

Three forces driving Australia's infrastructure supercycle

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Australia is entering a new era of infrastructure investment shaped by the convergence of several powerful structural forces. While the energy transition remains a major driver, it is intersecting with the rapid growth of artificial intelligence (AI), cloud computing and digital infrastructure. At the same time, geopolitical uncertainty and shifting supply chains are escalating the importance of sovereign resilience and domestic capability. Investors are expanding their focus beyond traditional infrastructure toward essential service businesses with infrastructure-like characteristics and long-term growth potential.

Together, these trends are creating a new infrastructure supercycle characterised by substantial investment needs across energy, digital networks, transport, logistics and essential services.

"Infrastructure is no longer defined by a single sector or investment theme. The most compelling opportunities today sit at the intersection of digitalisation, decarbonisation and resilience," says Tom Butcher, Executive Director and Head of Infrastructure, Asia Pacific, at Macquarie Capital.

Tom Butcher Head of Infrastructure, APAC Macquarie Capital

The rise of AI is challenging the traditional distinction between digital and energy infrastructure. Increasingly, these sectors must be viewed as part of the same ecosystem.

The rapid expansion of AI, cloud computing and data storage is creating unprecedented demand for data centres and digital networks, making reliable, affordable and scalable electricity a critical enabler of digital growth.

Danish Aleemullah Head of Renewables Infrastructure, ANZ Macquarie Capital

"Australia's electricity demand is forecast to double by 2050,¹ with data centres expected to be a major driver of that growth as the country builds on its position as a leading global destination for data centre investment,"² says Danish Aleemullah, Executive Director and Head of Energy & Renewables, Australia, at Macquarie Capital.

At the same time, Australia's energy system is undergoing its own transformation. As coal-fired generation ages and retires, significant investment is required across renewable energy, transmission networks, storage and firming technologies to maintain reliability and support future demand.

What makes this moment unique is the convergence of two defining investment themes: decarbonisation and digitalisation.

For investors, Aleemullah says the opportunity extends beyond individual projects. As energy and digital infrastructure become more closely connected, investment decisions in one sector are increasingly influencing outcomes in the other.

"A challenge we see is increasingly one of execution, integration and capital deployment. Supporting this build-out will require innovative financing structures and long-term capital solutions capable of funding

infrastructure at speed and scale," says Aleemullah.

Unlocking capital for a major developer of large scale Australian renewable projects.

Macquarie Capital acted as financial adviser and debt arranger to GPG on the ~\$A2.3 billion portfolio financing of its Australian renewable energy portfolio.

For much of the past decade, resilience was viewed primarily through the lens of climate change, energy security and the challenges of decarbonisation.

"What we see today is a much broader perspective being adopted," says Xavier Eid, Division Director at Macquarie Capital specialising in utilities and transport.

Resilience now encompasses sovereign capability, supply chain security and technological competitiveness, alongside the challenge of transitioning energy systems while maintaining reliability and affordability.

"The pandemic, trade wars and conflicts in key regions have highlighted the importance of building more resilient economies and infrastructure systems," says Eid.

As a result, resilience has evolved from an operational consideration to a strategic investment theme. Governments, businesses and investors are increasingly directing capital towards infrastructure that strengthens economic security and domestic capability.

These shifts are driving investment across logistics, transport, energy and industrial infrastructure, while changing how investors assess value. Infrastructure assets are increasingly recognised for their role in economic competitiveness and national resilience.

"Assets that strengthen national and regional supply chains often combine strong long-term demand fundamentals with clear strategic importance," says Eid. "Our visibility across infrastructure markets provides a unique perspective on where these opportunities are emerging."

One of the most significant shifts in infrastructure investing is the broadening definition of what qualifies as infrastructure.

While traditional infrastructure assets such as utilities, toll roads and airports remain attractive for their stable cash flows, essential service characteristics and long asset lives, investors are expanding their focus to adjacent businesses with similar characteristics.

Jessica Edwards Division Director Macquarie Capital

"Investors are seeking a balance between the stability of core infrastructure and the growth potential of higher-return opportunities," says Jessica Edwards, Division Director at Macquarie Capital, specialising in renewables and transport.

"Core plus assets occupy a unique position in the investment landscape. Although adjacent to traditional infrastructure, they are often equally critical to the functioning of economies and communities. These businesses can benefit from long-term demand drivers, resilient cash flows and strategic importance, while also offering greater opportunities for operational improvement and growth."

As a result, the infrastructure investment universe is expanding to include businesses that support critical supply chains, enable the energy transition, and provide services with strong, enduring demand.

"This includes supply chain opportunities such as waste management, transport and logistics, and

health services like medical imaging,” says Edwards.

For investors, the opportunity lies in identifying businesses that combine strong fundamentals with strategic relevance. This requires sector expertise, extensive market networks and an understanding of how infrastructure needs are evolving.

“Infrastructure investors have a natural edge in the core plus market. They have deep experience managing long-duration assets and assessing essential service business, alongside a strong understanding of regulatory, stakeholder and sustainability considerations,” says Edwards.

Australia's infrastructure supercycle is being shaped by the convergence of digitalisation, decarbonisation and sovereign resilience, while the rise of core plus is expanding the universe of investable infrastructure opportunities.

“For investors, success will depend on recognising not only the individual trends reshaping markets, but also the points at which they intersect. That is where the most compelling opportunities are emerging,” says Butcher.

As infrastructure systems become more interconnected and capital requirements continue to grow, investors will need partners with the capability to advise, finance and invest across the full infrastructure ecosystem. Macquarie Capital's global platform and deep sector expertise position it to help clients identify opportunities, navigate complexity and deploy capital across the next generation of infrastructure investment.

Facilitating the continued growth of a global multi-modal transport operator

Bolstering critical food infrastructure in Australia

Partnering with the public sector to deliver world-class transport and community infrastructure

Source: <https://www.macquarie.com/us/en/insights/three-forces-driving-australias-infrastructure-supercycle.html>