

Fit for the future

Australia's infrastructure sector has centred on privatisations for decades. But a rapidly changing world calls for more greenfield development, Amy Carroll and Tharshini Ashokan discover

The Australian infrastructure market has benefited from a steady stream of privatisations for more than 30 years. But the rate of transformation that is taking place not only in the way we live, work and travel, but also in the way we generate, transmit and distribute energy, means attention is now turning to building new infrastructure fit for purpose in a rapidly changing world.

"The supply of brownfield opportunities centred on the privatisations by both federal and state governments in the 1990s has tapered off over the last five years to be replaced by 'take-privates' of listed infrastructure companies," says Danny Latham, head of Australia and New Zealand at Igneo Infrastructure Partners. "The sector has now trended towards the construction of new infrastructure, rather than recycling existing assets."

Nowhere is this more evident than in Australia's energy transition. "The investment requirement is enormous," Latham explains. "We need something

like \$400 billion of investment in renewable generation and associated transmission links to get anywhere near 2050 net-zero targets."

Australia's transition prospects have recently been boosted by the country's most significant emissions reduction legislation in more than a decade. Total emissions from major industrial facilities must now be cut and not just offset. This is deemed critical to meeting Australia's net-zero pledge, which will require a 45 percent reduction in emissions by 2030.

No transition without transmission

But the transition also requires a dramatic escalation in renewable generation and storage technologies. The problem, according to Latham, is that regulators are wrestling with funding greenfield infrastructure in an increasing interest rate and high inflation environment. "They are more comfortable with the old model of incremental additions to established networks," he says. "In some cases, you may be better off buying operating assets today because

you can buy them, in regulatory terms, at less than their replacement cost."

There are also challenges around transmission. Many parts of Australia's grid date back to the 1950s, and a massive upgrade is required to unlock renewable energy capacity and transport it around the country to where it is most needed.

"Investment in the grid is critical to enable renewable capacity coming online to be efficiently delivered to load centres," says Maria Donnelly, portfolio manager, infrastructure at Aware Super.

"The whole country needs to be rewired to get renewable energy out to the population," agrees Alexandra Campbell, head of private markets at Cbus Super.

Meanwhile, an unprecedentedly tight labour market and continued supply chain disruption are exacerbating construction risk in the renewables space. "I query the true risk behind the returns," says Campbell. "Delay will kill many projects and those risks can be hard to quantify."

"I would agree that lenders sometimes struggle with the underlying



Aaron Ross

Global head of project and export finance, ANZ Banking Group

Aaron Ross has more than 25 years' institutional banking experience and currently leads ANZ's global team of project and export finance professionals who originate and execute financing solutions in a variety of industries. Prior to joining ANZ, he worked in the global structured finance team at Deutsche Bank.

Alexandra Campbell

Head of private markets, Cbus Super

Alexandra Campbell joined Cbus Super in 2020 having previously worked at AustralianSuper. Campbell was also a founding principal for a boutique advisory firm in the infrastructure sector and has held senior roles at Hastings Funds Management. She started her career at Herbert Smith Freehills.

Danny Latham

Head of Australia and New Zealand, Igneo Infrastructure Partners

Danny Latham is a partner in the infrastructure investment team, based in Sydney, and has been with the firm since 2007. He was previously a director of RREEF Infrastructure and was senior partner and a founding member of AMP Capital's infrastructure team in 1994.

Maria Donnelly

Portfolio manager, infrastructure, Aware Super

Maria Donnelly joined Aware Super in 2017 and has been responsible for establishing the strategy for management of direct assets. Donnelly previously worked in investment banking at Merrill Lynch. She began her career at Deutsche Asset Management.

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AARON ROSS
ANZ Banking Group



return for renewables opportunities, particularly considering the impact of inflation, merchant risk and curtailment-related issues,” says Aaron Ross, global head of project and export finance at ANZ Banking Group. “For some large-scale renewables and infrastructure investments we are starting to see cost-sharing models emerge.”

But perhaps the biggest concern that market participants have regarding Australia’s transition story is the willingness of communities to accept the impact these projects may have on local areas, and the consumers’ willingness to pay.

“Community acceptance is a real issue,” says Campbell. “People may say they want renewable energy, but when it comes to the reality of what it means for their day-to-day life and financial situation, that can be quite different. A big question is whether households are ready to pay for the transition.”

Latham adds: “Nimbyism is alive and well given the sheer scale of investment required, not only in Australia, but globally. New England, in the US,

is an interesting example where you have huge amounts of gas in the relatively nearby Marcellus but they can’t build a pipeline, so they are looking to offshore wind for power. Land is valuable and has fragmented ownership, giving nimbyists additional strength to block a turbine in their backyard. So, the industry is opting for offshore, which for now is actually one of the more expensive sources of power.”

Government intervention

The government, of course, has an important role to play in all this and there have been a number of notable initiatives over the years, starting with the Clean Energy Finance Corporation followed by the Rewiring the Nation plan and most recently, in 2023, a \$10 billion pledge to support the onshore manufacture of solar panels, batteries and electrolyzers.

But there are concerns that Australia is being left behind, particularly when it comes to the economic support required to develop nascent technologies and use cases. The huge stimulus

provided by the Inflation Reduction Act in the US, in particular, has seen Australia slip further behind.

“The IRA has been a gamechanger and we are seeing some very large clients that were looking to build significant projects here in Australia prioritise investment in the US market,” says Ross. “Australia is still very well positioned and benefits from favourable climate and availability of land to build large-scale energy transition projects, but the US government incentives are driving significant capital to be invested in that market. This represents a significant opportunity for Australia.”

Latham agrees: “Australia has abundant reserves of rare earths and minerals with a tendency to dig it out of the ground and export it and, therefore, we are lagging behind from a value-add perspective.”

Ross, meanwhile, believes that one way the Australian government could better support technologies associated with the transition is through export credit. “The Danish and Korean export credit agencies EKF, KEXIM

and K-Sure have been providing significant support to help develop wind and battery manufacturing projects, for example,” he says. “We have seen similar things in Taiwan, Southeast Asia and Europe generally. There are opportunities for Australia too, in terms of accessing the Export Credit Agency market as an additional source of capital to fund the transition.”

But Latham says that what is really required is for the government to take on equity risk. “There are lots of good intentions but I do worry about execution. The problem is that with all these initiatives, be it the CEFC or Rewiring the Nation, the government is acting as a lender. We already have lots of lenders with plenty of capital to deploy. We need the government to take the role of developer and be the first loss equity provider in order to get some of these technologies off the ground.”

Hydrogen hype

Indeed, investors seem circumspect about the risk/return dynamics of some of these earlier stage propositions.

“Hydrogen is seeing a lot of interest with governments funding projects and strategics investing in pilot projects. It is still relatively early stage and the small scale of opportunities has made it challenging to find opportunities to invest,” says Donnelly. “Storage is also interesting, both in terms of batteries for short-term storage and pumped hydro for longer-term storage. That is certainly an area of opportunity, but again there are substantial risks.”

“Even if you are satisfied with the risk profile of some of these assets, you have to question whether a better risk-adjusted return can be achieved through debt rather than equity,” adds Campbell.

“Batteries may not be a new technology, but whether they represent a long-term solution is still unknown. And while pumped hydro is a proven technology, there have been issues in getting assets built on time and on budget. Do you really want to take equity risk or is there a better risk-return from investing debt in some of these assets?”

Ross, meanwhile, believes that the new Safeguard mechanism – which requires the country’s largest greenhouse gas emitters to stay below a progressively declining annual emissions limit – provides certainty and effectively puts a price on emissions, which should drive investment in decarbonisation. This will lead to the development of nature-based solutions, as well as carbon capture and storage. “These aspects of the transition are currently less developed in Australia than in Europe and the US but I expect that to change,” he says.

Campbell, however, points to potential regulatory risk. “A key concern is that legislation could change during the life of those assets, particularly if the carbon cap is watered down or taken away.”

As in other parts of the world, meanwhile, gas remains an interesting proposition as a medium-term transition fuel. However, investors have concerns around the sustainability of these assets. “A key issue is one of expected lifespan. There are well articulated



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Cbus Super

ideas that midstream assets could be repurposed for hydrogen but the engineering required, even if hydrogen is proven to be a viable fuel, is largely unproven,” says Campbell.

Waste management is also considered an interesting and growing opportunity supporting sustainability themes. “We have recently moved into the waste space with a waste management business in New Zealand – embracing the circular economy is a compelling proposition,” says Latham.

Campbell adds: “We have looked at the waste sector. There have been some high returns achieved in the sector, particularly through the separation of infrastructure assets from operating businesses. The biggest risk with assets, however, has been gate fees and confidence that waste volumes will continue.”

Ross also sees challenges arising in the financing of waste to energy projects. “It’s a tough sector primarily due to the logistics required to bring large quantities of waste to a centralised site. You see that with CCUS as well – the

cost of transporting the carbon is one of the biggest barriers.”

Meanwhile, another sector to fall under the sustainability banner is, of course, water. Australia has been beset by both floods and drought in recent years, with severe implications for its water systems as big cities grow and as the infrastructure in regional areas continues to fall into disrepair. Here, the challenge once again, is around cost.

The digital landscape

In addition to the energy transition, digital infrastructure has clearly been a hot sector, particularly in the wake of the pandemic. According to Donnelly, towers activity has peaked, following many Australian and New Zealand telcos divesting their tower assets in recent years. “Those assets are largely in the hands of long-term owners, although there has been some recent asset recycling with Aware Super and Macquarie divesting the 2degrees towers portfolio to Ontario Teachers’ Pension Plan, which has a very competitive cost of capital,” she says.

“Data centres are also great assets, although the number of opportunities is limited. However, there are situations where these businesses have grown so rapidly that their owners are looking for new investors to come in due to the concentrated position the assets hold in their portfolios. Fibre is a space we’ve been active in, with our investment in Vocus. Lastly, I would point to land and motor vehicle registries, which is less core but where we also see some opportunity.”

Campbell, however, points to valuations in the sector. “The towers space has been more stable, but we have seen some overbuild in fibre and the uptake has not always reflected the growth that has been paid for,” she says. “There is also technology risk with digital and data assets. Digital infrastructure is a popular sector because it is less correlated to GDP, but you have to question when the next technology leap will be.”

Ross says that the recent telecommunication towers transactions were very well supported in the bank market due to the additional investment required

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for the continued rollout of 5G. Liquidity will also be available for data centres and fibre network asset classes where there has been considerable M&A activity in the European and US markets. “The other evolution we are starting to see with data centres in Australia, that we have already seen elsewhere in the world, is renewable power being used to operate these assets,” he says. “This renewable energy solution is now being sourced before the project is developed, therefore adding additional liquidity to this asset class.”

A transport revival

While the energy and digital transitions are both global phenomena, Australia’s transport industry is in many ways unique. Less suited to rail than other regions, it relies heavily on air.

As a lender, Ross is convinced of the essential nature of air assets in Australia. “Banks provided billions in liquidity through the pandemic because they recognised just how critical these assets are to the efficient operation of the cities where they are located.”

“Certainly, Australians have jumped back on planes pretty quickly to leave the country, albeit inbound travel has not recovered to the same extent,” adds Latham. “Pre-covid, world passenger growth had a close to 2x correlation with GDP. However, that relationship appears less certain as flying habits evolve.

“Sydney and Melbourne used to be in the top five busiest airport pairs in the world. However that is no longer the case due to supply-chain constraints, weaker business demand and high ticket prices. However, these are still great assets that have demonstrated their resilience during many socio-economic shocks during our ownership over the last 25 years. As with any investment, the interplay of price and value is paramount, and ensuring that the valuation reflects the achievability of the business plan and the appropriate discount rate.”

Meanwhile, the future of toll roads is less certain, given the cost-of-living crisis. “There are question marks over whether we have reached the end

of toll roads in Australia,” Campbell says. “The cost of some of these tolls is becoming too high for households and there is talk of imposing caps and changes in financing structures, including PPPs.”

Ports are deemed to be highly attractive given Australia’s extremely high import rates, however. “In fact, logistics is an interesting space altogether as de-globalisation and onshoring gather pace and as buying habits change alongside. It remains to be seen whether these trends are transitory or permanent,” says Latham.

Indeed, it appears that there is a rich seam of opportunity for investment in Australia, right across the spectrum, as the country’s infrastructure seeks to keep pace with rapid societal transformation. But there are challenges, of course, and a great deal of uncertainty persists around everything from prevailing technologies to who is going to bear the cost.

“At the end of the day there is no blueprint,” says Campbell. “It’s a new world.” ■