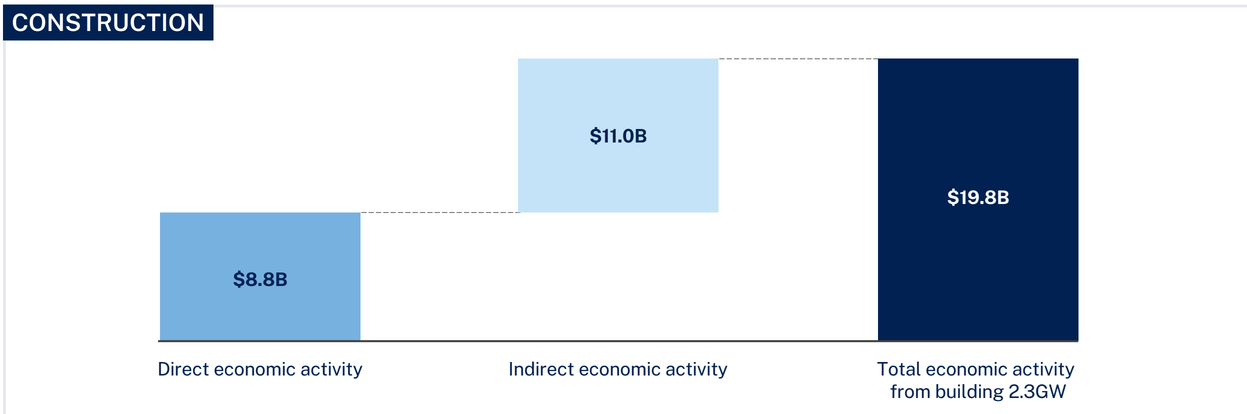
Building this capacity is estimated to contribute $19.8 billion in economic activity. This comprises of $8.8 billion in direct economic activity and $11 billion in indirect economic activity, and supports an additional 18,930 construction jobs over the period (see Exhibit 7).

Once this 2.3GW projected capacity is added, it will lift the annual operational contribution from $2.3 billion today to $5.6 billion by 2030, an increase of $3.3 billion, and support 23,040 ongoing jobs per year (see Exhibit 8).

EXHIBIT 7

Incremental economic activity and jobs from data centre construction, 2026 to 2030

$AU billions, 2026 to 2030 cumulative

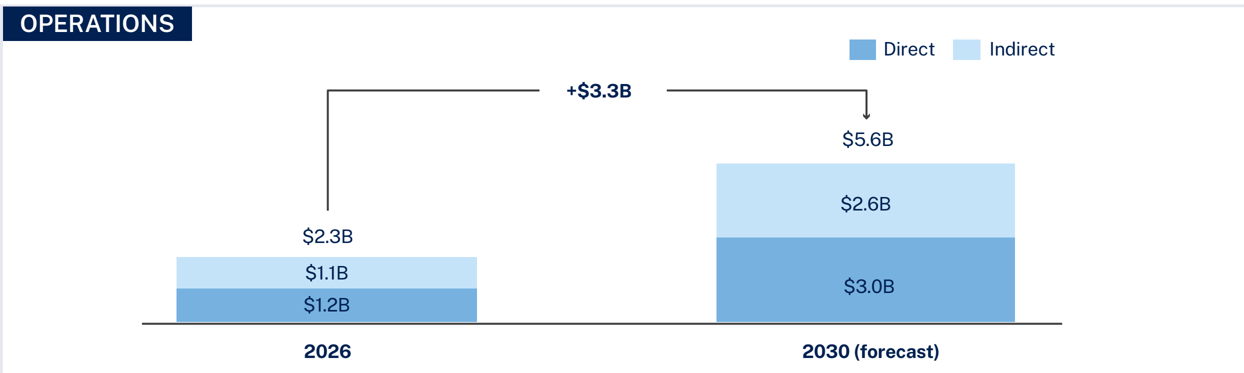


An additional **18,930 construction jobs** are expected to be supported over this period

EXHIBIT 8

Annual economic activity and jobs from data centre operations

$AU billions, 2026 and 2030



A total of **23,040 ongoing operational jobs** are expected to be supported by 2030

Note: Direct effects comprise the economic activity generated by the data centre and associated contractors on-site activities, while indirect effects comprise the economic activity supported across the supply chain.

Source: Mandala analysis

2.4

Data centres support jobs that are technical, highly skilled, and pay well above the typical Australian salary

Data centres create substantial employment opportunities across an extensive range of occupations, and this activity benefits Australian businesses and workers throughout the supply chain. Companies like Drac Mechanical illustrate this well: what began as a one-person generator installation business has grown into a vertically integrated manufacturer across three facilities in Victoria, employing more than 100 people and drawing on local procurement rather than imported solutions to build out its supply chain.

These roles occur across both the build and operations phases of a data centre's life and fall into two broad categories: technicians and trades workers, and professionals. Several occupations also span both phases. Electricians, for example, install electrical wiring during the build of data centres, and provide ongoing operational services once a facility is up and running.

Jobs across the data centre lifecycle are highly paid roles, with median annual earnings ranging from $109,000 to $154,000, at least 45 per cent higher than the median for all Australian workers (see Exhibit 9). These roles are also highly skilled. Technicians and trades workers typically require a multi-year trade qualification or certificate, while professionals typically require a bachelor's degree or higher. This is echoed across the industry: CBRE's Head of Data Centre Solutions for APAC, Matt Madden, underscores just how deep the skill requirement runs: "*Becoming a fully accredited data centre professional is a three-year journey - a genuine trade, not something picked up on the side.*" Several of these occupations, including electricians, air conditioning and refrigeration mechanics, and electrical engineers, are also in high demand across the broader economy. This points to a growing need for training pathways to build the workforce required to support Australia's data centre sector.

EXHIBIT 9

Profiles of key jobs for data centre construction and operation

Occupations			Role in data centres	Median annual earnings	Minimum qualifications
Technicians and Trades Workers	Building and engineering technicians	Construction, Operations	Supports commissioning and ongoing maintenance of critical data centre infrastructure	$154k	Typically requires trade qualification or certificate, plus on-the job training
	Metal Fitters and Machinists	Construction	Fabricates and installs cable trays, containment systems and raised floor infrastructure	$136k	
	Electricians	In demand, Construction, Operations	Installs and maintains electrical and power distribution systems	$114k	
	Air conditioning and Refrigeration Mechanics	In demand, Construction, Operations	Installs and maintains precision cooling and air handling systems	$109k	
	Diesel Motor Mechanics	In demand, Operations	Maintains and tests backup power generation systems	$128k	
	Air conditioning and Mechanical Services Plumbers	In demand, Construction, Operations	Installs and maintains liquid cooling and chilled water systems	$128k	
	Electronic Equipment Trades Workers	In demand, Construction, Operations	Installs and maintains cabling and rack infrastructure	$128k	
Professionals	ICT Business and Systems Analysts	Operations	Designs and plans computing and storage systems and architecture	$140k	Typically requires a bachelor's degree or higher qualification
	Industrial, Mechanical and Production Engineers	Construction, Operations	Designs and optimises mechanical, cooling and power systems	$136k	
	Electrical Engineers	In demand, Construction, Operations	Designs and oversees high-voltage power and grid connection systems	$133k	
	Database and Systems Administrators, and ICT Security Specialists	Operations	Manages and monitors servers, storage and database systems	$128k	
	Computer Network Professionals	Operations	Designs and manages network and connectivity infrastructure	$120k	
	Software Engineers	Operations	Develops and maintains operational and management software systems	$131k	

In demand · Construction · Operations

Median Australian earnings: $75k

Note: Where occupation-specific earnings data was unavailable, median earnings were estimated using comparable occupation averages
Source: Job and Skills Australia (2026) *Occupation data & Occupation shortage list*; ABS (2025) *Employee earnings*

These roles are well-paid, commutable and safe, and the sector is building the pathways to fill them

In addition to being well-compensated, data centre jobs are commutable. Many data centre projects are in suburban corridors, offering workers steady, consistent employment in the city rather than requiring travel from site to site in search of work. Data centre capacity is concentrated in major cities, with Sydney and Melbourne together hosting over 85 per cent of Australia's total capacity,[7] giving skilled trades workers access to these opportunities where they live.

Data centre technology is also evolving rapidly. This creates ongoing opportunities for workers to upskill and to build and operate new technologies as they emerge, enabling them to transition into higher paying roles. The sector is already building these pathways. To take one example, Erilyan is an Australian-owned construction and fit out business. Its data centre workforce has grown nearly fivefold to almost 200 staff, and its electricians are being upskilled into new specialisations, such as liquid cooling and advanced chip cooling, through partnerships with equipment suppliers and training academies, alongside a wider industry effort to build a training pipeline for the sector. Chris Learmonth, General Manager – Data Centres, Lendlease, reinforces the importance of prioritising training and development, stating that *"By treating workforce development as a national priority, Australia could build a sustainable data centre export industry".*

CASE STUDY

Erilyan is investing in Australia's training ecosystem

Erilyan is an Australian owned construction and fit out business: Twelve years ago, it drew 85 per cent of its revenue from commercial projects but data centre construction has entirely reshaped its future. It now holds a multibillion-dollar negotiated pipeline, employs nearly 200 staff, and its next Melbourne and Sydney data centre rollouts are expected to require 3,500 workers, including up to 2,000 electricians.

Liquid cooling and advanced chip cooling systems were largely absent from Australian construction a few years ago. Through partnerships with equipment suppliers, international training academies, and industry bodies, Erilyan has developed specialist capabilities in these areas, broadening the skills base of its workforce to deliver Australia's data centre capacity.

An entire training ecosystem is being built in real time, alongside the data centres themselves. Organisations like Australia's National Electrical and Communications Association (NECA) are running electrical apprenticeship programs of their own, with sector leaders sitting on their boards.

> *There's a perception that the data centre sector is built on imports, but our experience points to a significant local contribution. Up to 40 per cent of a typical rollout's contract value goes to local materials and manufacturing, from paint and plasterboard to copper and prefabricated components, with even imported equipment often finished onshore.*
>
> *The flow-on effects for other Australian businesses are real. Automation experts Cross Mueller, BMS integrator Control Works, Generator Containment companies like Parratech and Drac Mechanical along with hundreds of locally owned subcontracting businesses of various sizes have all expanded significantly on data centre demand, while Nilsen and LAI Switchboards in South Australia have gone from strength to strength manufacturing switchboards locally for the sector.*
>
> *— Karl Mayoh, Co-founder*

7 DC Byte (2026)

CASE STUDY

Drac Mechanical is manufacturing Australia's critical infrastructure

What began as a one-person business installing generators has evolved alongside Australia's rapidly growing critical infrastructure sector. From its origins in installation, Drac has expanded into a vertically integrated manufacturer, designing, manufacturing, delivering and installing complete power generation packages for some of Australia's most demanding environments. Headquartered in Melbourne's southeast, Drac operates three manufacturing facilities across Victoria - two in Pakenham and a regional facility in Traralgon, in the Latrobe Valley.

With a regional manufacturing arm, Drac has grown alongside a network of Australian suppliers and service providers that play a critical role in its success. Many of these businesses are family-owned enterprises that have expanded as demand for data centres increased. By prioritising long-term partnerships and local procurement, Drac's growth has helped foster a strong local supply chain including painting contractors, steel fabricators and heavy haulage.

Growth has been strong and consistent over the past five years, averaging approximately 50 per cent year-on-year over that period. Today, Drac employs more than 100 people and continues to expand its manufacturing footprint and capabilities. As demand for critical infrastructure continues to rise, that growth will translate directly into more Australian manufacturing jobs - with the new Pakenham facility set to significantly expand Drac's local production capacity from early 2027.

> *As demand for critical infrastructure continues to grow, we've chosen to invest in Australian capability rather than rely on imported solutions. By manufacturing locally and building strong Australian supply chains, we're creating jobs, strengthening regional industry and delivering greater certainty for our customers.*
>
> *For us, 'Made in Australia' isn't a procurement policy or a compliance exercise -it's a business philosophy. When you genuinely care about the impact of your decisions, supporting Australian industry becomes an outcome, not an obligation.*
>
> *— Chris Dracoulas, Founder & Managing Director*

How leading global technology companies can unlock financing, de-risk development, and give developers the confidence to bring new data centres to market

Delivering the workforce and infrastructure behind these jobs depends on data centres being built at scale and pace. Building and operating a data centre is a long and capital-intensive process. Leading global technology companies, such as AWS, Microsoft and Google, often referred to as hyperscalers, can support this process and help bring new capacity to market. Leading AI labs, such as OpenAI, are increasingly playing this role as well. Hyperscalers can either build their own data centre capacity or lease it from independent developers and operators. When they lease capacity, hyperscalers often act as anchor tenants - supporting the data centre build through their demand and commitments.

Australia's appeal to hyperscalers is reflected in a wave of recent investment commitments. Microsoft has committed $25 billion, spanning AI supercomputing and cloud infrastructure. AWS has also committed $20 billion to expand its Australian data centre infrastructure to support cloud and AI capabilities. AI labs are also signalling their interest in Australia. In 2025, OpenAI and NEXTDC announced a $7 billion partnership to develop a dedicated AI campus. Anthropic has separately expressed interest in leasing significant capacity, exploring the possibility of training its Claude models onshore in Australia.

Hyperscalers signal early commitment to a data centre build through letters of intent or non-binding agreements, with binding pre-lease contracts typically following once planning approvals and grid connections are secured. This staged approach helps secure capacity in an increasingly competitive market while reflecting the lead time required to bring a site to a construction-ready stage. A signed pre-lease gives developers greater confidence that a project will be commercially viable. It also helps unlock financing, since lenders assess a project's viability partly on the creditworthiness of its tenants; as hyperscalers typically hold strong credit ratings, their commitments can accelerate a project's access to finance.

The capacity hyperscalers lease serves a broad base of end users. Their Australian customers span government agencies delivering public services, businesses running core operations, start-ups building new products, and not-for-profits supporting their communities, all relying on this infrastructure to run their own operations. Hyperscalers also build their own facilities, accounting for 13 per cent of current operational capacity and 11 per cent of committed capacity. Operators account for the majority, however, with colocation representing the remaining 87 per cent of total operational capacity and 89 per cent of committed capacity.

Anchor tenants can help underwrite the data centre build, supporting capacity that other tenants may later occupy

Driven by: aws Google Microsoft OpenAI

A hyperscaler's letter of intent gives developers early confidence to proceed while sites, planning approvals and grid connections are secured

Hyperscaler's high credit ratings help unlock project financing as lenders factor tenant creditworthiness

With revenue contracted upfront and financing secured, developers and operators gain confidence in funding and viability, enabling them to move ahead with construction

1. Data centre planning
2. Anchor pre-lease
3. Construction finance
4. Build out
5. Operational and stable

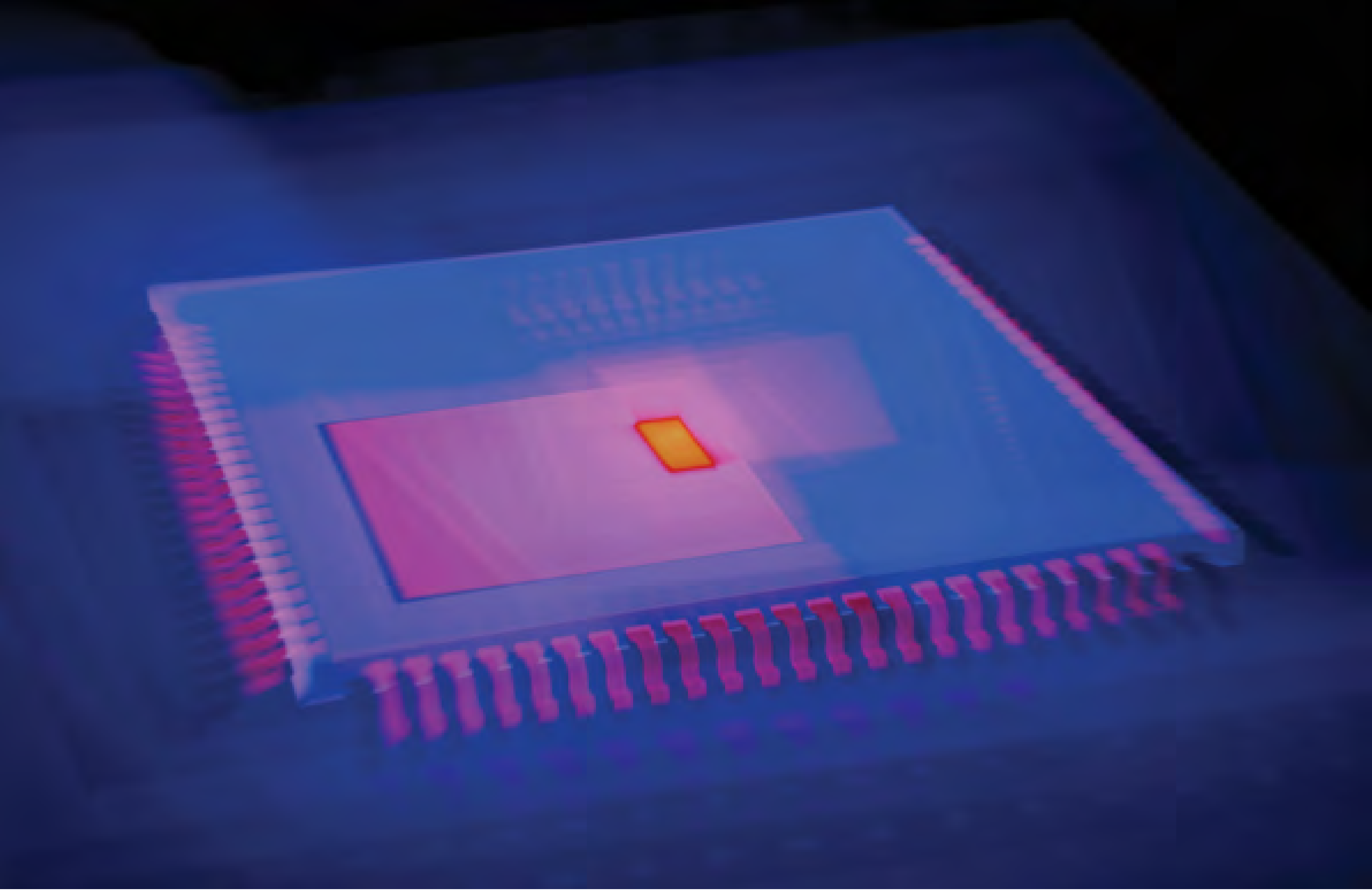
Recent investment commitments signal sustained confidence in Australia as a destination for hyperscale infrastructure and frontier AI and cloud development

Microsoft: In 2026, Microsoft committed A$25 billion to digital and AI infrastructure through 2029 - its largest investment in Australia

aws: In 2025, AWS announced plans to invest A$20 billion through to 2029 to expand its digital infrastructure in Australia

OpenAI / NEXTDC: In 2025, OpenAI and NEXTDC signed a memorandum of understanding to co-develop a Sydney-based AI campus worth A$7 billion

Source: Skadden (2025) *Hyperscaler Data Centers;* Microsoft (2026) *Microsoft deepens commitment to Australia with A$25 billion investment in AI infrastructure, security, and skills*; Amazon (2026) *Amazon investing AU$20 billion to expand data center infrastructure in Australia and strengthen the nation's AI future*; Ministers for the Department of Industry, Science and Resources (2025) *$7 billion infrastructure deal to boost AI in Australia*; AFR (2026) *Anthropic's plans to buy 1.4GW of Aussie data centre capacity;* DC Byte (2026) *Industry Forecasts;* Mandala analysis



3 Australia can unlock additional economic benefits from exporting AI compute and influence the governance of AI

3.1

AI model training and batch inferencing can occur in data centres located further from customers, creating an export opportunity to serve global compute demand

Australia's data centre capacity is already growing to meet domestic needs, as set out in Chapter 2, but domestic demand is not the only opportunity. Data centres today mainly serve cloud computing. While this portion of work is still growing as businesses shift away from on-premises servers, AI workloads will be where most future growth lies for Australia. As a significant share of AI workloads can be hosted further away from end users, this creates an opportunity for Australia to serve this demand from across the APAC region. This chapter focuses on the AI workload opportunity, and the potential benefits this could create for Australia.

Broadly, two factors determine whether an AI workload can be hosted further away from end users: time sensitivity and operational tolerance. A workload must be flexible on both counts to be hosted this way.

Time sensitivity. Some AI workloads like real-time inferencing (AI agents running business functions, live translation) must be hosted close to users because even small delays are disruptive. AI training and batch inference work differently: they are latency-tolerant, processing large jobs on a schedule rather than responding to a live request.

Operational tolerance. Some workloads need faults rectified immediately, requiring staff to reach the data centre without delay. Model training and, to a certain extent, batch inference workloads are more tolerant of delay.

Because AI training and batch inference workloads are flexible on both counts, these workloads can be hosted in data centres located anywhere with a strong workforce and close to a power source, broadband connectivity and water supply (see Exhibit 10).

EXHIBIT 10

Type of AI workloads serviced by data centres

Workload types	Description	Example	Time sensitivity	Operational tolerance	Location
Real-time AI inference	Applies trained AI models to respond to live user requests the moment they are asked	AI agents running business functions including within energy infrastructure, live translation, personalised product suggestions	Real-time or near real-time	Low tolerance: requires continuous, highly reliable power supply	Near user
Batch inference	**Applies trained AI models to work through a large stack of data on a schedule, with no users waiting on the other end**	Analysis of transaction data for fraud detection, classifying satellite imagery	Flexible	Moderate to high tolerance: jobs can be rescheduled without affecting end users	Anywhere that can reliably host data centres
AI model training	Builds and refines AI models by processing large datasets at scale	In Australia, to date, this is predominantly fine-tuning foundation model using proprietary data sets and to a lesser extent, foundation and predictive model development	Flexible	High tolerance: training runs can be checkpointed and resumed	Anywhere that can reliably host data centres

Export Opportunity

Source: Mandala analysis

EXHIBIT 11

A single task can draw on data centres in several different locations

Illustrative example of digital interactions that take place in a typical day

This is Claire. Her bank app flags a suspicious transaction, and its AI assistant instantly checks if it's a scam.

This single interaction draws on data centres in several locations. One AI task spans three distinct workloads, from periodic training to instant response, with each workload having different location requirements.

1 AI Model training	2 Batch Inference	3 Real-time AI Inference
▪ Underlying AI model needs to first be trained on how to identify fraudulent transactions based on past data ▪ Model also gets periodically retrained on aggregated and anonymised data to refresh ▪ Workload can be located in regional areas due to greater latency-tolerance	▪ A regional facility runs overnight fraud pattern analysis across thousands of transactions, using the current trained model ▪ This refreshes the risk scores and fraud-pattern reference data that real-time checks rely on ▪ Overnight processing can also be located in regional areas as it is not time-critical	▪ Checks Claire's transaction against known fraud patterns in real time, using the trained model and the latest overnight refresh ▪ Runs in milliseconds and produces a score ▪ Real-time inference needs to be located closer to the user in a metro facility due to latency requirements

Note: Workloads can technically run on the same underlying hardware; the location differences reflect latency-tolerance rather than strict physical separation.

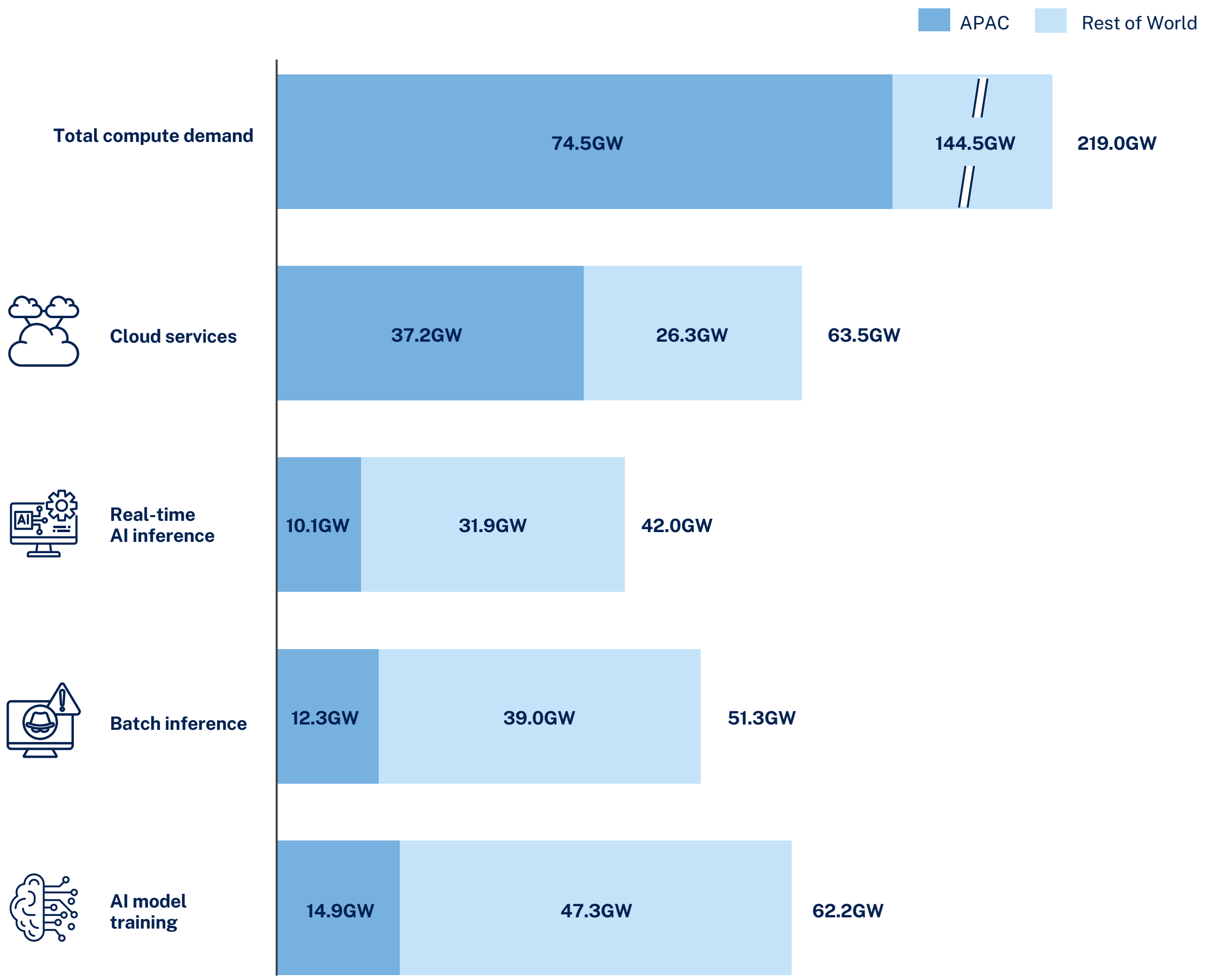
Source: Mandala analysis

This distinction defines Australia's opportunity. Australia can host the batch inference and AI training workloads that businesses and governments across the region need to run, but don't need to run near their customers. Australia is competing against other APAC markets for this demand, and it does not need to compete on proximity to the end customer to win it.

The scale of this addressable demand is significant. Global compute demand is projected to grow 21.6 per cent per annum between 2025 and 2030 to 219GW[8] (see Exhibit 12). Inference (including both real time and batch inference) and AI model training are growing fast, expanding at 35 and 22 per cent a year respectively. Cloud-based workloads are also growing, but more slowly, making their share of total demand fall from 47 per cent in 2025 to 30 per cent by 2030.[9] It is the growth in latency-tolerant workload that creates Australia's opportunity. The Asia Pacific region's inference and training demand is also substantial in absolute terms. The region's demand mix remains more cloud-based today, reflecting an earlier stage in the cloud adoption cycle, with consumer digitalisation continuing to drive a large share of near-term demand. As APAC's cloud adoption matures, the region's AI-related demand could grow much faster, pointing to an even greater opportunity for Australia further down the track.

EXHIBIT 12

Projected compute demand in 2030 by workload types



Source: McKinsey (2025) *The next big shifts in AI workloads and hyperscaler strategies*; Li et al. (2025) *EcoServe: Designing Carbon-Aware AI inference systems;* McKinsey (2026) *Beyond the spillover: Asia-Pacific, the next engine of data center demand*; Mandala analysis

8 Mandala analysis. See appendix for more details
9 Mandala analysis. Compound annual growth rate is calculated based on estimated 2025 and 2030 global compute demand. See appendix for more details

3.2

Australia is competing to become the AI hub for the Asia Pacific region, a role that could deliver economic benefits and influence over AI governance

Australia has the potential to serve a share of the region's growing demand for AI training and batch inference. Capturing this demand requires outcompeting other markets for "hub" status, or the preferred location for hosting the region's AI compute. This role could bring both economic benefits and influence over how AI is governed:

- **Economic benefit**: Hub status brings export-oriented investment into Australia that supports local economic activity, supply chains, jobs, and deepens workforce capability
- **Influence over AI governance**: Australia as the AI compute host could have soft power over the standards for other countries to follow

Global technology companies are already choosing Australia as a location for AI infrastructure. These commitments reflect Australia's natural advantages for hosting data centres: available land, renewable energy potential from sunlight and wind, and a skilled workforce. Political stability, strong rule of law, Five Eyes membership and reputation as home to locally founded, world-leading data centre operators add further credibility.

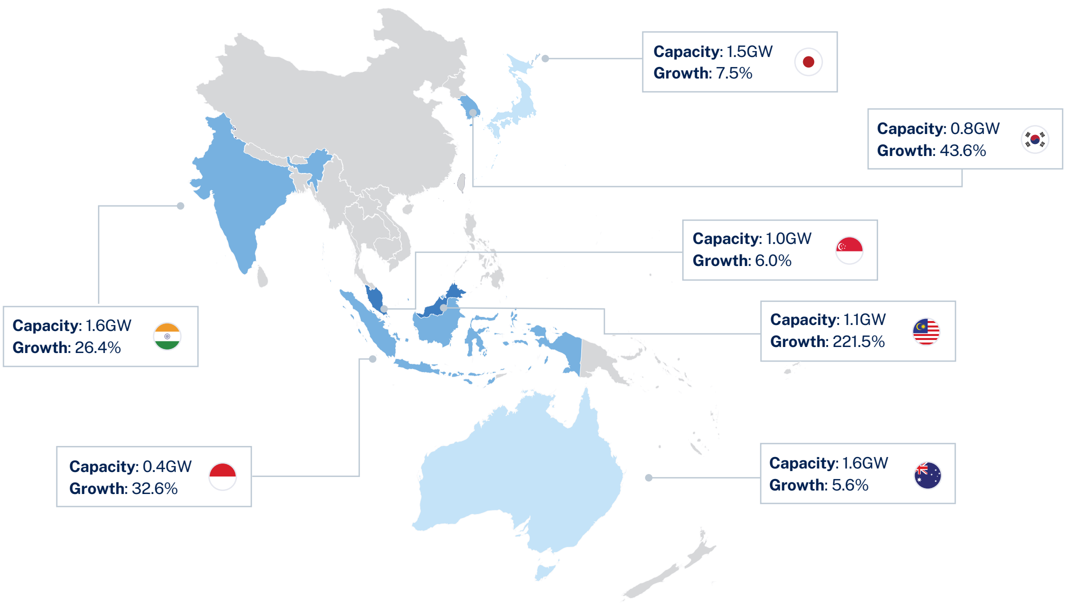
However, this trend is not guaranteed to continue. Australia is losing ground on two dimensions that increasingly determine where operators choose to build: time to build and power availability. State-based planning approval processes and environmental assessment requirements are extending project timelines relative to faster-moving markets in the region. New projects also increasingly compete for grid connection capacity, and connection queue times have become a binding constraint on how quickly new load can become operational.

Regional competitors are closing the gap quickly, even as Australia remains among the leading markets in terms of absolute capacity (see Exhibit 13). Malaysia's data centre capacity has grown 222 per cent since 2022, driven by faster approvals for data centre construction and by capturing overflow demand from Singapore following its decision to put a moratorium on data centre builds from 2019 to 2022. Singapore's growth has remained capped since. India's operational capacity is similar to that of Australia but is growing more than four times as fast, at 26 per cent compared with Australia's almost 6 per cent.

EXHIBIT 13

Regional capacity and recent growth

GW, 2025 and % growth p.a., 2022-2025



Note: Darker shade of blue denotes higher growth rate. Country-level operational capacity is derived from reported capacity in a given city and extrapolated to a national estimate using the city's proportion of total capacity. Compound annual growth rate is calculated based on 2022 and 2025 operational capacity data; Australia operational capacity of 1.6GW refers to June 2026, all others 2025. Countries included are the largest in the Asia Pacific region by GDP size and data centre offer, excluding Hong Kong and China.

Source: Cushman & Wakefield (2025) *Asia pacific data centre H2 2025 update*; Mandala analysis

Exporting AI compute could deliver up to $4.1 billion in annual economic activity for Australia

Capturing the export opportunity could add between $2.7 billion and $4.1 billion in additional annual economic activity for Australia by 2030 over and above that outlined in Chapter 2, depending on how much of the regional and global opportunity Australia captures, as illustrated in Exhibit 14.

This range reflects two scenarios for how much competition Australia faces for APAC's AI compute demand. The **Broad competition scenario** benchmarks Australia against the full set of regional peers: China, India, Indonesia, Malaysia, South Korea, Singapore, Thailand and New Zealand. The **Narrow competition scenario** excludes the weakest-scoring peers, reflecting a market in which Australia faces less competition.

Under the **Broad competition scenario**, Australia's addressable APAC demand alone could contribute an additional 1.9GW of compute on top of existing domestic capacity. This could translate to $2.7 billion in annual economic activity. Extending this to also serve demand from the rest of the world would add a further 0.4GW, lifting total export opportunity to 2.3GW and economic activity to $3.3 billion.

Under the **Narrow competition scenario**, APAC demand alone could contribute 2.4GW of capacity on top of domestic demand, adding $3.4 billion worth of annual economic activity. Adding global demand lifts total additional capacity to 2.9GW and economic activity to $4.1 billion.[10]

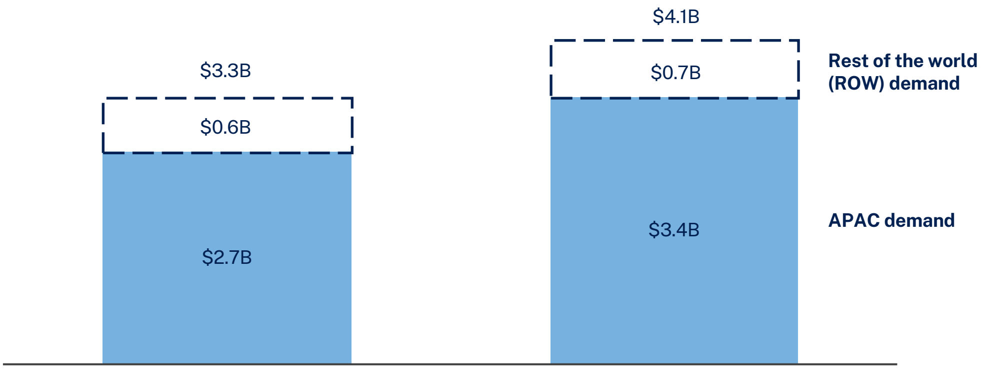
This economic activity is generated on an ongoing basis, through activity such as colocation leasing, power supply and facilities services. Realising this opportunity could support 11,220 to 17,120 additional ongoing jobs, sustained annually for as long as the facilities remain in operation.

To meet this export demand, Australia would need up to $52 billion in construction investment by 2030 on top of that required for domestic demand, to capture the full APAC and global export opportunity.

EXHIBIT 14

Uplift in annual economic activity from exporting AI compute by 2030

$AU billions, 2030



Scenario	**Broad competition scenario**: Australia captures 1.9GW of latency-tolerant compute demand from APAC, and another 0.4GW from global demand	**Narrow competition scenario**: Australia captures 2.4GW of latency-tolerant compute demand from APAC, and another 0.5GW from global demand
Jobs supported (APAC | APAC + ROW)	**11,220 | 13,580**	**14,190 | 17,120**

Source: Mandala analysis

10 Broad competition and narrow competition export scenarios score APAC countries on data centre investment attractiveness, covering power, connectivity, land, water, workforce, build time and political stability. See Methodology for more details.

As a hub, Australia could also create an AI cluster effect that attracts global talent and deepens our domestic workforce capability

On top of direct economic activity contribution, realising hub status could benefit the economy through a larger workforce and deeper capability that Australian firms and workers can take to overseas markets.

The first channel, workforce depth, depends on scale. The gain comes not from hosting data centres, but from hosting enough of them in one place for an ecosystem to form. Bahar and Wright (2026) find that a single facility produces little measurable growth in a region's information sector, while a cluster of four or more facilities is associated with a 23 per cent increase in information sector employment.

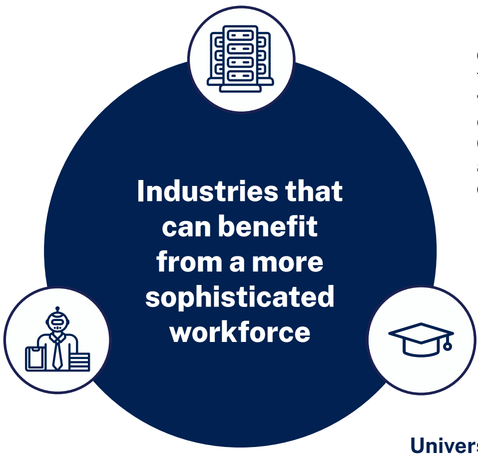
With enough scale, three industries could see an increase in workforce depth. Sustained demand for data centre construction and operations could make Australia more attractive to trades and engineering professionals with expertise in renewable energy, electrical engineering and construction. A larger AI ecosystem could also give local start-ups and scale-ups access to a bigger pool of engineers and researchers, who are drawn by the presence of frontier AI firms. Universities and research institutions could benefit too, with hub status strengthening their ability to recruit international research talent and form partnerships with leading AI firms.

EXHIBIT 15

Potential impacts on workforce from AI cluster effect

Data centre infrastructure

Hub status drives sustained demand for data centres, making Australia attractive for professionals and trades workers with expertise in renewable energy, electrical engineering and construction. Over time, this could position Australia as a recognised leader in data centre operations



AI start-ups and scale-ups

With hub status, Australia becomes a more attractive destination for AI practitioners at frontier companies, giving local start-ups and scale-ups access to a larger pool of engineers and researchers

Universities and research institutions

Hub status strengthens universities' ability to recruit international research talent and attract collaborative arrangements with leading AI firms

Source: Mandala analysis

The second channel is capability. As Australia accumulates experience constructing and operating data centres at scale, its trades and engineering workforce could develop expertise beyond what domestic demand requires. This could position Australia as a recognised leader in data centre operations regionally, and support innovation in relevant areas.

That capability is exportable, both as expertise and as physical product. As data centre demand grows overseas, Australian workers and firms with capability built at home are increasingly able to serve those markets, building further jobs and capability domestically in the process. Codecom, which designs, engineers and manufactures fibre optic cabling and connectivity products in Melbourne, built its reputation for quality through early exposure to Australia's data centre operators and global clients building locally. That reputation has since allowed the company to expand into Southeast Asia and take Australian-made designs into more mature markets across the US and Europe, growing jobs and manufacturing capability at home in the process.

This capability would also be valuable in other infrastructure industries, and getting the planning settings right for data centres would also help get them right for other new industries that have a significant physical footprint, such as green iron production.

CASE STUDY

Codecom is capturing Australia's export opportunity

Codecom is a family-owned and operated Australian business, headquartered in Melbourne, with a new office recently opened in Western Australia. The company began supplying power rack mount inverters for Australia's HFC communications network, before the convergence of the telco and IT sectors over the past decade pulled it into the data centre market.

Codecom operates as the physical layer of the industry, designing high-performance fibre optic cabling and connectivity products in Australia. Codecom's growth has been exponential, driven by its own intellectual property and in-house product design capability.

Early exposure to Australia's fast-scaling data centre operators and to global clients building locally has allowed Codecom to establish a reputation for quality and reliability. That reputation, built on Australia's sovereign, high-quality standards in design, labour and installation support, has allowed the company to grow its reach across APAC as other regional economies begin building their own data centre infrastructure.

> *With continued investment in Australian supply chains, there is a genuine opportunity to convert more local manufacturing capabilities into critical infrastructure for the APAC region, both at home and as the sector expands further into global markets over the next 5 to 10 years.*
>
> *— Andrew and Courtney Purcell, Co-founders*

Hosting critical infrastructure can provide Australia with the soft power to shape standards that others will follow

Countries that host critical infrastructure have historically gained more than its associated economic value. Where the infrastructure is significant enough that other countries cannot route around it, the host gains a role in negotiating standards and governance, shaping the rules others must follow. This effect depends significantly on scale, since hosting a small or substitutable share of infrastructure earns little influence.

As shown in Exhibit 16, the London Stock Exchange illustrates what significant scale of critical infrastructure looks like. Founded in 1801 as the world's first major exchange, it remains one of the largest exchanges handling global clearing and settlement today, a position too large for global finance to bypass. London's status as a major international banking centre gave the Bank of England a founding seat at the table when global bank regulation was first coordinated. That founding role has given the Bank of England a continuing say in setting minimum capital and supervisory standards for banks worldwide through the Basel accords.

Belgium's hosting of SWIFT follows the same logic. As the network underpinning most cross-border payments and securities transactions, SWIFT cannot be easily replaced. Belgium holds the chair of the international oversight body and a direct role in implementing financial sanctions.

Singapore's position as a primary node for digital connectivity across Southeast Asia has similarly enabled it to incorporate vendor screening and data flow criteria into its bilateral cable agreements.

AI infrastructure is the newest form of this pattern. The United States controls around three-quarters of global GPU cluster capacity. This share is large enough that frontier AI development runs through it by default. That dominance has already translated into governance authority. For example, the US government requires companies to notify it of major model training runs or more recently, to turn off access to the latest model for other countries.[11]

Australia could replicate this dynamic through data centres and AI infrastructure. However, simply hosting the infrastructure alone would not be enough. Shaping AI governance across APAC and beyond would require hosting a share of the region's compute large enough that others depend on it.

This choice carries a security dimension as well as an economic one. In his July 2026 address on AI, the Prime Minister framed continued dependence on foreign-hosted infrastructure as a source of strategic vulnerability, warning this would mean *"subcontracting our sovereignty and security to the control of foreign monopolies."* As he put it, *"the inescapable lesson of the global instability of the 2020s, is that if we are always dependent on someone else, somewhere else, we will always be vulnerable."*[12] Hosting the AI infrastructure layer domestically would be central to both Australia's sovereign capability and its capacity to shape how AI is governed across the region.

11 Eastland and Lowenkron (2026) *Anthropic shuts down latest AI models after sweeping US order*
12 The Prime Minister of Australia (2026) *AI in Australia's interests*

EXHIBIT 16

Examples of infrastructure hubs and their influence on governance outcomes

Australia's potential

		Regional / Global Hub	Influence on Governance Outcomes
2018	AI infrastructure	The United States controls approximately three-quarters of global GPU cluster capacity and houses the majority of hyperscale data centres.	As nearly all frontier AI models train on US-controlled infrastructure, the US government holds effective oversight over their development. The US has recently signed an executive order to require companies to proactively submit their most powerful models for the government to test up to 30 days before releasing them to the public.
2000	Fibre optic submarine cable	Singapore serves as a hub for nearly 40 undersea cables connecting the region east and westward, making it the primary node for digital connectivity across Southeast Asia.	Singapore embeds submarine cable governance standards into its bilateral agreements with the UK, including criteria for screening and certifying cable vendors to ensure secure data flows.
1973	Financial messaging infrastructure	Belgium hosts SWIFT, the cooperative messaging network connecting financial institutions globally and underpinning most cross-border payments and securities transactions.	Belgium's central bank chairs the international oversight body and sets the agenda for standards reform. Belgium also holds the power to implement sanctions preventing other countries from using SWIFT.
1801	Financial exchange infrastructure	The London Stock Exchange is the world's oldest major exchange and handles a large share of global clearing and settlement.	Bank of England officials, alongside other central bank governors, have shaped minimum regulatory standards for banks across the world through the Basel Standard since the 1970s.

Across infrastructure types, the host country sets the governance standards others follow. The same dynamic is now playing out in AI. If Australia becomes the region's AI hub, it could acquire the soft power to influence how AI is governed across APAC and beyond.

Source: Bond, Shivaram (2026) *Trump signs AI safety order seeking voluntary review of new models*; Global Economic Governance Programme (n.d.) *Basel standards and their widespread but selective adoption;* CSIS (2022) *Securing Asia's Subsea Network: U.S. Interests and Strategic Options*; Sastry et al (2024) *Computing Power and the Governance of Artificial Intelligence*; Cipriani, Goldberg and Spada (2023) *Financial Sanctions, SWIFT, and the Architecture of the International Payments System*

Australia's seat at the table is dependent on providing the compute and infrastructure layer of the global AI value chain

Across the AI value chain, from critical minerals through to model access, incumbents already control the key chokepoints and have shown a willingness to use them to restrict access (see Exhibit 17). Compute and data centres is the one stage where there is yet to be an established incumbent, and also where Australia's natural advantages of land availability, political stability, and a significant renewable energy potential could let it establish a position faster than at any other point in the chain.

Hosting this infrastructure would earn Australia a seat at the table on two grounds. First, jurisdiction: whoever hosts the physical hardware operates under that country's laws, giving it authority over data residency, access and disclosure rules. These are powers Australia already exercises domestically through instruments such as the SOCI Act. Second, standard-setting: if Australia becomes that dominant hub it could extend this into shaping the governance standards other countries across APAC must follow to use its infrastructure.

EXHIBIT 17

Key actors across the AI value chain

Australia's potential

Stage	Description	Key Actors and Their Soft Power
1. Critical minerals	Rare earths and inputs like gallium and germanium used in chips.	• China dominates processing, but Australia holds substantial raw input. • Countries with critical minerals/raw input have leverage over the supply chain. • Example: China's restrictions on gallium and germanium in 2023.
2. Chip design	The blueprints and architecture for advanced AI chips.	• US firms (Nvidia, AMD) and UK-origin ARM dominate chip design. • Export controls allow chip architecture access to be selectively withdrawn. • Example: US restrictions on Nvidia chip exports in 2025–26.
3. Chipmaking equipment	The machines (especially EUV lithography) needed to manufacture advanced chips.	• ASML (Netherlands) has a near-monopoly on EUV lithography. • This near-monopoly creates a controllable chokepoint in chip production. • Example: The US previously influenced the Netherlands to restrict exports to China in 2020.
4. Chip fabrication	Manufacturing infrastructure for advanced chips.	• TSMC (Taiwan) produces the vast majority of GPU chips. • Concentration of manufacturing in Taiwan gives the country power and creates global dependence.
5. Compute and data centres	Physical facilities that run AI training and inference.	• Australia, as a host of large AI data centres, could have the power to determine governance outcomes. • Example: Australia could influence governance laws and access rights.
6. Frontier models	The most advanced generative AI models.	• US and Chinese AI labs (e.g. Anthropic, OpenAI, DeepSeek) lead model development. • Countries with control over frontier models can set the pace of AI development and restrict access. • Example: US restrictions on access to the AI model Mythos (2026).
7. Access and deployment	Access to use the chips, compute and AI models.	• The US and its allies control access through alliance frameworks. • Access to chips, compute and models is increasingly governed by alliance frameworks rather than purely commercial terms.

Currently Australia has limited influence over most of the AI value chain. In a future scenario, by hosting significant data centre capacity, Australia could exercise jurisdiction over the governance of AI infrastructure and shape the standards for other countries to follow.

Source: Godek (2025) *China's Germanium and Gallium Export Restrictions: Consequences for the US*; Read (2026) *Anthropic ban shows Australia must build AI capability: Marles*; US Congress (2025) *US export controls and China: advanced semiconductors*; Alper et al. (2020) *Trump administration pressed Dutch hard to cancel China chip equipment sale - sources*

3.3

Australia is best positioned to deliver the AI compute sustainably, creating the opportunity to export clean energy via tokens

Australia currently leads the APAC peer group in renewable electricity generation share at 40 per cent.[13] This is nearly double that of other markets in the region such as Malaysia (21 per cent)[14] and more than double Indonesia (18 per cent).[15] Australia also has the largest renewable target by 2030 at 82 per cent. This trajectory sits under a legislated emissions reduction target, giving it higher policy certainty compared to plan-based targets set by other countries. Data centres can play an active role in the renewable energy transition, backing new projects through power purchase agreements (PPAs) and investing in on-site renewable generation. PPAs can help underwrite renewable projects and support access to the financing needed to move them through development.

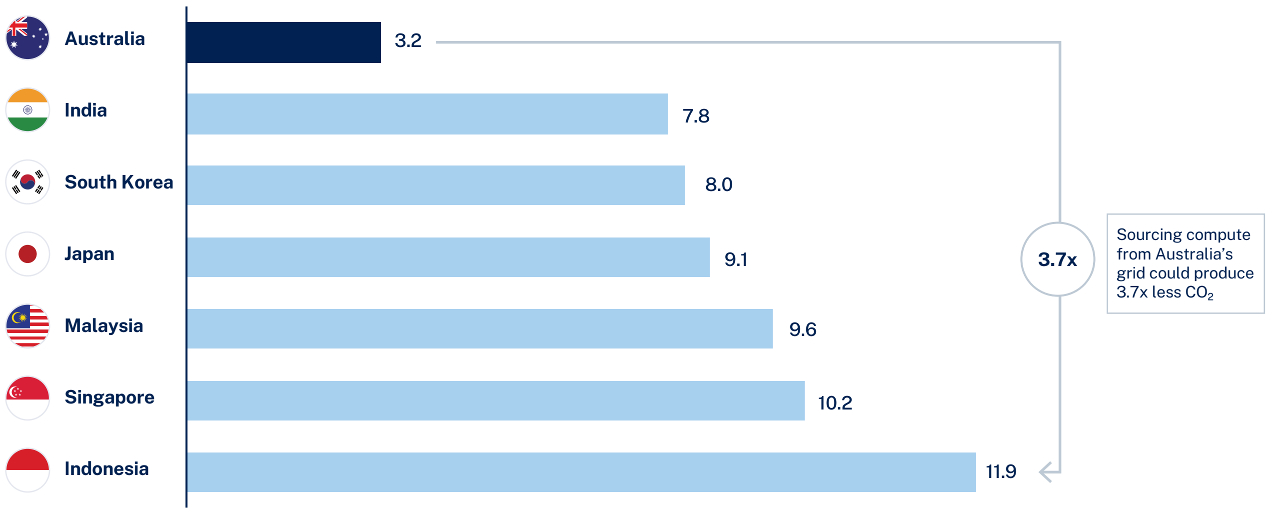
Looking ahead, sourcing compute from Australia's grid instead of a more emissions-intensive regional grid could cut emissions by 3.7 times. Serving an additional 1.9GW of export demand as projected in the **Broad competition (APAC) scenario** would generate an estimated 3.2 million tonnes of CO_2 emissions ($MtCO_2$) by 2030 if met from the Australian grid (See Exhibit 18). This is 3.7 times less than the 11.9 $MtCO_2$ generated if the projected compute demand were met by Indonesia. This difference is equivalent to about 2 per cent of global data centre emissions projected for 2030.[16] With large global technology companies facing growing pressure to meet Scope 2 commitments, Australia is one of the few markets in the region able to credibly supply low-emissions compute at scale within this decade.

In effect, this means Australia would export its renewable energy via the compute it powers, rather than directly over high-voltage transmission lines. This follows the same logic behind Australia's broader strategy for green exports. Australia cannot export electricity directly to APAC markets. It has instead sought to embed renewable energy in tradeable products such as green iron and ammonia.[17] AI compute applies the same principle, without the conversion step required by green iron or ammonia. Servers are powered on-site using renewable electricity, and the resulting compute service is sold to international markets. Unlike physical energy exports, which incur significant transmission losses, exporting AI compute embeds the value of renewable generation directly into the service.

EXHIBIT 18

Projected location-based scope 2 emissions from serving the export opportunity on each country's 2030 grid

$MtCO_2$, 2030



Note: Bars reflect emissions from hosting Australia's AI compute export opportunity (constant capacity) under each country's electricity grid mix, not each country's total data centre emissions. Renewable penetration for some countries is extrapolated linearly from a stated target year beyond 2030. See Methodology for more details.

Source: Ecoflow (2026) *Which power generation by source generates more greenhouse gases?*; Ember energy (n.d.) *Electricity Data Explorer;* Clean Energy Regulator (2026) *Electricity sector emissions and generation data 2024–25*; Mandala analysis

13 DCCEEW (2026) *Renewable energy*
14 Ember Energy (2026) *Malaysia*
15 Ember Energy (2026) *Indonesia*
16 IEA (2025) *Energy and AI*
17 The Superpower Institute (2024) *The new Energy Trade*; Grattan Institute (2022) *Green energy superpower: trade and investment*

4 Realising Australia's future economic prosperity from data centres requires the right approach and settings today

Australia has a real opportunity to capture the economic uplift from data centres. On its current trajectory, data centre investment is forecast to contribute $19.8 billion in economic activity uplift from construction alone, supporting more than 18,000 jobs, and $5.6 billion in ongoing annual economic activity from operations by 2030. If Australia captures the additional export opportunity, this could rise materially further, with additional compute demand of 1.9GW to 2.9GW on top of domestic capacity translating into up to $52 billion in investment uplift.

THE ECONOMIC OPPORTUNITY FOR AUSTRALIA

Australia has a real opportunity to capture these economic benefits by 2030...

$19.8
billion
Economic contribution from construction

18,930
Construction jobs supported

$5.6
billion
Annual economic contribution from ongoing operations

23,040
Ongoing operational jobs each year

If Australia could capture the additional export opportunity, this could represent...

1.9 - 2.9GW
Additional compute demand

up to
$52
billion
Uplift to investment

up to
$4.1
billion
Annual economic contribution from ongoing operations

up to
17,120
Additional operational jobs each year

Few emerging industries offer Australia an opportunity of this scale. Data centres sit at the intersection of several structural advantages that Australia has, and the compounding nature of digital infrastructure means the benefits of early, well-positioned investment could extend well beyond the sector itself, flowing into construction, energy, and the broader digital economy. This could be a consequential economic decision facing Australia over the next decade.

However, these figures represent an opportunity, not a guarantee. The gap between what Australia's data centre sector could deliver under current settings and full export potential cannot be closed by market forces alone. It reflects the choices made today on energy, workforce, planning, investment and policy settings.

What this requires, in practice, is settings that are proportionate and balanced. They should be ambitious enough to allow Australia to compete for its share of regional demand, while remaining measured enough to manage the genuine trade-offs around energy systems, communities and long-term national interest. Getting this balance right is less about any single policy lever than about a coherent, whole-of-system approach that gives investors, communities, and government confidence in the direction of travel.

Australia will not capture this opportunity by default. The scale of the prize is real, but so is the risk of under-delivering against it if the settings are not right. What happens now, in the choices made over the next several years, will determine which of these futures Australia ends up with.

5

Appendices

5.1

Appendix A: Methodology

Exhibits 5, 6, 7, 8 and 14: Economic modelling outputs

Approach

Direct and indirect economic impacts are estimated using a Leontief input-output model drawing on ABS input-output tables. Modelling draws on financial data provided by a group of DCA member organisations, aggregated to produce an industry-level view of data centre capital and operating expenditure.

Direct economic activity

1. Map data centre expenditure across industries in the ABS input-output tables
2. Apply GVA-to-spending ratios estimated from the input-output tables to derive direct economic activity
3. Apply ABS employment coefficients to the same expenditure base to estimate direct jobs supported

Indirect economic contribution

1. Construct a direct requirements matrix by dividing each column of the input-output tables by the total output of the corresponding industry
2. Apply the Leontief inverse to the direct requirements matrix to derive Type I output multipliers. Type I multipliers capture the total value of production by all industries required to satisfy one extra dollar's worth of final demand for the output of a specific industry
3. Apply output multipliers to the direct economic impact to estimate total supply chain activity
4. Subtract the direct contribution to isolate the indirect effect

Exhibit 10: Type of workloads serviced by data centre

Approach

The report uses publicly available forecasts of global data centre demand by workload in 2030 as the basis for data centre demand projection.

- A simple share is applied to divide the inference workload into batch inference and real time inference, forming the basis for global demand for latency-tolerant tasks. Note that this split varies by model and customer usage.
- APAC demand and its workload mix in 2030 are derived from publicly available information, assuming the split between AI training and AI inference workloads in APAC is proportional to global demand.

Key inputs

Input	Value	Source
Global data centre workload demand in 2030	Non - AI: 63.5GW AI inference: 93.3GW AI training: 62.2GW	McKinsey (2025) *The next big shifts in AI workloads and hyperscaler strategies*
Workload split between batch and real-time inference	55%	Li et al. (2025) *EcoServe: Designing Carbon-Aware AI inference systems*
APAC share of global data centre demand in 2030	34%	McKinsey (2026) *Beyond the spillover: Asia-Pacific, the next engine of data center demand*
APAC workload demand split in 2030	Traditional workload: 50% AI workload: 50%	McKinsey (2026) *Beyond the spillover: Asia-Pacific, the next engine of data center demand*

Exhibit 14: Uplift in annual economic activity from exporting compute by 2030

Approach

We developed a comparative scoring framework to assess data centre investment attractiveness across APAC countries, then applied two export scenarios to test Australia's relative competitiveness under different levels of market contestability.

- Countries are scored across seven dimensions, using a five-point Likert scale to enable consistent, like-for-like comparison
- Dimensions are split into two categories: gating dimensions (power availability, land, water, time to build and political stability) act as hard constraints on investment viability and are combined multiplicatively, while offsetting dimensions (workforce and connectivity) can offset weaker gating performance and are combined additively.
- The broad competition scenario benchmarks Australia against the full set of regional competitors: China, India, Indonesia, Malaysia, South Korea, Singapore, Thailand and New Zealand.
- The narrow competition scenario reflects active policy settings, excluding Singapore, Thailand and New Zealand as the weakest-scoring countries from competing for AI compute market share.
- Australia's score is converted into a market share, then applied to total latency-tolerant demand as laid out in Exhibit 10 methodology to estimate its compute capacity uplift.

We then translate this capacity uplift into economic contribution and investment value using the same input-output modelling approach set out in Exhibit 5, 6, 7, 8 and 14, applying the derived GVA and employment multipliers to the additional compute capacity captured under each scenario to estimate the associated direct and indirect economic impact.

Exhibit 18: Projected location-based scope 2 emissions from serving the export opportunity on each country's 2030 grid

Approach

The report estimates the emissions associated with hosting Australia's AI compute export opportunity if the same capacity were instead served by each comparator country, based on each country's energy mix and the emissions intensity of its specific energy sources.

- Emissions are calculated as the sum across energy types of each energy type's share of the country's grid multiplied by its specific emissions intensity (gCO_2/kWh), scaled by the annual energy required to serve the compute capacity.
- The compute capacity is held constant across all countries and set equal to Australia's AI compute export opportunity, isolating the effect of each country's energy mix on emissions.
- Emissions intensity is matched to each individual energy source (e.g. coal, gas, hydro, solar, wind). As emissions intensity varies across projects for a given energy source, the analysis applies a single representative value per source, held constant across all countries. Energy mix shares follow each country's stated ambition for renewable energy penetration.
- Where a country's target year differs from 2030 (e.g. 2040), renewable penetration is assumed to increase linearly toward the stated goal. In practice, this transition is likely to be uneven, with progress shaped by discrete additions of capacity and policy change rather than a smooth trend. The report models this as a linear path as a simplifying approximation, and uses it to extrapolate the renewable share in 2030.
- Within the renewable and non-renewable categories, the mix of individual energy sources (e.g. coal versus gas within non-renewable, solar versus wind versus hydro within renewable) is held proportional to each country's current mix, so only the overall renewable/non-renewable split shifts to reach the 2030 target.
- Note that the calculation captures Scope 2 emissions from grid electricity consumption only, based on location-based emissions intensity. It excludes Scope 1 emissions (e.g. backup generation, refrigerants), embodied emissions from data centre construction, and firming/backup generation required to manage renewable intermittency. These are assumed to be held constant across countries.

Key inputs

Input	Value	Source
Coal emission intensity	910 gCO_2/kWh	Ecoflow (2026) *Which power generation by source generates more greenhouse gases?* Schloemer, S. et al. (2014) *Annex III: Technology-specific cost and performance parameters*
Natural gas emission intensity	650 gCO_2/kWh	
Hydro emission intensity	24 gCO_2/kWh	
Solar emission intensity	45 gCO_2/kWh	
Nuclear emission intensity	12 gCO_2/kWh	
Wind emission intensity	11 gCO_2/kWh	
Bioenergy emission intensity	890 gCO_2/kWh	Schloemer, S. et al. (2014) *Annex III: Technology-specific cost and performance parameters*
Australia's target renewable energy generation share	82% (2030)	IEA (n.d.) Australia
India's target renewable energy generation share	50% (2030)	Ministry of New and renewable energy (2026) *India Ranks third globally in Renewable Energy Installed Capacity*
Japan's target renewable energy generation share	45% (2040)	Hasegawa and Maekawa (2025) *Japan approves new energy mix target*
Singapore's target renewable energy generation share	40% (2035)	EMBER (2024) *Regional renewables investment key to Singapore's energy future*
Malaysia's target renewable energy generation share	40% (2035)	SEDA (n.d.) *Malaysia renewable energy roadmap*
Indonesia's target renewable energy generation share	34% (2034)	Juwita (2025) *Indonesia targets 34 percent renewables in energy mix by end of 2034*
South Korea's target renewable energy generation share	30% (2035)	Joo (2026) *Korea Targets Over 150GW Renewable Energy Capacity by 2035*

5.2
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