Microsoft

New Zealand's opportunity in the new AI economy

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Defining the new
AI economy in New Zealand

Contents

Foreword

Artificial intelligence (AI) is one of the most transformative forces in today's global economy. Like other world-changing general-purpose technologies that have come before, it will reshape industries and propel nations forward. As we stand on the cusp of a new AI-powered economy, it's time to reflect on the innovations that have brought us to this moment and chart the course for a future that is brimming with possibilities.

New Zealanders are innovators. From the electric fence to Rocket Lab, and now the work of amazing local tech companies like Auror and Volpara, we have much to share with the world. And sharing with the world really matters for New Zealand – a small trading nation, geographically remote but globally connected through technology.

The new AI economy isn't just about the technology itself. It's about the jobs it creates, the efficiencies it offers and the new ways it enables us to interact with the world. Now we need to leverage New Zealand's strengths, including renewable energy, strong institutions and great local talent, and identify where we want to focus our efforts across the AI technology stack.

As we look ahead, the findings in this report offer a clear path. We should take confidence from our past successes and move forward with purpose. The new AI economy provides a remarkable opportunity to drive economic growth, foster innovation and enhance the lives of people – in New Zealand and beyond.

Steven Worrall
Managing Director
Microsoft Australia
and New Zealand

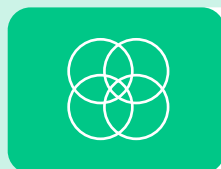**Vanessa Sorenson**
Managing Director
New Zealand

Executive summary

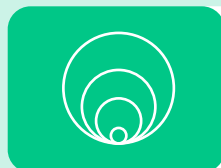# A new AI economy is emerging globally, based on the tech stack of Generative AI

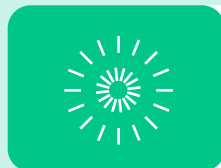**There are six core components of the Generative AI tech stack:**

	Applications
	Tooling
	Foundation models
	Data
	AI datacentres
	Chips

This core tech stack is connected by **utilities infrastructure and distributed** to end users via various platforms and services.

The new AI economy is global, with New Zealand's domestic AI tech stack already comprising a mix of local and global organisations. New Zealand can secure its place by focusing on its comparative advantages.

A strong AI economy will boost adoption of Generative AI and support New Zealand to grow investment, exports, and productivity. Generative AI could support $76 billion of economic activity in 2038.

New Zealand's AI tech stack could generate $3.4 billion in revenue in 2035, with opportunities in applications and datacentres.

Industry and government will need to take targeted action to capitalise on this opportunity and unlock the full benefits of AI.

Applications
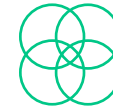
New Zealand-based applications companies and global companies with New Zealand operations will generate $2.1 billion in revenue in New Zealand in 2035. Sectors such as healthcare, agriculture, and tourism as well as the public sector represent promising areas for growth.

AI datacentres

Firm renewable energy, political stability, and proximity to Asia will underpin growth in New Zealand's datacentres. This component of the stack is essential for the growth of AI and is set to generate $1 billion in revenue in New Zealand in 2035.

Calibrating conditions

As new technology emerges, workforce training and social licence for AI must keep pace with innovation. New Zealand should leverage its distinctive government structure to support this.

Accelerate AI applications

New Zealand should continue to foster R&D and start-up growth for AI. The public service should steward AI uptake and support AI applications in key sectors.

Double-down on datacentres

To establish world-leading datacentres, New Zealand needs to support the scale-up of firm renewables and fast-track approval processes for new facilities.
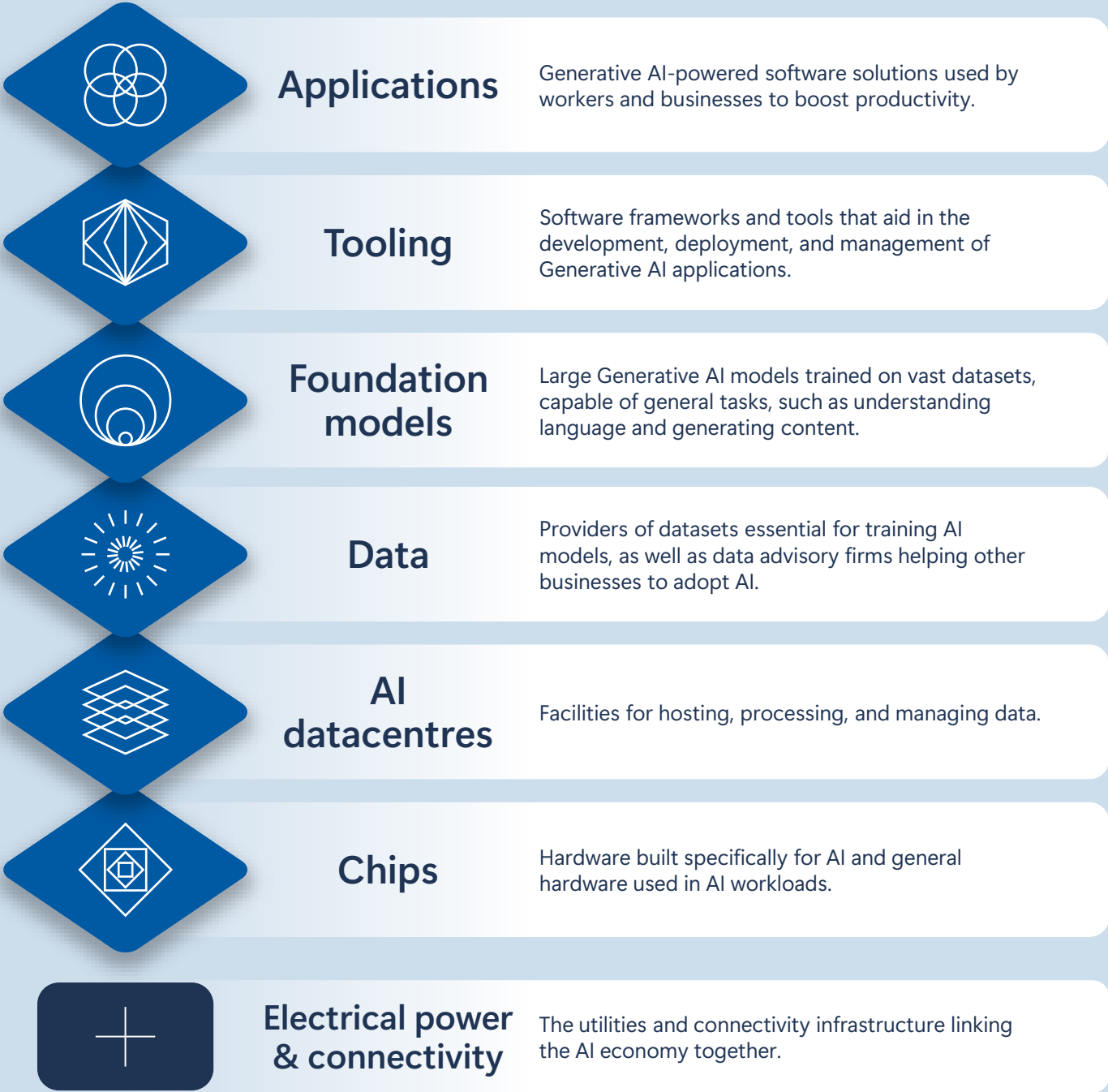
The Generative AI tech stack

The Generative AI tech stack has created a new AI economy

Definition of the new AI economy

Applications	Generative AI-powered software solutions used by workers and businesses to boost productivity.
Tooling	Software frameworks and tools that aid in the development, deployment, and management of Generative AI applications.
Foundation models	Large Generative AI models trained on vast datasets, capable of general tasks, such as understanding language and generating content.
Data	Providers of datasets essential for training AI models, as well as data advisory firms helping other businesses to adopt AI.
AI datacentres	Facilities for hosting, processing, and managing data.
Chips	Hardware built specifically for AI and general hardware used in AI workloads.
Electrical power & connectivity	The utilities and connectivity infrastructure linking the AI economy together.

Source: Microsoft (2023) *Microsoft's Access Principles.*

This tech stack powers the Generative AI applications already saving time for workers

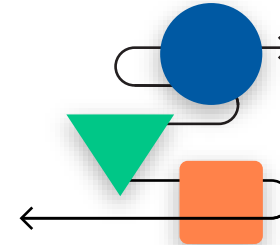## The new AI economy is connected to end users via distribution channels

The New AI Economy

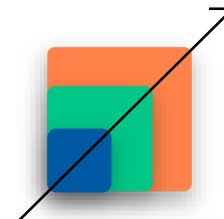The tech stack underpinning Generative AI

Distribution

Platforms and services that ensure AI models and applications are effectively delivered to end-users

End Users

Individuals and organisations utilising Generative AI solutions to improve efficiency in their everyday workflow

AI is already transforming work

84%

In New Zealand, 84% of knowledge workers already use Generative AI to co-pilot work in some capacity.[1] Additionally, workplaces are increasingly using AI agents to complete tasks autonomously.

– In **healthcare**, AI can analyse scans scans to detect anomalies, prioritising cases for urgent review. This improves diagnostic accuracy and efficiency.[2]

– In **primary industries**, AI can help with crop and livestock treatment, yield optimisation, supply chain management, and waste reduction. This can reduce costs and improve resilience across the sector.

– In the **public sector**, Generative AI co-pilots increase the pace of content creation, generate ideas, and improve service delivery. This saves time, increases innovation, and improves quality.[2]
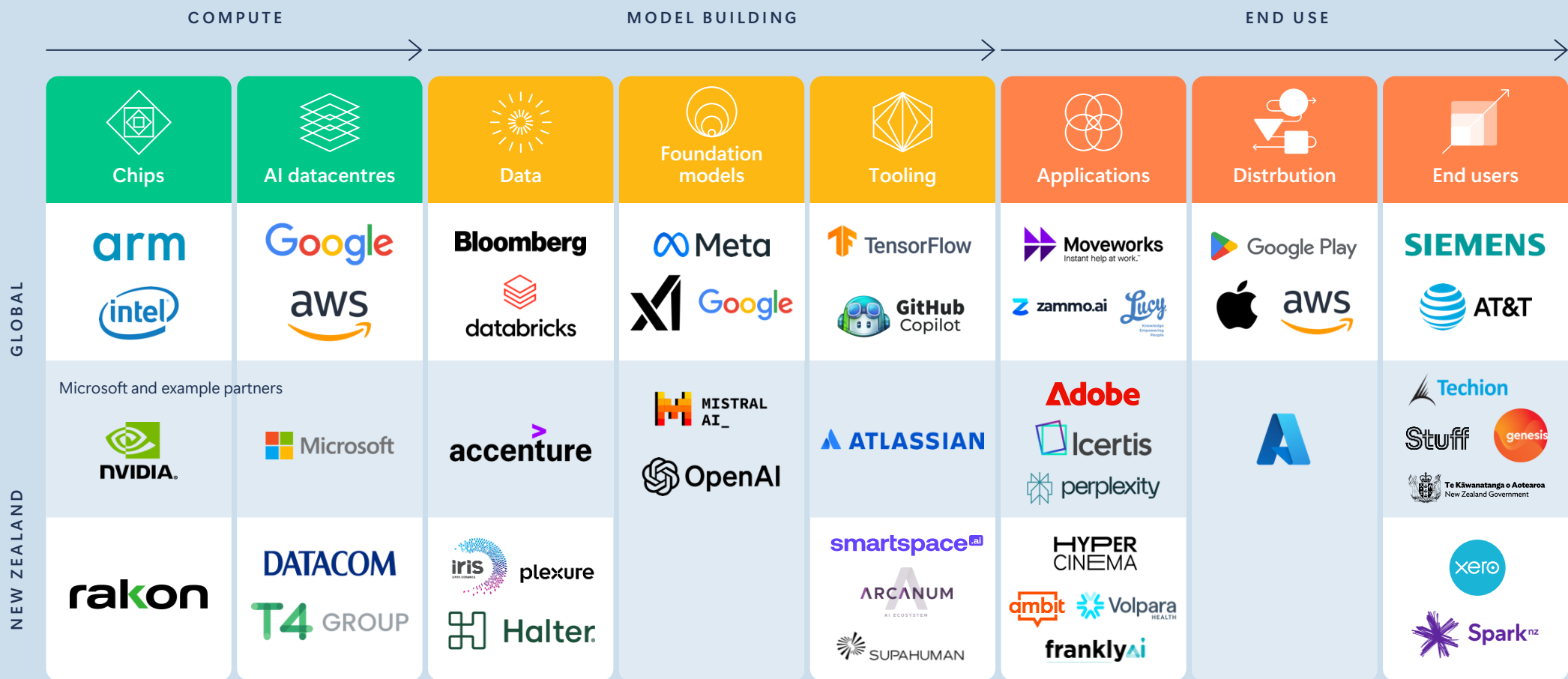
[1] Microsoft and Accenture (2024) *New Zealand's Generative AI opportunity.*
[2] See pages 22, 23 and 24 of this report for examples of New Zealand companies providing and adopting AI powered applications in the public sector, healthcare and entertainment.

The new AI economy is global, with New Zealand's global and local organisations partnering to create opportunities for businesses across the AI tech stack

Example companies in New Zealand's new AI economy

|	COMPUTE		MODEL BUILDING			END USE		
	Chips	**AI datacentres**	**Data**	**Foundation models**	**Tooling**	**Applications**	**Distrbution**	**End users**
GLOBAL	arm / intel	Google / aws	Bloomberg / databricks	Meta / xAI Google	TensorFlow / GitHub Copilot	Moveworks / zammo.ai Lucy	Google Play / aws	SIEMENS / AT&T
NEW ZEALAND	Microsoft and example partners / NVIDIA	Microsoft	accenture	MISTRAL AI_ / OpenAI	ATLASSIAN	Adobe / Icertis perplexity	Azure	Techion / Stuff genesis / Te Kāwanatanga o Aotearoa New Zealand Government
	rakon	DATACOM / T4 GROUP	iris / plexure Halter		smartspace.ai / ARCANUM AI ECOSYSTEM / SUPAHUMAN	HYPER CINEMA / ambit Volpara HEALTH / franklyAi		xero / Spark nz

Source: Mandala analysis.

New Zealand can secure its place in the global AI economy by focussing on the country's comparative advantages

Government AI Readiness Index[1]

2024 rankings, composite index of AI readiness in Government, Technology, Data and Infrastructure

Low ▭▭▬ High
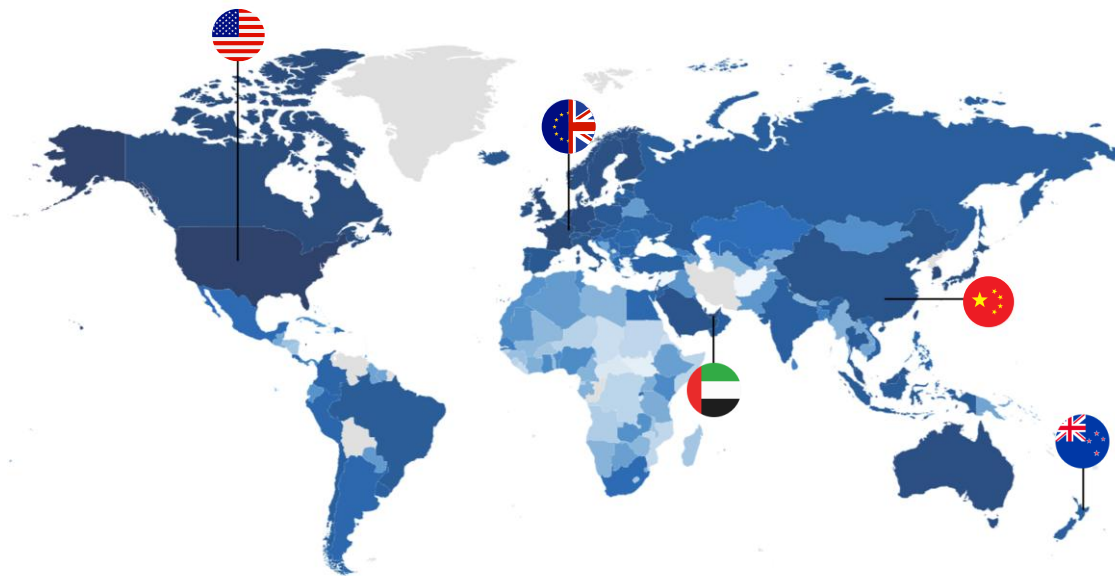
Comparative advantage and example companies by region

United States of America
The US has led the global AI economy, supporting cutting-edge research, financing, and talent pools with a flexible regulatory environment.

NVIDIA
OpenAI

People's Republic of China
China's advantage lies in its state support, vast datasets, app deployment, and STEM workforce. Recent developments in foundational models show how it can compete across the tech stack.

Alibaba
deepseek

European Union and United Kingdom
The EU and UK seek AI development with a greater emphasis on governance and data privacy, growing locally competitive models.

Benevolent[AI]
MISTRAL AI_

United Arab Emirates
The UAE is a hub for sovereign AI development, driving innovation through strategic partnerships, secure infrastructure, and active talent investment.

G42

New Zealand
Leveraging New Zealand's comparative advantage is key to securing its place in the global AI economy. Its agile regulation, firm renewable energy[2], and niche sector expertise can help it punch above its weight and unlock AI's full potential.

[1] Oxford Insights (2024) *Government AI Readiness Index*.
[2] Refers to renewable sources that are consistently available such as geothermal or hydropower with storage capacity.
Source: Expert input and industry consultations. Mandala analysis.

A strong AI economy in New Zealand will boost Generative AI adoption and help the country achieve its economic priorities

The benefit of a strong AI economy

A strong AI economy...

Three key features of a strong AI economy:

Investments and partnerships
Spurring innovation through strategic funding and collaborative ventures

New products and businesses
Driving market expansion and creation of AI-enhanced solutions domestically and globally

New jobs
Generating diverse employment opportunities, from technical roles to ethics specialists

...boosts adoption of Generative AI...

Three key drivers of Generative AI adoption:

Equal access to AI infrastructure
Streamlined and safe access to AI capabilities through robust cloud and network technologies

Adaptive solutions
Flexible, continuously updated AI tools that enhance business agility and cyber resilience

Inclusive and AI-savvy workforce
A workforce with strong AI expertise and leadership support, able to safely adopt AI with no cohort left behind

...helping achieve New Zealand's economic priorities

Three key economic priorities:

Increase productivity
Increased AI uptake can improve productivity across the economy, lifting real incomes and improving opportunities for New Zealanders

Improve public service delivery
Adopting AI across the public service can deliver a more effective and responsive customer experience to all who need them

Attract investment
AI adoption in New Zealand can help to attract foreign investment and industry know-how, supporting economic growth

Source: New Zealand Government (2024), *Budget Policy Statement* 2025; UNSW Business Think (2022) *Microsoft's Lee Hickin on digital resilience beyond cybersecurity*; and expert input and industry consultations.

Previous research shows that widespread adoption of Generative AI could deliver more than $76 billion in economic value to New Zealand in 2038

The economic opportunity of Generative AI for New Zealand in 2038

GDP in 2038, billions of dollars, 2023 prices

$39B — Conservative
$76B — Moderate
$102B — Upside
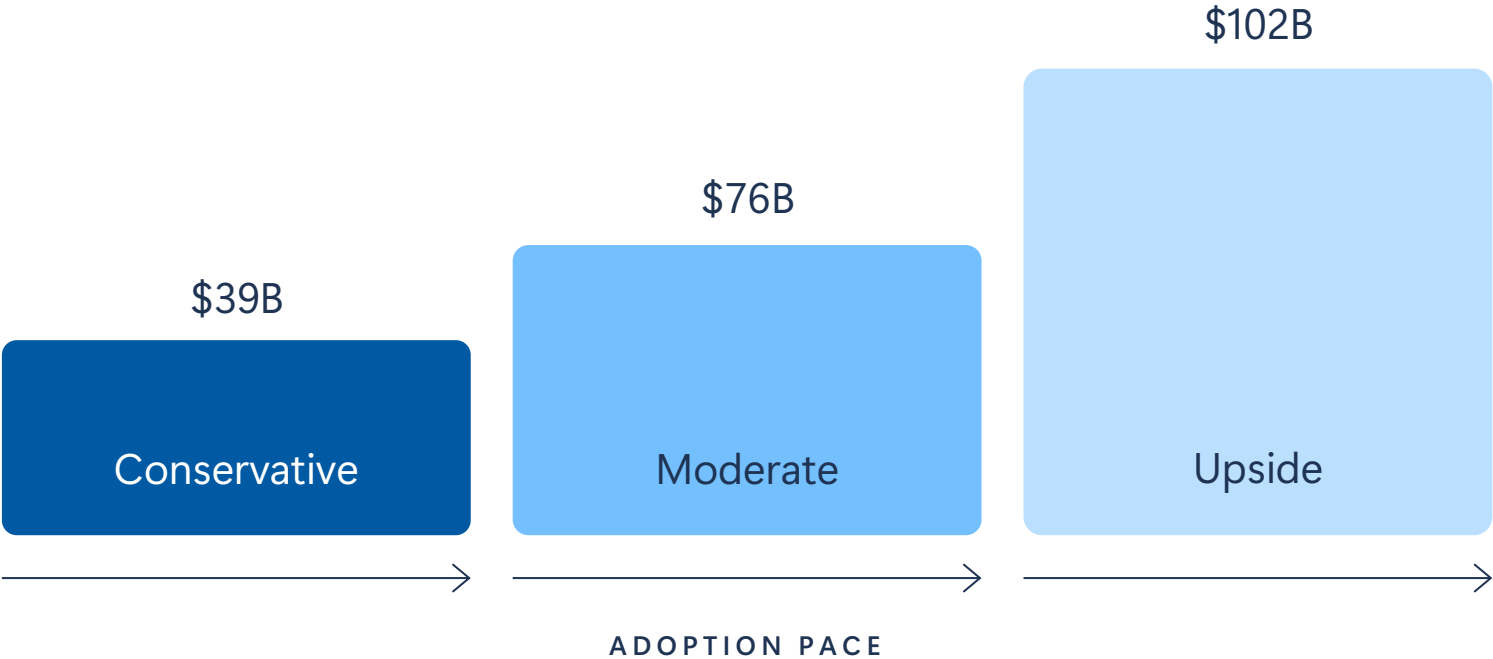
ADOPTION PACE

Achieving fast-paced adoption unlocks the full benefits of Generative AI

Widespread adoption of Generative AI is key

The economic value of Generative AI depends on how it is adopted in New Zealand. A moderate case, where automation is balanced with workforce augmentation, could deliver $76 billion annually by 2038.[1] In contrast, if AI is used mainly for automation without balancing with effective worker reallocation, the benefit drops to $39 billion.

The conservative case could stem from an underdeveloped AI economy with limited infrastructure, skill shortages, regulatory barriers, and unequal access. In this case, a focus on cost-cutting automation would limit productivity gains. The labour market would reshuffle based on automation alone, with workers unable to adapt, leading to higher unemployment. This would leave New Zealand lagging in global AI innovation and missing out on key economic benefits.

An upside scenario could deliver $102 billion in economic activity by 2038, which would arise from a strong AI economy, driven by investment in infrastructure, talent, and smart regulation. In this scenario, AI augments roles and the labour market efficiently reallocates workers. This would boost productivity, drive innovation, and unlock significant economic value, helping New Zealand realise the full benefits of AI for its economy.

[1] All prices in NZD unless otherwise specified.
Source: Microsoft and Accenture (2024) *New Zealand's Generative AI opportunity*.

Generative AI adoption could increase New Zealand's GDP per capita by 14%, helping the country keep pace with peers

The potential impact of Generative AI on New Zealand's relative GDP is significant

Without any uplift from Generative AI, New Zealand's per capita GDP is forecast to be $100,000 in 2038, the third lowest of its peers. Under the moderate Generative AI adoption scenario, there would be a 14% increase in GDP per capita, rising to $114,000 per person and leapfrogging Estonia and Finland.
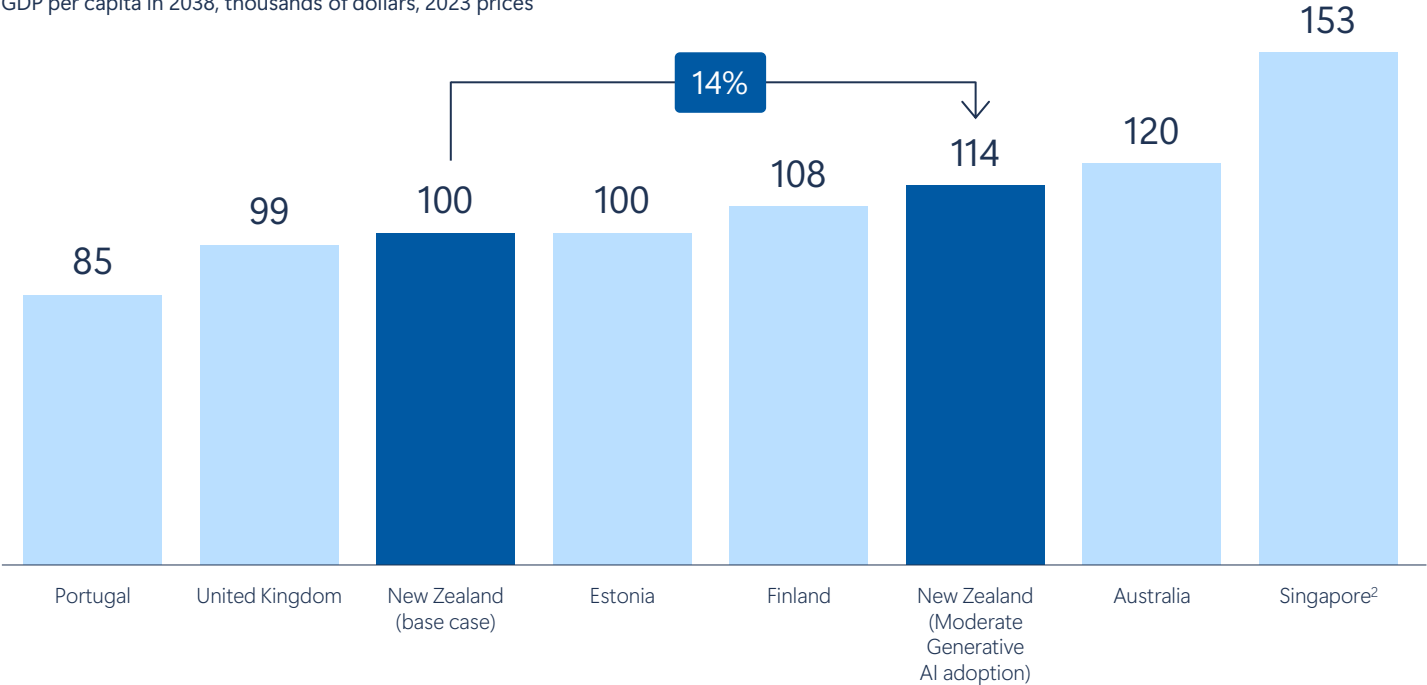
Under this scenario New Zealand's GDP go from $561 billion to $637 billion in 2038. This would see the country overtake Finland's GDP.

With moderate Generative AI adoption, New Zealand's GDP per capita will begin to approach Australia's levels.

The benefits of Generative AI adoption will be realised across New Zealand's economy. The greatest opportunities in Generative AI will be in the economy's largest sectors, such as agriculture, health, business services, construction, and public services.

Real GDP per capita long-term forecast in select peer countries[1]

GDP per capita in 2038, thousands of dollars, 2023 prices

Portugal	United Kingdom	New Zealand (base case)	Estonia	Finland	New Zealand (Moderate Generative AI adoption)	Australia	Singapore[2]
85	99	100	100	108	114	120	153

14% (from New Zealand base case to New Zealand Moderate Generative AI adoption)

GDP in 2038, billions of dollars, 2023 prices

868	7170	561	125	588	637	3574	958

[1] Peer countries are selected based on similar levels of development or size of economy as measured by GDP or GDP per capita.
[2] Singapore GDP data sourced from World Bank (2023) and forecast with an assumption of a 2% annual GDP growth rate from the IMF (2025) and the Monetary Authority of Singapore (2025).
Source: OECD (2023) "Real GDP long-term forecast", *Economic Outlook No 114 – December 2023 – Long-term baseline projections;* Oanda (2025) USD to NZD exchange rate on 5 February 2025; and World Bank (2024) "Databank" Population forecast.

New Zealand's most promising opportunities

We assessed New Zealand's most promising opportunities in the new AI economy

The attractiveness and capability framework

To understand the potential of different components of the AI tech stack, we assess each component through an attractiveness and capability index which includes over 19 different metrics.

Attractiveness measures which components of the tech stack are most economically promising. The index considers current revenue, forecast growth, and the future potential of each component of the AI tech stack.

Capability looks to understand where New Zealand may be better placed to capture the opportunity in the AI tech stack relative to international peers. This index considers a range of metrics grouped into four categories:

– AI readiness, which captures the opportunity, sentiment, and support for AI;
– workforce and existing activity, which includes skills of the workforce.
– operating environment, which assesses how easy it is for businesses to start, operate, and grow; and
– institutions and infrastructure, which assesses the political and technical foundations for the opportunity.

These categories are indexed and weighted based on their importance and relevance to each component.
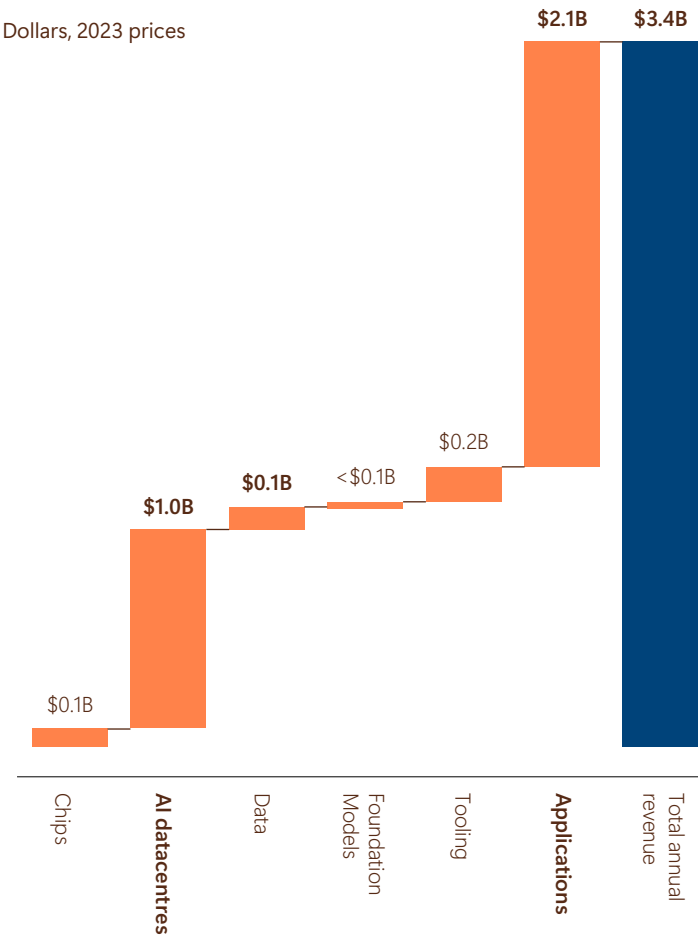
Source: Mandala analysis.

AI tech stack assessment framework

Attractiveness

Attractiveness of each part of the AI tech stack based on expected growth and revenue, and future potential.

Capability

AI readiness

Attractiveness of each part of the AI tech stack based on expected growth, current revenue, and future potential.

Workforce & existing activity

Extent of AI skills in the workforce and existing activity in AI and other tech start-ups, venture capital (VC) funding, AI demand, and AI skills in the workforce.

Operating environment

Conduciveness of the environment to set up and operate a business, such as operating costs, access to land, the business environment, and the level of policy prioritisation for the component of the stack.

Institutions & infrastructure

Suitability of institutions and infrastructure for AI adoption, such as political stability, sustainability performance, and ICT infrastructure.

Attractiveness:

Applications and AI datacentres are fast-growing and represent over 90% of the total opportunity of the new AI economy in New Zealand.

Source: Mandala analysis.

Total revenue by AI tech stack component in 2035 in New Zealand

Dollars, 2023 prices

Waterfall chart showing revenue contributions:
- Chips: $0.1B
- AI datacentres: $1.0B
- Data: $0.1B
- Foundation Models: <$0.1B
- Tooling: $0.2B
- Applications: $2.1B
- Total annual revenue: $3.4B

PROJECTED GROWTH IN ANNUAL REVENUE FROM 2025–2035

Chips	AI datacentres	Data	Foundation Models	Tooling	Applications	Total annual revenue
12.5x	9.0x	5.1x	4.5x	9.8x	13.0x	10.8x

Key takeaways

– By 2035, the new AI economy will generate $3.4 billion in revenue in New Zealand.

– This includes New Zealand-headquartered businesses and global companies with operations in New Zealand. Achieving this growth will require New Zealand companies to export and grow revenue globally.

– Applications are the largest and fastest-growing component of the AI tech stack for New Zealand. Local start-ups can leverage existing foundation models to build industry-specific applications, utilising expertise in sectors where the country is already strong, such as agriculture, health, and public services.

– AI datacentres will likely be another major revenue source. The country's favourable operating environment will attract multinationals who will invest and bring technology to the country.

– New Zealand is unlikely to focus on capital-intensive sectors like chip manufacturing or R&D-intensive foundation model development. While the country's chips component will grow strongly, it is starting from a very low base in 2025.

Capability: New Zealand has strong institutions and renewable infrastructure, but falls behind international peers in AI readiness and training its workforce for AI

Key measures of New Zealand's AI capability

Index, by country

AI Readiness[1]

Singapore
Australia
Finland
United Kingdom
Estonia
Portugal
New Zealand

Public skepticism and lack of trust, contributes to limited social license. There is also less AI regulation to date, creating regulatory uncertainty. New Zealand is also behind its peers when it comes to AI research.

Despite this, New Zealand's government structure can help it quickly catch up to its peers. The National AI strategy and Advanced Technologies Public Research Organisation will help improve readiness.

Workforce & existing activity[2]

Singapore
Estonia
Finland
United Kingdom
New Zealand
Portugal
Australia
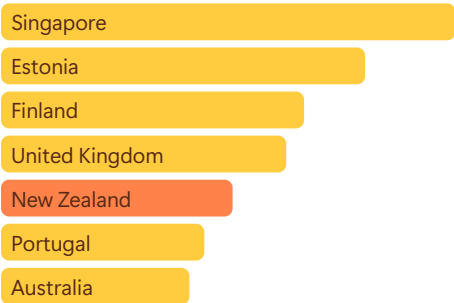
New Zealand currently lags peers, especially in digital skills, AI start-ups, and VC investment. This is driven in part by limited training and upskilling in AI.

Training new workers and upskilling the existing workforce will help to address this. New Zealand's AI Forum has highlighted workforce as a priority in its 2024 AI Blueprint for Aotearoa. Further regulatory certainty and support for start-ups will also help to attract investment for AI.
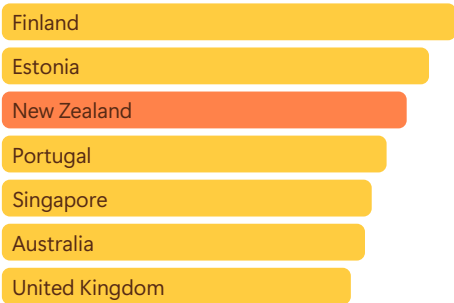
Operating Environment[3]

Australia
New Zealand
Singapore
Portugal
Estonia
Finland
United Kingdom
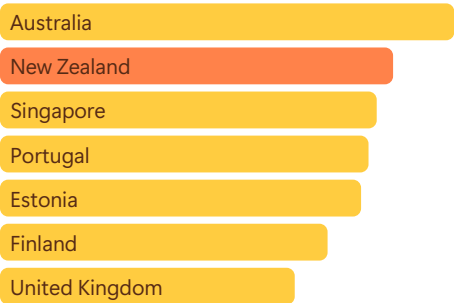
New Zealand ranks well against peers, especially for ease of doing business. Leveraging this advantage will help New Zealand to attract investment in AI.

Institutions & infrastructure[4]

Finland
Estonia
New Zealand
Portugal
Singapore
Australia
United Kingdom

New Zealand performs well in measures of sustainability and political stability, with a solid foundation of firm renewables. However, its IT infrastructure lags slightly.

New Zealand's strong performance in its operating environment, institutions and infrastructure position it well to capture opportunities in AI applications and datacentres. Favourable business conditions support applications, while political stability, renewables, and tech infrastructure drive AI datacentre potential. However, New Zealand is less well-placed to capture opportunities in chips, data, foundation models, and tooling, due to weaker AI readiness, workforce capability, and existing activity levels.
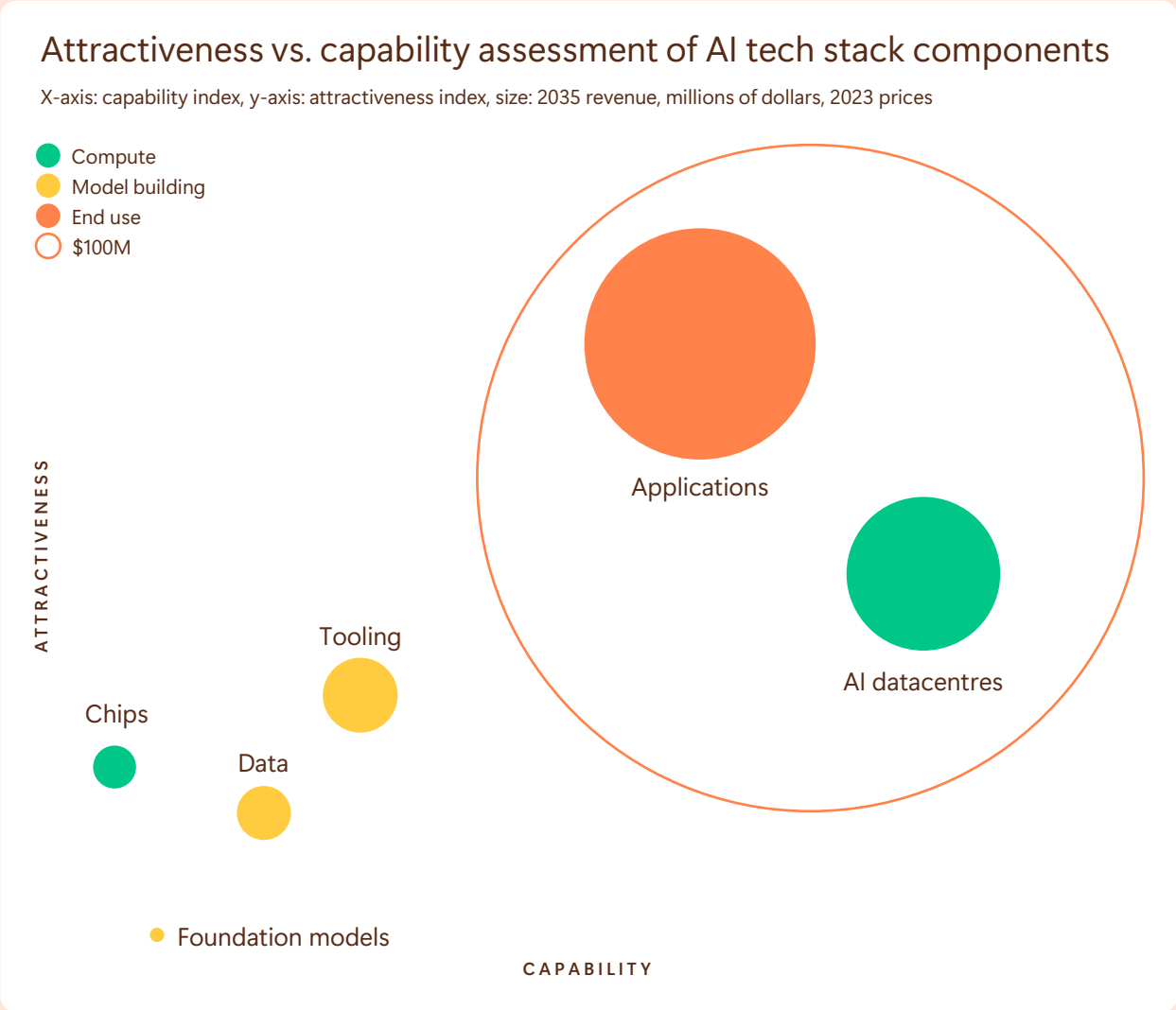
[1] Average of results of metrics on AI regulations and AI research, metric on AI sentiment of society has been removed as data was not available for some peer countries.
[2] Average of results of metrics on proportion of ICT industry, number of successful start-ups, number of AI start-ups, VC funding, presence of AI skills and hardware exports.
[3] Average of results of metrics on access to land, electricity and labour costs and business environment, metric on construction costs has been removed as data was not available for some peer countries.
[4] Average of results of metrics on political stability, sustainability and IT infrastructure.
Source: Mandala analysis; see Appendix for further detail on methodology and sources used.

Applications and AI datacentres present the most promising opportunities for New Zealand, when considering both attractiveness and capability

Attractiveness vs. capability assessment of AI tech stack components

X-axis: capability index, y-axis: attractiveness index, size: 2035 revenue, millions of dollars, 2023 prices

- ● Compute
- ● Model building
- ● End use
- ○ $100M

ATTRACTIVENESS

CAPABILITY

Applications

AI datacentres

Tooling

Chips

Data

Foundation models

Globally, chips and foundation models represent a significant opportunity, with substantial investments to date across leading tech firms. However, the opportunity for New Zealand is limited. The scale of investment required to compete, and the need for highly technical expertise are key barriers for New Zealand's growth in these components.

Source: Mandala analysis.

Key takeaways

– Attractiveness measures the most promising components of the tech stack in terms of economic value. Capability measures New Zealand's ability to capture this opportunity.

– This assessment framework shows that applications and AI datacentres are areas where New Zealand could be well-positioned to capture the most promising opportunities in the AI tech stack.

– New Zealand's opportunity in applications is due to a supportive business environment.

– New Zealand already has a healthy ecosystem of AI firms that are contributing to the new AI economy's revenue today. These include large home-grown businesses like Xero and multinational firms like IBM that are developing products and services in New Zealand.

– New Zealand is also well positioned in the large opportunity of AI datacentres due to its strong adoption of firm renewables, political stability, and proximity to Asia and the Pacific.

Applications: New Zealand's government and business settings make the country an attractive destination for AI applications companies

Factors that support New Zealand's current regulatory conditions

Political stability

– Political stability and strong institutions enable long-term policy that provides confidence.
– New Zealand ranks 5th on the World Bank's index of political stability.[1]
– New Zealand has strong ties countries leading AI innovation such as the US and UK.

Government structure

– The unitary system of government allows for agile decision making and rapid policy adjustments.
– The relatively small size allows for stronger coordination between government agencies.

Business environment

– New Zealand ranks 1st on the World Bank's ease of doing business.[2]
– A strong business environment will support existing businesses expanding into New Zealand and start-ups looking to set-up.

Benefits of permissive regulation to applications companies

Market trust: Firms that operate successfully in permissively regulated markets build trust with customers and investors. These examples can allay concerns of regulators in more strictly regulated markets, which is particularly relevant given public concerns around AI risks. New Zealand's adherence to international AI rules and norms, including through recognition of the OECD AI Principles, will also help to build trust in other markets.

Agile regulatory approach: The New Zealand Government's proposed approach for proportionate, risk-based AI regulation would leverage existing regulatory frameworks which are largely principles-based and technology-neutral. This would help to foster innovation, while addressing AI harms. This approach would allow for more agile regulatory response, keeping pace with technological progress and international standards.

Innovation: Proportionate regulation allows AI firms to experiment with novel approaches to model training, testing, and deployment while containing regulatory risk. This is particularly valuable for testing new ways to improve model safety, transparency, and fairness without fear of penalties.

[1] World Bank (2023) *Political stability and Absence of Violence/Terrorism.*
[2] World Bank (2020) *Ease of Doing Business rankings.*
Source: New Zealand Ministry of Business, Innovation and Employment (2024) *Approach to work on Artificial Intelligence.*

Applications: New Zealand's strong start-up ecosystem and established tech companies will drive growth in AI applications

Tech investment in sectors of focus[1]

Millions of dollars, FY22 – FY23

Cleantech $171M

Cleantech involves technologies that reduce negative environmental impacts.

New Zealand founded company LanzaTech's novel recycling technology converts carbon emissions into fuels and textiles, leveraging AI to optimise the process.

Fintech $155M

Fintech combines technology with financial services to make banking, payments, and investment more efficient and accessible.

New Zealand innovations include PocketSmith, which uses predictive AI to forecast personal finances.

Healthtech $145M

Healthtech uses data analytics and new technologies to improve healthcare.

New Zealand's Volpara is using AI software to improve cancer detection worldwide.

AI Powers Smarter Business Applications

New Zealand's established tech companies will play a key role in scaling applications for the country's growing AI tech stack. Companies like Xero are embedding AI across their platforms to enhance product capability, improve user experience, and support small business productivity.

✓ Xero is a global small business platform with 4.4 million subscribers – including 629,000 in New Zealand – embedding AI across its platform to improve productivity, including an AI-powered support tool that has reduced search times by 40% and a bank reconciliation feature that cuts reconciliation time by up to 80%.

✓ Just Ask Xero (JAX), launched in 2024 and currently in beta, is a generative AI companion designed to automate accounting tasks, deliver personal insights, and give small businesses and their advisors valuable time back.

✓ In 2024, Xero acquired Syft, a global analytics platform that enhances reporting and insights, accelerating the delivery of smarter, AI-powered tools for small businesses.

✓ Xero research shows small businesses that adopt digital tools are more likely to grow revenue, improve cash flow, and create jobs – demonstrating how AI integration by established platforms can unlock the full potential of New Zealand's AI tech stack.

[1] Technology Investment Network (2024) *NZ Tech Sector Dashboard.*.
Source: Xero (2021) *'Trends in small business technology adoption and use'.*

Volpara is improving cancer detection with AI-powered screening

AI is unlocking new capabilities and offerings for healthtech services.

Volpara offers data-driven screening to empower patients through preventative healthcare.

Volpara's mission is to make software to save families from cancer

New Zealand healthtech company Volpara developed an AI tool to assist in breast imaging. The software is available at over 3,500 facilities worldwide, already helping 18 million patients across 40 countries.[1]

Volpara was acquired by South Korean company Lunit in 2024. The integration of technologies from both companies will help radiologists detect cancer more accurately.

Volpara uses AI to improve cancer detection

Volpara's AI breast density scanning software significantly improves abnormality detection and reduces false positives in selecting for further screening.

Volpara's analytics software can algorithmically evaluate the quality of mammogram images. The algorithm can provide feedback to technologists, increasing the chances of abnormality detection.

Microsoft Azure powers Volpara, enhancing patient outcomes

Volpara's AI technology requires the storage and computation of many high-quality images.

Azure's platform and cloud underpins the smooth and efficient delivery of these services.

Volpara and Microsoft engineers are currently advancing the cancer detection product to additionally detect heart disease in a single scan.
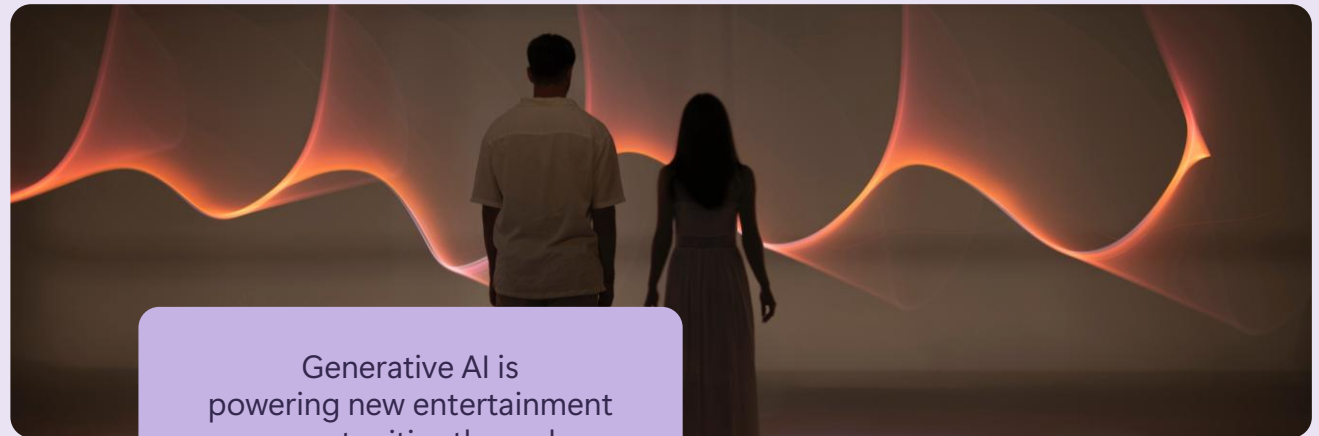
[1] Volpara (2025) *Our Mission.*
Source: Microsoft (2025) *A Clearer Picture;* and Lunit (2024) *Lunit Complete Acquisition of Volpara*

HyperCinema integrates Generative AI and storytelling to create personalised experiences

HYPER CINEMA

Generative AI is powering new entertainment opportunities through immersive experiences.

HyperCinema is the world's first hyper-personalised AI entertainment experience.

HyperCinema creates groundbreaking technology to transform entertainment

HyperCinema is a New Zealand company producing live, hyper-personalised media.

The company is bringing AI to ordinary people, creating personally resonant and tailored experiences.

HyperCinema are leaders in the innovative entertainment field, showcasing the creative capacity of AI to tell stories.

HyperCinema uses AI to create immersive experiences that are tailored to individuals

At HyperCinema engagements, guests first respond to a set of tailored questions while their images and voices are recorded.

This data is then fed into the proprietary "hyperengine" which creates a personalised storyline and associated immersive experience.

The hyperenigine supplies guest data to a chain of LLMs, image generation models, and voice generation models to create a personalised output.

HyperCinema is powered by Microsoft Azure

HyperCinema's hyperengine requires the instantaneous computation of large amounts of data.

Azure supports these demands and sizable computational load.

HyperCinema is working on new engagements to advance the field of hyper-personalised media.

Microsoft Copilot has helped boost productivity and inclusivity in the New Zealand public service

The New Zealand public service is expanding its use of Generative AI, including through Microsoft Copilot trials.

Generative AI applications can be used to make more productive and inclusive workplaces.

The New Zealand public service is already incorporating Generative AI tools like Microsoft Copilot

After a successful 6-month trial with a public sector agency, the New Zealand Government has published guidelines that enable widespread adoption of Microsoft Copilot and other AI technologies.

The trial delivered an estimated 287% ROI, indicating the significant opportunity AI presents to New Zealand's public service.[1]

Microsoft Copilot was found to boost productivity, job satisfaction, and inclusivity

In the public service trial, Microsoft Copilot saved workers an average of 10 hours per month on routine tasks. 76% of staff reported greater productivity and 79% reported higher quality of work.[1]

Automation of tasks such as producing meeting summaries and notes allowed for greater inclusivity of neurodiverse and English as an Additional Language workers.

New guidelines emphasise the importance of ethical and transparent AI use in the public service

The Government has stated the need for an open and coordinated approach across agencies to promote safe and efficient AI use.

The *Responsible AI Guidance for the Public Service: Generative AI* report was released in early 2025, providing guidelines to public service workers on Generative AI usage.

AI adoption in the New Zealand public service can help set an example for other industries.

[1] Microsoft (2024) *Real-World Benefits of Generative AI in the New Zealand Public Sector.*
Source: Digital Government NZ (2025) *Responsible AI Guidance for the Public Service; and*
New Zealand Ministry of Business, Innovation and Employment (2024) *Approach to work on Artificial Intelligence*

AI datacentres: New Zealand's firm renewable energy generation offers a unique opportunity to establish world-leading sustainable datacentres

New Zealand's firm renewable energy mix makes it well placed to support datacentres

New Zealand generates 88% of its electricity via renewable sources, significantly outperforming its peers.[1] Importantly, 78% of New Zealand's electricity comes from firm renewable sources, including hydropower with storage and geothermal. Firm renewables are those which are consistently available, providing continuous power regardless of weather conditions. New Zealand is continuing its rollout of renewable energy, with the goal of being 100% renewable by 2030.
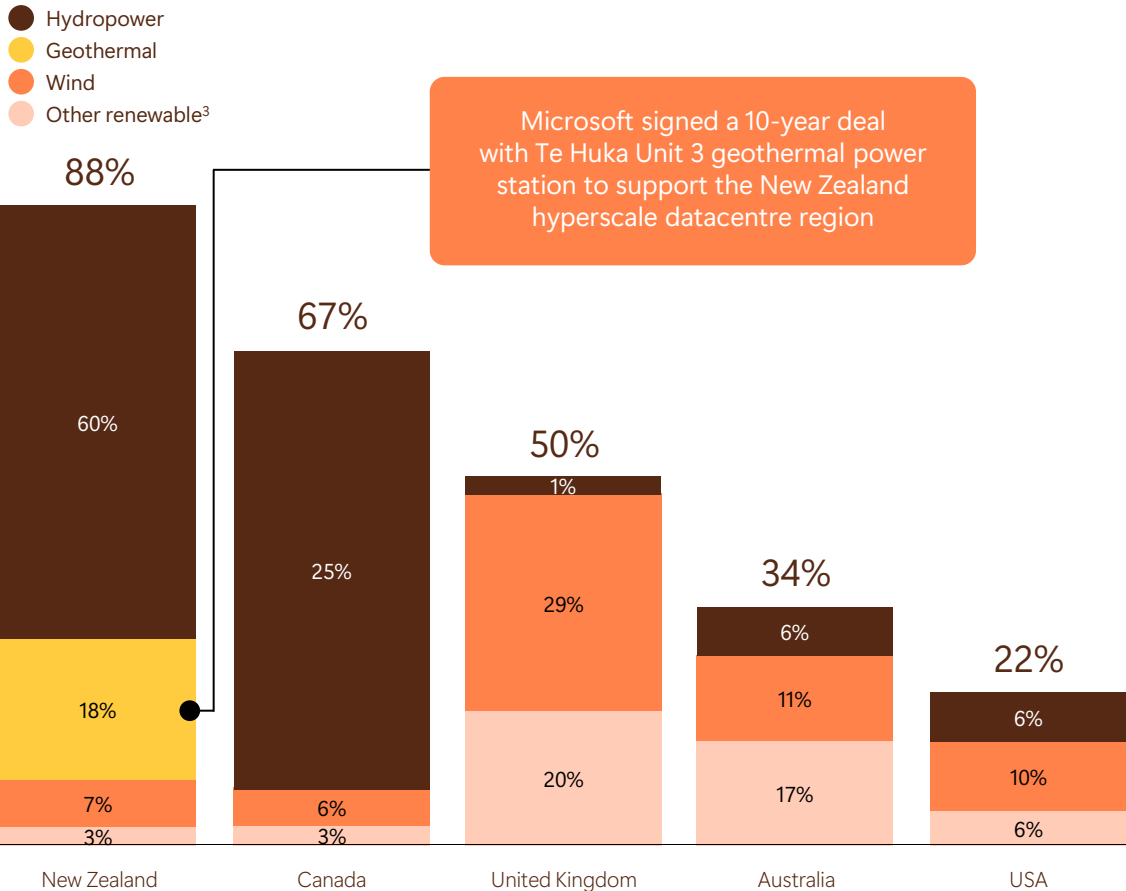
Renewable energy sources will be important for datacentres going forward due to high energy consumption. Globally, datacentres are projected to account for 4% of all power by 2030.[2] Additionally, datacentres require consistent and reliable energy supply, as even small power outages can cause significant data and financial loss.

New Zealand's uniquely clean and firm energy mix can support the development of large, scalable, and sustainable datacentres. New Zealand is a leader in the region, with the potential to support the datacentre needs of neighbouring countries in the Pacific.

[1] International Energy Association (2023).
[2] Goldman Sachs (2024) *AI poised to drive 160% increase in power demand.*
[3] Other renewable refers to energy generated via photovoltaic solar, thermal solar, tidal, biofuels, and waste
Source: New Zealand Energy Efficiency and Conservation Authority (2025).
Hydroelectricity in New Zealand; New Zealand Ministry of Business, Innovation & Employment (2023)
Advancing New Zealand's energy transition; International Energy Association (2024)
What the datacentre and AI boom could mean for the energy sector.

Energy mix of countries in renewable electricity generation

Percentage of renewable sources in total electricity generation, 2023[1]

Legend:
- ● Hydropower
- ● Geothermal
- ● Wind
- ● Other renewable[3]

Microsoft signed a 10-year deal with Te Huka Unit 3 geothermal power station to support the New Zealand hyperscale datacentre region

Country	Total	Hydropower	Geothermal	Wind	Other renewable
New Zealand	88%	60%	18%	7%	3%
Canada	67%	25%		6%	3%
United Kingdom	50%	1%		29%	20%
Australia	34%	6%		11%	17%
USA	22%	6%		10%	6%

Microsoft's hyperscale datacentre region sets the standard for sustainability and will underpin the new AI economy

Microsoft's New Zealand hyperscale datacentre region opened in December 2024.

Expanding datacentre capability in New Zealand unlocks sustainable AI potential in new industries.

Microsoft's New Zealand datacentre region opened in December 2024

Microsoft's hyperscale datacentre region comprises of linked sites in the Auckland area. The physical size, scalability, and sustainability make this a hyperscale region.

Microsoft has partnered with Ecotricity New Zealand and the Te Huka Unit 3 geothermal power station.

The region services local clients including Bank of New Zealand, Fonterra, and Auckland Transport.

Microsoft's New Zealand datacentre region enables new industries to make use of cloud technology

Microsoft's New Zealand datacentre region can uniquely meet high data compliance needs by housing data domestically and computing onsite with Azure cloud.

This capacity supports the uptake of AI technologies in industries with data residency requirements, expanding participation in the new AI economy.

Microsoft's New Zealand datacentre region is leading global best-practice for sustainability

Microsoft's New Zealand datacentre region is 100% carbon free, leveraging New Zealand's firm renewable energy mix. The region also employs new air-cooling technology, making it 100% water free.

These innovations make it Microsoft's most sustainable datacentre region globally, setting a benchmark for future projects.

Te Tumu Paeroa's data sovereignty framework provides a foundation to unlock Māori AI innovation

TE TUMU PAEROA
Office of the Māori Trustee

Te Tumu Paeroa is an anchor tenant of Microsoft's New Zealand datacentre region.

The partnership is underpinned by Te Tumu Paeroa's landmark data sovereignty framework.

Te Tumu Paeroa is undergoing a cloud migration to strengthen its digital infrastructure

Te Tumu Paeroa, is the office that supports the the Māori Trustee, which administers Māori Land Trusts on behalf of over 100,000 landowners.

Te Tumu Paeroa acts on behalf of Māori landowners to manage statutory matters, finances, leases, and contracts which requires large sets of landowner data and trustee records.

They aim to protect and grow the assets of Māori landowners while honouring cultural values and intergenerational responsibilities.

Ensuring data sovereignty is critical to digitising Māori data and processes

Te Tumu Paeroa are undergoing a cloud migration to Microsoft's New Zealand datacentre region.

The shift was driven by Te Tumu Paeroa's landmark Māori data sovereignty framework, to guide how this taonga (treasure) should be managed in the cloud.

In Te Ao Māori, data carries the mana (identity), tapu (sacredness), and mauri (spirit) of the person and land it represents. Data sovereignty is of utmost importance, and data must be handled and managed accordingly.

Microsoft's New Zealand datacentre region supports Māori landowners to retain data sovereignty

Microsoft's New Zealand datacentre region allows Te Tumu Paeroa to store and compute data locally while benefiting from Microsoft's security, carbon-neutrality, and advanced AI technologies. With this capability Te Tumu Paeroa can unlock the potential for AI innovation to support Māori landowners.

This partnership offers a model for indigenous organisations worldwide to embrace technology while preserving cultural values.

The new AI economy presents an opportunity for New Zealand to attract further foreign investment and know-how, helping to catalyse growth and skills

Alongside global investors, more domestic funding would strengthen New Zealand's AI start-up sector

International investors accounted for 90% of total venture capital (VC) investments in New Zealand AI start-ups in 2023.[1] Investors from the United States and United Kingdom contributed 88% of this VC investment.

This strong international interest in New Zealand's AI sector demonstrates that AI could be a key driver of foreign investment for New Zealand, aligning well with current national priorities to attract overseas investment.

Beyond funding, global investors foster innovation and bring best-practice knowledge to local companies.
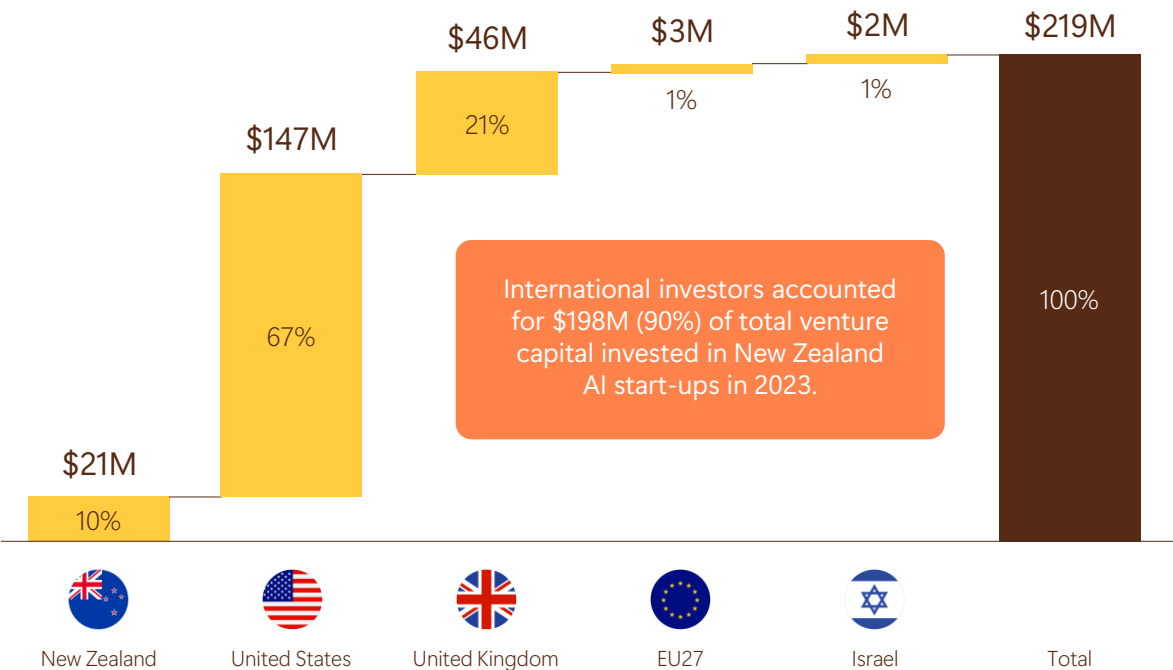
This will be especially relevant in helping New Zealand build an AI ecosystem and skilled workforce in this space.

New Zealand's investment in local AI start-ups (10%) also lags peer countries such as Australia (40%).[1] Increasing local VC investment would strengthen the AI start-up environment by leveraging knowledge of local market dynamics and opportunities.

Maintaining significant international partnerships and investment will be particularly important in the AI tech stack components most promising to New Zealand and could help foster export opportunities in the long-term.

Origin of venture capital investments in New Zealand AI start-ups

Millions of dollars, 2023

International investors accounted for $198M (90%) of total venture capital invested in New Zealand AI start-ups in 2023.

| New Zealand | United States | United Kingdom | EU27 | Israel | Total |
| $21M / 10% | $147M / 67% | $46M / 21% | $3M / 1% | $2M / 1% | $219M / 100% |

Note: When an investment deal includes investors from two distinct countries, the amount invested is counted twice due to the Preqin database not providing the exact amount invested per investor when there are multiple investors. Additionally, the OECD definition of 'AI start-up' may differ from other data sources used in this report.

Industry and government will need to take targeted action

Industry and government must support development of the new AI economy at key points of the AI tech stack

Actions for industry and government

Calibrate conditions
Industry and government must work together to build the foundations for success in the new AI economy

Continue enhancing national workforce readiness and talent development initiatives. Focus on upskilling the existing workforce at all levels through work-based learning, as well as training individuals entering or re-entering the workforce.

Build social license for AI adoption, demonstrating productivity-boosting AI use cases and fostering economic growth. Ensure new AI practices are culturally relevant, embedding Te Ao Māori in the sector as it develops.

Lean into the country's nimble and trusted regulatory environment to become a testing ground for AI innovation. Foster market trust through proportionate, risk-based, and agile regulation that draws on international standards.

Accelerate AI applications
Industry and government must work together to ensure New Zealand wins in AI innovation in priority sectors

Accelerate uptake and demonstrate the benefits of AI in the public service. Support government agencies to adopt AI as well as to foster AI development through well designed public research and funding.[1]

Foster New Zealand's R&D and start-up environment to support AI application innovations and companies. Grow and promote New Zealand's AI start-up ecosystem to attract and grow investment, talent and innovation.

Support applications in New Zealand's priority sectors to start-up, scale-up and go global. Identify and leverage existing expertise in priority sectors such as agritech, cleantech, and healthtech to attract investment and keep pace with global innovation.

Double-down on datacentres
Industry and government must work together to consolidate the country's AI infrastructure advantage

Promote hyperscale cloud and high-speed network access across the region, particularly for large enterprises and key industries. Practice regional leadership by supporting evolving datacentre needs in the Pacific.

Support the scale-up of firm renewable electricity, to ensure energy security while supporting datacentre sector growth. Attract global investors to New Zealand's mature renewable energy landscape to meet increasing electricity demands.

Fast-track datacentre approvals, including consideration for classification as critical infrastructure assets. Establish clear, standardised guidelines to accelerate approval process.

[1] Proposed Science Sector Reforms intend to make the public science system more efficient to keep pace with advancing peer economies. The Advanced Technologies Public Research Organisation should prioritise ethical AI research, demonstrating the opportunity to investors.
Source: Science System Advisory Group (2024) An architect for the future; New Zealand Ministry of Business, Innovation and Employment (2024) Approach to work on Artificial Intelligence; Expert input and industry consultations; and Mandala analysis.

These recommendations are designed to capitalise on New Zealand's competitive advantage in the new AI economy

TARGETED COMPONENT	RECOMMENDATION	CAPABILITY IMPROVED	RATIONALE
Broader settings	Continue enhancing workforce readiness	AI readiness, workforce and existing activity	Strategic workforce development is essential to address skills shortages, retain talent, and drive AI adoption. New Zealand's Digital Skills Gap Index underperforms compared to peer nations, driving AI talent attrition.
	Build social license for AI adoption	AI readiness	Public skepticism slows AI adoption across sectors. Industry and government leaders need to showcase the economic benefits of AI, building public trust, familiarity, and demonstrating cultural compatibility.
	Lean into the country's nimble and trusted regulatory environment	AI readiness	New Zealand's delayed development of a national AI strategy has resulted in a low Government AI readiness ranking of 49th.[1] New Zealand's governance structure presents unique advantages for regulatory innovation, attracting international R&D investment and positioning the nation as a global AI testbed.
Applications	Accelerate uptake and demonstrate the benefits of AI in the public service	AI readiness, workforce and existing activity	Accelerated public sector adoption and AI research will build public confidence, develop reference cases for private sector, and attract investment. The new Public Research Organisation for Advanced Technologies should improve AI research output from its relatively low base of 28 publications per million people.[2]
	Foster New Zealand's R&D and start-up environment	AI readiness, workforce and existing activity	New Zealand's AI start-up density is low, at 6 businesses per million people.[3] Improving the start-up environment will help New Zealand to attract further foreign investment for applications.
	Support applications in New Zealand's priority sectors	Workforce and existing activity	New Zealand should capitalise on existing sector advantages, supporting commercialisation at pace in the short term to boost this measure.
Datacentres	Promote hyperscale cloud and high-speed network access	Institutions and infrastructure	New Zealand can become a regional leader, building sustainable and secure datacentres that additionally benefit Pacific neighbours. Improving infrastructure enables both AI adoption and regional security.
	Support the scale-up of firm renewable electricity	Institutions and infrastructure, operating environment	Expanding renewable energy creates international differentiation in compute-intensive AI infrastructure. New Zealand can use this advantage to incentivise investment, encouraging the flow of foreign capital.
	Fast-track datacentre approvals	Operating environment	New fast-track rules do not specifically recognise datacentres as critical infrastructure. Their inclusion would consolidate New Zealand's advantage, removing costly barriers that drive construction and land use costs.

Importantly, both industry and government have a role in mitigating the risks and challenges

	Risks and challenges facing AI		Responsibilities
TECH	**Bias**	AI may reflect existing societal biases if not developed with diverse datasets, teams and/or organisations	**INDUSTRY** — Promote access, choice, transparency and social responsibility
	Opacity	Limited transparency in AI decision-making can reduce trust and understanding	
	Unpredictability	The rapidly evolving nature of AI can make it challenging to anticipate and manage its impacts	
ADOPTION	**Digital exclusion**	AI technologies might widen the digital divide if access and skills are not addressed	
	Misuse	AI could be misused for malicious purposes, posing significant ethical and security risks	**GOVERNMENT** — Provide regulatory clarity, support and collaboration
	Job transition	The integration of AI could lead to workforce changes, affecting job roles and employment	
MARKET	**Concentration**	The AI market needs to remain healthy and competitive, to spread the benefits and foster innovation	
	Security	AI systems, like any widespread technology, can face cybersecurity challenges, such as data breaches and malicious attacks	

Source: Microsoft (2024) *AI Access Principles,* DISR (2024) *Safe and responsible AI in New Zealand consultation: New Zealand Government's interim response*; Mandala analysis.

Microsoft's AI Access Principles set out a foundation for how industry should approach the new AI economy

Microsoft's AI Access Principles

Access and support

1 **Expand access to AI hardware**
Expand cloud computing AI infrastructure to enable more foundation models

2 **Expand access to AI software**
Make AI models and development tools broadly available to software applications developers
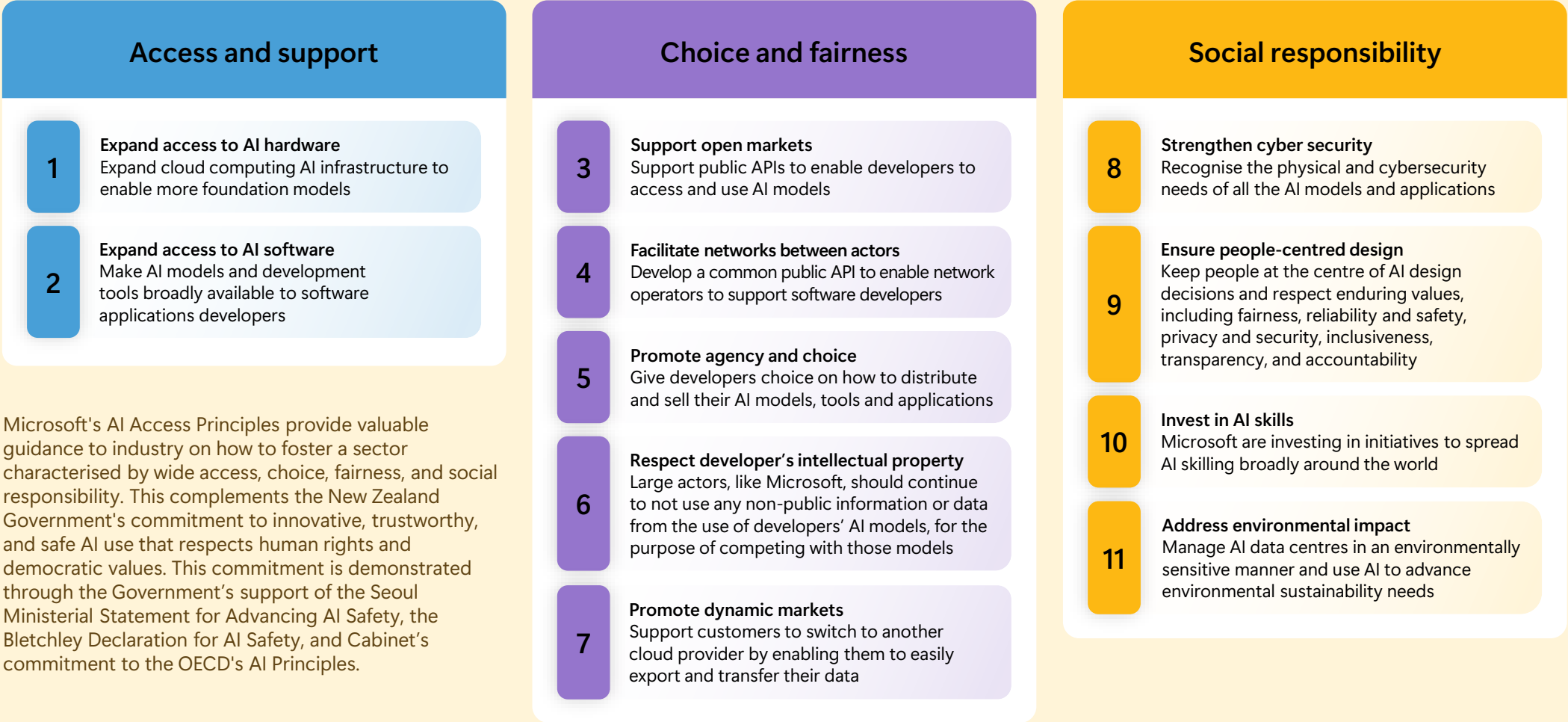
Microsoft's AI Access Principles provide valuable guidance to industry on how to foster a sector characterised by wide access, choice, fairness, and social responsibility. This complements the New Zealand Government's commitment to innovative, trustworthy, and safe AI use that respects human rights and democratic values. This commitment is demonstrated through the Government's support of the Seoul Ministerial Statement for Advancing AI Safety, the Bletchley Declaration for AI Safety, and Cabinet's commitment to the OECD's AI Principles.

Choice and fairness

3 **Support open markets**
Support public APIs to enable developers to access and use AI models

4 **Facilitate networks between actors**
Develop a common public API to enable network operators to support software developers

5 **Promote agency and choice**
Give developers choice on how to distribute and sell their AI models, tools and applications

6 **Respect developer's intellectual property**
Large actors, like Microsoft, should continue to not use any non-public information or data from the use of developers' AI models, for the purpose of competing with those models

7 **Promote dynamic markets**
Support customers to switch to another cloud provider by enabling them to easily export and transfer their data

Social responsibility

8 **Strengthen cyber security**
Recognise the physical and cybersecurity needs of all the AI models and applications

9 **Ensure people-centred design**
Keep people at the centre of AI design decisions and respect enduring values, including fairness, reliability and safety, privacy and security, inclusiveness, transparency, and accountability

10 **Invest in AI skills**
Microsoft are investing in initiatives to spread AI skilling broadly around the world

11 **Address environmental impact**
Manage AI data centres in an environmentally sensitive manner and use AI to advance environmental sustainability needs

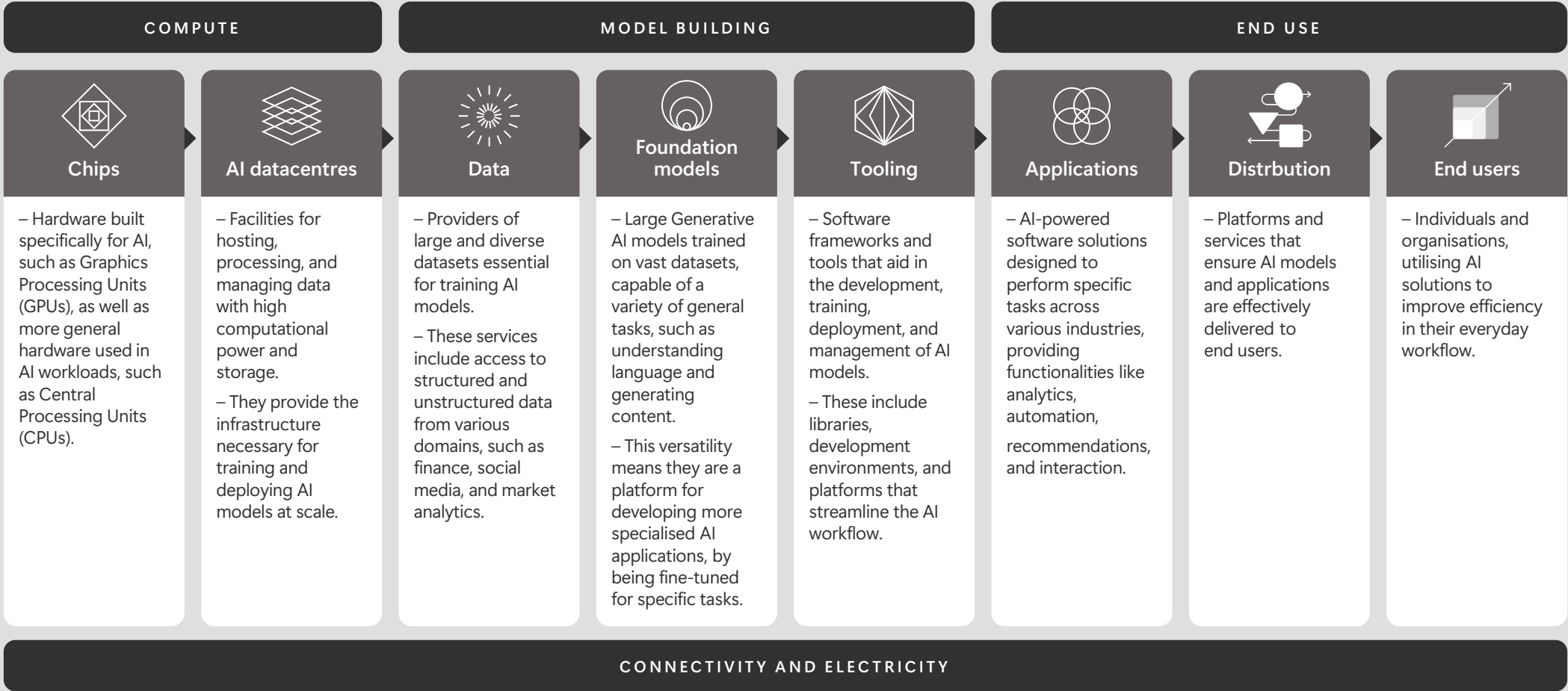Source: Microsoft (2023) *AI Access Principles.*

Appendix

The new AI economy is defined along the AI tech stack, from chips manufacturers to end users

Full definition of the new AI economy

COMPUTE		MODEL BUILDING			END USE		
Chips	**AI datacentres**	**Data**	**Foundation models**	**Tooling**	**Applications**	**Distrbution**	**End users**
– Hardware built specifically for AI, such as Graphics Processing Units (GPUs), as well as more general hardware used in AI workloads, such as Central Processing Units (CPUs).	– Facilities for hosting, processing, and managing data with high computational power and storage. – They provide the infrastructure necessary for training and deploying AI models at scale.	– Providers of large and diverse datasets essential for training AI models. – These services include access to structured and unstructured data from various domains, such as finance, social media, and market analytics.	– Large Generative AI models trained on vast datasets, capable of a variety of general tasks, such as understanding language and generating content. – This versatility means they are a platform for developing more specialised AI applications, by being fine-tuned for specific tasks.	– Software frameworks and tools that aid in the development, training, deployment, and management of AI models. – These include libraries, development environments, and platforms that streamline the AI workflow.	– AI-powered software solutions designed to perform specific tasks across various industries, providing functionalities like analytics, automation, recommendations, and interaction.	– Platforms and services that ensure AI models and applications are effectively delivered to end users.	– Individuals and organisations, utilising AI solutions to improve efficiency in their everyday workflow.

CONNECTIVITY AND ELECTRICITY

Source: Microsoft (2023) *AI Access Principles.*

We assess attractiveness and capability to identify priority components in the AI tech stack for New Zealand to pursue

Microsoft's AI Access Principles

	FACTORS	METRIC(S)	SOURCE(S)	
ATTRACTIVENESS INDEX	Current opportunity	Current New Zealand AI revenue predictions (2025)	Mandala analysis	Factors indexed & weighted based on importance for attractiveness
	Future opportunity	CAGR for Australian AI revenue (2025)	Mandala analysis	
	Differentiator potential	Scoring of differentiatior potential of tech stack components	Mandala analysis, consultation	
AI Readiness	AI regulations	Government AI Readiness Index (2023)	Oxford Insights (2023)	Factors indexed & weighted based on importance for each component of the AI tech stack
	AI research	Annual research publications in English/Chinese per M inhabitants (2021)	Center for Security & Emerging Tech (2023)	
	AI sentiment of society	Global Opinions and Expectations about AI – Global Survey (2023)	Ipsos (2023)	
Workforce and existing activity	ICT industry	Information and communication sector share of gross-value added (2019)	OECD (2019)	
	Successful start-ups	Number of unicorns per M people (2022)	CB Insights (2022)	
	AI start-ups	Number of funded AI start-ups per M people (2024)	Crunchbase (2024)	
	VC fundings	Venture capital investments per M people (2019)	OECD (2019)	
	AI demand	% of jobs requesting AI skills (2022)	Lightcast/ OECD (2022)	
	Digital readiness	The Digital Skills Gap Index (DSGI, 2021)	Wiley (2021)	
	Hardware exports	% of global exports in electrical and telecommunications equipment (2022)	World Trade Organisation (2022)	
Operating environment	Access to land	Land (sqm) per capita (2018)	CIA World Factbook (2020)	
	Construction costs	Construction costs/ sqm per country (2024)	Multiple, mainly Arcadis (2024)	
	Electricity costs	Cost per Kwh (2023)	Multiple, mainly CableCo UK (2023)	
	Labour costs	Average monthly earnings of employees, $US (2022)	ILO (2023)	
	Business environment	Ease of doing business ranking (2019)	World Bank (2019)	
Institutions & Infrastructure	Political stability	Political Stability and Absence of Violence/Terrorism index (2024)	World Population Review (2024)	
	Sustainability	Renewable energy share in total final energy consumption (2023)	Sustainable Development Report (2023)	
	IT infrastructure	ICT Development Index (2024)	International Telecommunication Union (2024)	

CAPABILITY INDEX (vertical label spanning AI Readiness through Institutions & Infrastructure)

Source: Mandala analysis.

Quantifying the attractiveness of each component of the new AI economy for New Zealand follows four steps

Overview of methodology for calculating the economic opportunity of the new AI economy in New Zealand

	Identify AI businesses	Categorise AI businesses based on AI tech stack	Quantify revenue	Estimate figures for 2025, 2030 and 2035
OUTPUT	List of businesses in New Zealand's new AI economy	Number of businesses in each component of the new AI economy	Current revenue generated in each component of the new AI economy	Projected revenue for each component of the new AI economy
METHOD	– Generate key search terms, using OECD list and additional terms – Filter search terms through business directories – Cull businesses with insufficient information – Manually add key businesses not included in directories	– Map industries and key terms in company descriptions to new AI economy tech stack components – Run code to automatically segment companies – Verify results across data sources and conduct manual sense checks	– Convert funding data into approximate valuations, and valuations into revenue using industry ratios. Use industry averages where funding not available 🇳🇿 – Use total revenue data and approximate New Zealand share – Use Bloomberg modelling to calculate AI related revenue 🌐	– Calculate average projection for New Zealand AI spending growth; including Datacube Research, Statista, and IDC – Use this CAGR as proxy for growth in 'applications' component – Calculate CAGRs for other components of the value chain based on Bloomberg modelling
METHOD	An alternative approach was used in components where revenue was concentrated to a small number of businesses.	Specific companies were manually identified for **chips** and **AI datacentres** due to these components being more concentrated and specialised.	**Chips:** Use public annual reports and Bloomberg estimates to calculate AI related revenue 🇳🇿 **Datacentres:** Use computing capacity and investment to estimate revenue 🌐	Use a combination of annual report Bloomberg industry growth estimates. Use growth rates from leading sources and comparable markets.
DATA SOURCES	OECD, Crunchbase, CSIRO, Desktop research	ChatGPT, Python, Mandala analysis	Crunchbase, Seeking Alpha, Dealroom, LinkedIn, Aventis Advisors, Bloomberg, desktop research	Datacube Research, Statista, IDC, Bloomberg, Mandala analysis

Source: Mandala analysis.

🇳🇿 **New Zealand HQ companies**   🌐 **Global companies w/ New Zealand operations**

More resources

Understanding AI at Microsoft

This page provides a comprehensive overview of Microsoft's efforts and vision around artificial intelligence. It covers key AI advancements, responsible AI practices, and how Microsoft is using AI to empower individuals and businesses globally.

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