KangaNews

PRIVATE CREDIT STEPS UP IN AUSTRALIA'S CAPEX TASK

Private credit has been much discussed as an investment option in Australia but somewhat less so as a means of delivering capex in critical areas including energy transition. *KangaNews* and Natixis CIB gathered sector leaders at a roundtable to discuss potential and challenges.

PARTICIPANTS

■ **Anne Anderson** Non-Executive Director and Adviser ■ **Sonia Baillie** Head of Income Assets AWARE SUPER
■ **Lucie Bishop** Portfolio Manager REVOLUTION ASSET MANAGEMENT ■ **Siu Chan** Director, Treasury IGNEO INFRASTRUCTURE PARTNERS
■ **Melissa Gribble** Managing Director and Head of Australia ASSURED GUARANTY ■ **Parvathy Iyer** Managing Director, Corporate and Infrastructure Ratings S&P GLOBAL RATINGS ■ **Denyse Ko** Assistant Treasurer AGL ■ **Francoise Merit** Chief Financial Officer ENDEAVOUR ENERGY
■ **Grace Tam** Head of Consumer Finance CLEAN ENERGY FINANCE CORPORATION

NATIXIS CIB PARTICIPANTS

■ **Namrata Gollamudi** Executive Director, Infrastructure and Energy Finance, Australia
■ **Samantha Ridler** Managing Director and Head of FIG Coverage, Australia and New Zealand

MODERATOR

■ **Helen Craig** Head of Operations KANGANEWS

SCALE OF THE TASK

Craig We should establish the volume of investment that is likely to be required to deliver Australia's future energy, digital and social infrastructure. What sort of scale are we talking about and in what formats?

■ **TAM** I want to share two data points. One is the Australian government's cheaper home battery scheme. This is a rebate that subsidises 30 per cent of home battery costs and has led to a huge increase in installations. This demonstrates that a lot of capital is flowing into the space we are discussing.

This scheme is worth A$2.3 billion (US$1.5 billion), has been driven by household uptake and is leading to rapid transition. Bt the end of October, more than 100,000 home batteries have been installed. For comparison, Tesla took four years to install 100,000 batteries, while our equivalent through this scheme has happened in four months. It shows the scale at which Australia is building out its battery infrastructure.

Taking a step back, according to the Australian Energy Market Operator's integrated system plan, A$142 billion in upfront capital investment is required to support essential electricity infrastructure and sustain the growth of the Australian economy. This is to replace the ageing coal fleet with

NATIXIS

SUPPORTING OUR CLIENTS THROUGH THEIR ENERGY TRANSITION JOURNEYS

GLOBAL EXPERTISE

Capital Markets • Global Markets & Credit Markets •
Acquisition & Strategic Finance • Infrastructure & Energy Finance

CORE INDUSTRIES and the GREEN & SUSTAINABLE HUB to support environmental, societal and digital transitions

Gas & Transition, Low-Carbon Energies, Critical Metals & Minerals, Food, Agriculture and Natural Capital, Healthcare, Telecom & Tech, Mobility & Environment, Real Estate

OUR LOCATIONS IN ASIA-PACIFIC :

Australia | Mainland China | Hong Kong SAR | India | Indonesia | Japan | South Korea | Malaysia | Singapore | Taiwan | Thailand

For more information, please contact:

Samantha Ridler
Head of FIG Coverage,
Australia & New Zealand
samantha.ridler@natixis.com
Natixis Australia PTY Ltd
Level 16, 39 Martin Place,
Sydney, Australia

Namrata Gollamudi
Infrastructure & Energy Finance,
Australia
namrata.gollamudi@natixis.com
Natixis Australia PTY Ltd
Level 16, 39 Martin Place,
Sydney, Australia

apac.cib.natixis.com/australia

GROUPE BPCE

"Australia offers stability, liquidity and transparency, which are key investor priorities. But there is a role for education. Some of the infrastructure investments we are discussing are very long-term. Closed-end funds can run for 15 years or more, while open-ended funds offer continuous capital-raising and redemption."

SIU CHAN IGNEO INFRASTRUCTURE PARTNERS

renewables, increase capacity to meet demand as electrification accelerates and enable two-way electricity flows – which is a significant shift from the traditional one-way system.

■ **ANDERSON** I am thinking about the wider infrastructure rebuild, which includes enabling infrastructure. I have seen a lot of numbers, but just for the energy transition in Australia, estimates are in the region of A$400 billion over the next 10-20 years. It is a long-term outlook, and with rising costs the number is still moving around.

■ **IYER** Also, project costs are increasing – so we are likely underestimating them. Recently, the Australian Energy Regular released figures showing the costs of several projects, including VNI West and HumeLink, have doubled.

This is just for energy infrastructure. Once we add data centres, electric vehicle (EV) infrastructure and, eventually, offshore wind, the number could be much higher. We should not assume A$400 billion is fixed for the next 10 years.

This is not unique to Australia. In the US, the utility sector had US$250 billion of capex in 2025 alone. The same is happening in Europe. The real questions are who will fund this and what hurdles we will face as we roll it out.

■ **MERIT** I want to pick up on a couple of points from an industry perspective. Everything said so far is correct but there are a few operational realities we need to keep in mind.

First, Australia's states are not interconnected. Electrons produced in South Australia (SA) cannot power New South Wales (NSW). This is a real constraint.

Second, there is no national electricity pricing strategy. Each network sets its own tariff approach. When we ask who will fund the investment requirement, we also need to ask what return on capital will be acceptable. Every component, including returns, is ultimately funded by consumers. This is sobering.

Energy transition is attractive to investors, but we are operating in a regulated environment – which makes the allowable return very low. Investors – and here I mean particularly equity rather than debt – are telling us it is no longer appealing.

On the home battery point, Grace is right to say the uptake is exciting. But making the most of two-way electricity flows requires access to data and household appliances. This means customers need to trust us. The energy supply chain – including how electricity is created, supplied and priced – can be quite confusing for consumers and the addition of every new technology makes it even more complex.

To build trust we ideally need to make it easy. The challenges we are wrestling with are operational decisions, technology constraints, consumer trust and regulation, all while trying to offer returns that will keep investors interested.

■ **BISHOP** I absolutely agree – there is often strong interest in the sector but the risk–return equation is far too tight. From Revolution Asset Management's point of view, we would love to be involved in the energy transition space but the spreads are simply not where private credit funds typically operate.

■ **CHAN** We identify mid-market solar operators where we can add value, acquire smaller solar farms and storage assets, and create synergies over time. For example, there do not need to be 10 separate operational teams for 10 solar farms.

The real value comes from this kind of consolidation and efficient asset management. It improves returns and allows us to apply lessons learned from one project to the next. One of our portfolio companies in Australia, Atmos Renewables, has benefited from a buy-to-build strategy and improved economies of scale over time.

■ **BAILLIE** It feels like a barbell. On one side, there is development and construction risk – but the risk-return equation is too high for our investment objectives. On the other side, once all the security and contracts are in place, the returns are too low and it moves into the bank market.

"We are also experiencing increased use of securitisation techniques and even CDO-style structures, where loans from sponsors are being repackaged. Investors that lived through the financial crisis are more seasoned now. They understand the risks but also where grossed-up yields can be found."

ANNE ANDERSON

"There is plenty of money looking for investment opportunities. Asset values in many markets are at record highs and there is strong demand from investors. However, much of this money is chasing the same assets – and not necessarily those that will support the transition."

SAMANTHA RIDLER NATIXIS CIB

■ **ANDERSON** The reality, though, is that this infrastructure build is about substantially replacing the entire grid. At the moment, sitting with in the National Electricity Market, each state has its own rules, regulations and funding models. Many of the assets are not investment-ready because of delays in environmental planning, social licence and other hurdles.

The assets will come through, though. The conversation we need to have is about packaging and risk sharing. There will be a massive pipeline over the next decade and I am sure people around this table have views on what it should look like. There is something for everyone in this transition.

■ **CHAN** This point really supports the idea that mainstream markets and government need to work alongside the private credit market. A lot of the most relevant projects start small and are funded through project finance. Lenders often price in a significant risk premium at this early stage.

As the portfolio grows and becomes more diversified, we can structure a NAV [net asset value] facility. This gives lenders more security through diversification, which in turn lowers the risk premium and improves the financing outcome.

■ **GOLLAMUDI** I do not think there is a definitive number for the scale of investment required – but we are clearly talking about hundreds of billions of dollars.

My view, though, is that it is important to distinguish between scale and pace. The scale of what is needed is large, but the pace of transition is slower than it needs to be. The grid is simply not strong enough to support the transition at this point.

Hopefully, once the grid is upgraded, we will see more investment flow. Also, we are not just talking about energy: digital and social infrastructure also need significant investment.

On social infrastructure, including projects like roads and hospitals, there are signs of a return of PPPs [public-private partnerships]. We will talk more about this shortly. But the scale of investment required across all sectors will grow, especially with population growth and technology change.

■ **KO** It is clear that the scale is enormous. The exact number may not be known but it is certainly in the hundreds of billions of dollars. Energy transition is a national effort. It involves all levels of government, the private sector, capital markets and consumers. For me, the key word is adaptability – of the grid, of consumers and of capital markets. This affects everyone.

On the pace of transition, we are playing a long game. There are challenges as we seek to maximise pace. We need strong approval processes but we also need to move quickly where we can. This could mean picking the low-hanging fruit to make progress while maintaining firming capacity for grid stability. Overall, we need to look ahead but stay the course. Keeping the transition orderly is critical.

ENABLING FACTORS

Craig As things stand, are technology and policy more of a help or a hindrance?

■ **GOLLAMUDI** State policy is a major issue. There is no clear direction across the states. For example, the Capacity Investment Scheme is well known but there is confusion about how projects can qualify or benefit. From a bank perspective, it is difficult to assess value when the guidance is not clear. This lack of clarity is a key challenge in financing and bankability.

■ **IYER** A few years ago, we put out a paper arguing that policy uncertainty was derailing the energy transition. But now I would say we are past the point of no return. There is no going back; this has to happen.

The issue is that state policies have been fragmented and uncoordinated. But some markets have moved ahead: SA, Victoria and NSW are leaders. Their interconnection helps and new projects will reinforce this strength.

"There are challenges as we seek to maximise pace. We need strong approval processes but we also need to move quickly where we can. This could mean picking the low-hanging fruit to make progress while maintaining firming capacity for grid stability."

DENYSE KO AGL ENERGY

DIVERSITY ***REFLECTIONS***

Female leaders' personal experiences of diversity, equity and inclusion (DEI) point to an Australian market that has made significant progress but has further work to do.

CRAIG As this roundtable is being published in the *KangaNews Women in Capital Markets Yearbook*, it is an appropriate forum in which to reflect on diversity in the capital markets sector. I would like to invite participants to share a story or reflection on DEI – something you have seen, heard or experienced in your own professional journey.

BISHOP I am the only woman in our team. Though we are a small team – just six people – we are operating in pockets of the market that are still very male-dominated. While diversity in our industry has been moving in the right direction, finding female talent is still not easy.

CHAN In my experience, people often assume the man is the client or investor. I have had people speak with my husband for half an hour before realising I am the one they should be talking to or building the relationship. Now, when we arrive at events, I make sure to introduce myself clearly to mitigate potential unconscious bias. I tell them: by the way, I am the treasurer of the organisation that I represent.

IYER It happens sometimes when I am with junior colleagues. People assume the man is the manager.

BAILLIE On a positive note, what gives me hope is what I see at work now. I have four children and I remember how hard it used to be to negotiate time off and the lack of paid leave. Policies have changed. Every other month, it is one of the fathers taking parental leave. I often wonder if they realise how much luckier they are than those that went ahead of them.

IYER I have been fortunate. When I had my child, I went part time. I think I was the first person in my organisation to be given part-time work. Many people did not even know I was working part-time – I just kept things moving. I had great support from my manager and team.

After nearly 10 years, a US national became my manager and asked why I was not full-time. He said working from home was common in the US and supported me to transition back to full-time.

Now, when I build teams, I pay attention to balance – gender and cultural. When reviewing CVs, I always look for ways to ensure diverse representation.

KO I love that it is called 'parental leave' now. It creates a more inclusive space. Being married to someone of Asian background, I also used to get a lot of surprise reactions – people expected me to be Asian because of my surname.

Growing up on the outskirts of Melbourne, there was little

"I NOTICE A DIFFERENCE WHEN I TRAVEL TO COUNTRIES THAT ARE STILL VERY MALE-DOMINATED. IT CATCHES ME OFF GUARD. I AM NOW WORKING ON STRATEGIES FOR HOW TO PRESENT MYSELF AND ASSERT MYSELF IN THESE CONTEXTS – AND HOW TO SUPPORT INTERNATIONAL DELEGATES WHEN THEY COME HERE."

GRACE TAM CLEAN ENERGY FINANCE CORPORATION

Queensland has lagged, and Western Australia is harder to integrate because of distance. Still, there have been some positive steps there.

Meanwhile, EnergyCo in NSW has moved decisively, implementing avenues like the long-term energy service agreement contract and developing renewable energy zones.

Yes, project costs have escalated – in some cases we could be talking about a project that was originally estimated at A$2 billion now costing A$5 billion. But some of them are using existing infrastructure, which helps.

The cost of transition will only rise if we miss this window. There is already a cost coming to consumers. Governments often say energy prices will fall, but who pays for all the new transmission works? The capex is measured in billions of dollars.

Despite this, momentum is building including NSW, Victoria and SA starting to coordinate more closely. Concessional loans from Clean Energy Finance Corporation (CEFC) and government support for land clearances are late but welcome developments. These are all positive signs that the industry is moving in the right direction.

■ **MERIT** I agree it is moving in the right direction, but the process of contracting with organisations like CEFC or ARENA [the Australian Renewable Energy Agency] can be very complex. It takes time and energy.

One of our partners was involved in the Central-West Orana renewable energy zone and its process took three years from tender to outcome. This was the first zone so there were many barriers to overcome, but the pace has been slow everywhere – even with strong support from the NSW government. It is worth noting that support was bipartisan, starting under the Liberal government and continuing under Labor.

Even with this, there are still obstacles that need to be addressed. These include regulatory hurdles and overly complex documentation. One hope I have is the elevation of energy decision-making to the federal level, to create more cohesion across states. At the moment, each state has its own strategy for reaching the same destination, which is not helpful for industry.

cultural diversity. It was mostly Italian and Greek communities. Now, the workplace feels much more mixed by gender, culture and background. Whether it is simply the product of population growth or something else, I find it encouraging. It is good for organisations and society.

GRIBBLE It definitely makes workplaces nicer. In the past, it felt more cliquey. Now, it is more open. People work together more naturally and are conscious of collaboration.

TAM I work across government, industry, trade unions and the finance sector – and I have not felt like I am entering a male-dominated environment. Everyone has been very welcoming and I am seeing more and more women leading in these areas, even in the trades. This is really encouraging.

But I do notice a difference when I travel to countries that are still very male-dominated. It catches me off guard. I am now working on strategies for how to present myself and assert myself in these contexts – and how to support international delegates when they come here. There is still work to do, but it is exciting to see how far we have come.

MERIT One concept I really like alongside diversity is inclusion – making sure everyone's voice is heard and valued equally. We have made progress. Parental leave is now standard, and this shift has helped promote equality. The next challenge is representation at the senior level, including board chairs and executives. It is still male dominated, and this shapes the tone of conversations. There is still work to do.

RIDLER I try to be involved in graduate recruitment because I learn so much about what young people care about and who is coming through the pipeline. But it is difficult to interview 50 per cent female candidates for finance roles – because there are not enough applying. We often reach for candidates who are slightly outside the usual profile to try to bring in more women. How do we reach candidates earlier – in high school or further education – to get them engaged in the subjects and pathways that lead to finance careers?

Why are women not applying for finance jobs?

GRIBBLE Sometimes the pool is narrowed too early. If applicants do not have a STEM degree, they are screened out – even though so many skills needed in financial services are in communication, critical thinking and relationship building. Employers could lose people before they have even had a chance to consider them.

ANDERSON Sometimes they screen themselves out, too. It is not too bad in asset management, though I'm going to a lunch tomorrow at which I will be the only woman alongside five men. Investment banking, by contrast, remains male dominated and self-perpetuating.

BAILLIE I think myths persist, especially among parents. Parents are often the ones guiding their children into subject choices. It starts early.

KO Names can be a factor, too. When I was pregnant with my first child, I read an article about how names can influence CV shortlisting. It said people with anglicised names were more likely to make it past the first screening. This stayed with me – and I gave my children names with simple, conventional spellings.

RIDLER Large organisations have processes and systems in place, and some even use algorithms. But this can introduce a different problem. For example, the algorithms often select only STEM candidates with top marks – and this leaves out other valuable people.

CRAIG Is there a role AI can play in eliminating bias in the hiring process? It seems inevitable that it will increasingly be used, one way or another.

ANDERSON I was at a talk recently about the use of AI in the hiring process. Someone described AI as the new HR manager. But the systems can be gamed and they can also entrench bias if not designed with diversity in mind.

MERIT Exactly. If AI is trained on biased data – and designed without diversity in mind – it will replicate narrow hiring patterns. We need ethical AI frameworks in recruitment. Otherwise, we limit the richness of candidates we can access. I have not seen this done well yet.

Craig What about technology: where are developments having an impact on investment needs, including in the energy space?

■ **GOLLAMUDI** Technology is changing across the board. One example is the surge in demand for AI and cloud, which is driving a lot of investment into data centre platforms. Australia was relatively immature in this area but it has started to change. Players like AirTrunk and Stack are pioneering significant growth in this sector in Australia, with several new large contracts being signed with US hyperscalers. Other players are entering the market, too. Data centre investment is becoming a key driver, alongside energy transition.

■ **BISHOP** There will be significant demand for energy in the hyperscale data centre space. Running a question through AI uses about 10 times more data than using Google. This shows how quickly the backbone infrastructure for data is going to have to grow. It is already growing rapidly, but it will be under even more pressure from now on.

"Australia has exported LNG to Asia with great success. Hydrogen could follow a similar model: build the capability here and export to markets that need it. This is a long-term play but it is one we should start thinking about now."

PARVATHY IYER S&P GLOBAL RATINGS

■ **TAM** If the question is whether technology change is helping, I would say yes. Look at home batteries – their cost has come down sharply as installation rates have increased. The same trend happened with EVs and rooftop solar panels.

As technologies mature and demand increases, cost curves decline. This helps reduce the capital needed and gives investors more confidence. AI and automation will support this by improving technology performance, and making it easier to understand and trust.

■ **KO** I really like this point about technology. When I first heard the question, I thought immediately about data centres, AI and EVs. But if we step back and consider the economics of new technologies – whether renewable energy or just something like the iPhone – we often see that, as a product matures, the cost of production comes down.

In technologies like batteries and wind farms, costs decrease as scale builds. Also, the performance improves. For example, today's battery installations have longer duration than those installed a few years ago.

■ **IYER** Batteries have come a long way. We now have two-hour, four-hour and eight-hour batteries, and they are becoming essential in solar and wind farm development.

But we also need to talk about hydrogen and biomass. The gas industry is struggling to keep pace, and many questions are emerging about its long-term role. Biomass is one alternative. Hydrogen is another, and it is being tested with regulatory support.

The issue with hydrogen is that the economics are still not compelling. The calorific value of hydrogen is lower than gas, so more is needed to produce the same energy output. Many companies are investing in trials but so far the only country that has established a robust regulatory framework is Germany.

There have been some early-stage initiatives in Australia, like the research centre proposed for the Port of Newcastle. But these are still developing. I expect it will take another two or three years before we see real progress here.

■ **RIDLER** I had a conversation recently with someone in the oil industry who is working on hydrogen projects. They said the biggest barrier to hydrogen exports – including from Newcastle – is the lack of aligned funding.

Several parties need to come together to fund the research and testing. Without this coordination, it is hard to move forward. Hydrogen works well for on-site use, like in industrial processes, but it is more difficult to do at export scale.

■ **IYER** Exactly. Hydrogen is already used in chemical and fertiliser production but it is produced and consumed on site. The challenge is transporting it. It needs very low temperatures to make it viable and the volume required is large.

■ **TAM** I am not a hydrogen expert but I recently went to Korea as part of a new energy technology exchange and met several hydrogen scientists. The Korean government is focused on hydrogen because the country relies heavily on gas, and gas prices have increased by around 1.5 times. Korea does not have the geographical size or solar resources Australia has so its energy transition strategy is centred on hydrogen.

The Korean government is investing heavily in R&D, especially in making fuel cells more efficient. This includes work on membrane and chemistry innovation. What they lack is production capacity. They see Australia's solar potential and want to produce green hydrogen here using their fuel cell technology, then export it back to Korea.

One scientist I spoke with is trying to set up a company in Australia but cannot find funding. It is early-stage technology and, as others have said, there is very little capital available at that stage. No-one wants to take the initial risk.

Even if production becomes feasible, the next challenge is exporting the hydrogen. The cost and logistics of shipping are huge. Infrastructure in the destination country, such as pipelines, also requires major investment.

We know these technologies need to scale quickly to support the transition to a net zero economy. But approval processes are slow, construction takes time and risk understanding is limited.

Investors need new ways to price and assess these risks. Until this happens, it remains a chicken-and-egg problem – we need the technology but cannot attract the capital, or we have capital but are not comfortable deploying it.

■ **RIDLER** Developing the technology to get hydrogen cold enough for export is also a major hurdle.

"There are areas where government needs to take the lead. Energy transition is a good example – it involves policy, planning and land access, which cannot be done without government. This is where public and private capital need to work together, but with government leading."

MELISSA GRIBBLE ASSURED GUARANTY

■ **GOLLAMUDI** Hydrogen technology is still premature in Australia and green hydrogen has not yet been proved to be feasible. Government support in the form of grants is required to support investment in this sector. We are seeing some encouraging signs of this through the Hydrogen Headstart programme, where successful applicants were announced earlier this year, although it will take several years before we make any headway in this sector.

Globally, there has been progress in hydrogen technology in Saudi Arabia's Neom project. This was made possible through strong government support for the project.

■ **IYER** Two or three years is an optimistic view. Australia has excellent solar resources that could be used to produce hydrogen. Depending on how it is produced, it can be classified as blue or green hydrogen. The classification matters for ESG [environmental, social and governance]-conscious investors.

■ **RIDLER** The Australian government's "future made in Australia" initiative could support this. The plan is to bring these types of projects online and invest in technologies we would otherwise not see here.

■ **CHAN** Infrastructure investment has a high barrier to entry, though. This is true across sectors, including digital, energy, water and security. Governments do not always address these barriers directly. They often rely on a mix of public and private investment, supported by credit and policy settings. Policy plays a critical role. We need sustainable, viable ways to manage the energy transition over the next 5-10 years. From our point of view, we still have a way to go before that is fully in place.

■ **MERIT** There are always complexities. On batteries, the technology is improving in duration, cost and installation – but batteries have a 15-20 year lifespan and we need an effective way to recycle many of their components. This is a problem we are pushing into the future. We need innovation now to address battery end-of-life solutions.

As for hydrogen, it is not yet a proven technology at scale anywhere in the world. It is difficult to be the first mover. Australia has an abundance of resources – coal, gas and solar – so we need to choose a national strategy and stick to it.

Some strategies will make more sense in other jurisdictions. For example, as has already been mentioned, Saudi Arabia is investing in hydrogen as part of its transition away from oil. This suits its situation. Similarly, Germany abandoned nuclear two decades ago and became reliant on Russian gas. This was a strategic bet that did not work out, and now Germany is trying to catch up.

Australia needs to decide what makes the most sense and then simplify the approval process. Only four renewable energy projects have been approved this year, which makes things extremely difficult.

We need to give certainty to investors and companies. The "future made in Australia" initiative is positive as it could help build new sectors and create new jobs. But we must avoid spreading ourselves too thin. A focused national strategy is essential.

■ **IYER** I completely agree. Each market has to adopt technology in a way that fits its cost profile and scale. Australia is a small market and unlikely to achieve the same scale as Germany or France.

One of the structural challenges is that our coal plants are no longer profitable. They are old and unreliable. We either need to reinvest in them or scale up alternatives. Solar and wind are progressing well and batteries are gaining momentum, but offshore wind is far from viable in Australia due to cost. Onshore transmission is already expensive. Offshore adds another layer of cost.

Instead of focusing solely on the domestic market, we should aim to replicate the success of LNG. Australia has exported LNG to Asia with great success. Hydrogen could

"I do not think there is a definitive number for the scale of investment required – but we are clearly talking about hundreds of billions of dollars. My view, though, is that it is important to distinguish between scale and pace. The scale of what is needed is large, but the pace of transition is slower than it needs to be."

NAMRATA GOLLAMUDI NATIXIS CIB

GLOBAL PERSPECTIVE: KEEPING MOMENTUM THROUGH COMPLEXITY

The themes discussed at the Sydney roundtable mirror sustainability developments across global markets. The parallels are clear, says Orith Azoulay, Paris-based global head of sustainable finance at Natixis CIB.

The world is experiencing a fundamental reshaping of priorities, Azoulay says. "Geopolitics, sovereignty, energy security, defence and the rise of AI are increasingly shaping international cooperation. Climate is not forgotten, but it is now one urgency among many."

This context means investors and governments are navigating a more complex landscape for infrastructure and transition investment. Yet the core dilemma remains unchanged. Azoulay points to the essential energy policy trade-off facing all major economies, citing European Central Bank president, Christine Lagarde, and the need to secure energy supply, deliver sustainability and keep costs affordable.

"Different countries are responding to this trilemma in different ways but only clean energy ultimately has the potential to deliver on all three," Azoulay says.

She argues that the task for policymakers is to provide the clarity and predictability that allows private capital to scale confidently into transition-aligned infrastructure.

Europe's experience provides practical examples of how this can work. The EU taxonomy, sustainable finance framework and the Green Deal Industrial Plan have helped create a coherent investment environment, even as political pressures have led to adjustments or temporary retreats. These tools highlight technology pathways, disclosure expectations and credible transition planning. Azoulay says this consistency is essential for mobilising long-term capital as policy evolves.

Despite political headwinds, she emphasises that transition investment is still advancing. Electrification of industry, buildings and transport is "already happening at pace", driving significant demand for grid reinforcement, renewable generation, storage and digital infrastructure.

Private capital is also flowing into the sector, with sustainable infrastructure funds representing nearly 70 per cent of all new vehicles globally in 2024, and about 90 per cent in Europe, compared with historical averages of closer to half. This is evidence, she says, that investors are continuing to back credible transition pathways even when policy environments are more challenging.

Azoulay also highlights the rise of transition finance. Recent guidelines from the Loan Market Association, the Asia Pacific Loan Market Association, the Loan Syndications and Trading Association and the International Capital Market Association outline safeguards to avoid carbon lock-in and ensure financing genuinely supports decarbonisation.

The International Energy Agency estimates that US$400-500 billion could be mobilised annually through transition finance over the course of the next decade.

Azoulay sees a clear opportunity for Australia. She says: "The challenge now is to scale solutions that bridge ambition and reality. This means public and private capital working together, supported by stable policy and frameworks that make projects bankable and internationally competitive."

"GEOPOLITICS, SOVEREIGNTY, ENERGY SECURITY, DEFENCE AND THE RISE OF AI ARE INCREASINGLY SHAPING INTERNATIONAL COOPERATION. CLIMATE IS NOT FORGOTTEN, BUT IT IS NOW ONE URGENCY AMONG MANY."

ORITH AZOULAY NATIXIS CIB

follow a similar model: build the capability here and export to markets that need it.

This is a long-term play but it is one we should start thinking about now.

■ **MERIT** Yes, but there is also an asymmetry between our projected electricity demand and current production capacity. We are still thinking in today's numbers, but AEMO updates its integrated system plan every year and the forecasts keep increasing.

Demand for data and digital services is not going to slow down. This means we need ambition and, more importantly, we need certainty for investors.

A capital requirement of A$100-200 billion is enormous – and we are not the only ones seeking investment. The US, Europe and Asia all have similar needs. Subsidies help but they are funded through tax – which ultimately comes back to the consumer. Australia has a small funding base so we need to make our investment proposition compelling.

■ **RIDLER** On the other hand, there is plenty of money looking for investment opportunities. Asset values in many markets are at record highs and there is strong demand from investors. However, much of this money is chasing the same assets – and not necessarily those that will support the transition. My sense is that the challenge is not capital availability – it is matching

"Customers need to trust us. To build trust we ideally need to make it easy. The challenges we are wrestling with are ones of operational decisions, technology constraints, consumer trust and regulation, all while trying to offer returns that will keep investors interested."

FRANCOISE MERIT ENDEAVOUR ENERGY

capital with the right projects. We need to steer investment toward the areas that will drive Australia's long-term energy and infrastructure needs.

■ **GRIBBLE** And, I would add, enable capital to flow more easily.

INVESTMENT DESTINATION

Craig How can Australia maximise its global appeal as an attractive investment destination once a national energy strategy is in place or even as such a strategy is still being developed?

■ **RIDLER** Australia already has a lot going for it, including a strong legal system, stable government and enforceable contracts. These factors make it a reliable place to invest. It is why, for example, Canadian pension funds have been bringing capital here for years.

In general terms, Australia is already investable. But when we look at specific sectors where change is needed, there may still be a role for intervention – either policy from the public sector or, ideally, a mix of public and private working together.

■ **CHAN** I agree. Australia offers stability, liquidity and transparency, which are key investor priorities. But there is a role for education. Some of the infrastructure investments we are discussing are very long-term. Closed-end funds can run for 15 years or more, while open-ended funds offer continuous capital-raising and redemption.

We structure our funds to give investors flexibility. The trustee or responsible entity acts in the best interest of the fund and, as long as capital continues to flow in, we can meet redemption requests without distress.

This is part of the appeal: long-term value creation alongside ongoing access to capital. Investors often reinvest through distribution reinvestment plans, which shows confidence in the assets and strategy.

■ **GRIBBLE** Although it feels like the investment horizon is often shorter in Australia, at around five years, even if the assets are longer term.

■ **BISHOP** From a lender's perspective, Australia is certainly an attractive jurisdiction. The legal and security enforcement frameworks are strong. Compared with some markets in Asia, for instance, Australia offers a much more lender-friendly environment.

■ **GOLLAMUDI** The other thing is that financing costs are relatively low here. Investors can access good terms that flow down from Australia's sovereign rating and general macroeconomic stability.

■ **BAILLIE** There is certainly no shortage of capital in the market and plenty of it is seeking infrastructure assets. In fact, we are witnessing deals that would typically sit in the corporate lending bucket being relabelled as infrastructure, and therefore likely to benefit from favourable treatment by banks and other lenders.

Craig Is this labelling coming from the sponsors? What sort of assets are we talking about?

■ **BAILLIE** Yes, it is. The kind of assets I'm thinking about might be something like a bus company.

■ **BISHOP** Ultimately, it is about achieving optimal cost of funding. If calling something infrastructure helps with pricing, this is what sponsors will do. But sophisticated investors will still price risk appropriately.

■ **ANDERSON** Generally these products are not suitable for retail, but there is appetite in the wholesale and institutional space.

We are also experiencing increased use of securitisation techniques and even CDO [collateralised debt obligation]-style structures, where loans from sponsors are being repackaged. Investors that lived through the financial crisis are more seasoned now. They understand the risks but also where grossed-up yields can be found.

I read a good article recently by the Infrastructure Partnerships Australia group. It highlighted how Australia's rule of law is a major strength, along with a strong track record in infrastucture investment. But it also noted the barriers, especially around planning approvals and regulatory processes: so-called 'green tape'.

Ko It seems that renewable energy approvals are the biggest issue. What did the article say about green tape?

■ **ANDERSON** Green tape refers to environmental diversity legislation and social licence to operate. The government is now reviewing environmental laws with the aim of making them enablers, not obstacles.

One of my roles has given me a perspective on funding NSW's renewable infrastructure. There have been innovative government financing measures such as CEFC, through the Rewiring the Nation Fund, committing A$450 million to NSW EnergyCo to finance land and biodiversity costs in the

"There is certainly no shortage of capital in the market and plenty of it is seeking infrastructure assets. In fact, we are witnessing deals that would typically sit in the corporate lending bucket being relabelled as infrastructure, and therefore likely to benefit from favourable treatment by banks and other lenders."

SONIA BAILLIE AWARE SUPER

Central West Orana Renewable Energy Zone. The concessional finance is lowering the cost to consumers and helps enhance the bankability of energy infrastructure projects.

■ **KO** When I first heard "green tape", I thought it referred to green finance – like ESG assurance and verification, which is often subjective. This can be frustrating. But, from an issuer's perspective, if the company has a clear strategy and communicates it well to investors – whether in bank debt or bonds – the capital will follow. It comes down to transparency and continuous engagement.

■ **ANDERSON** Yes – this article was using "green tape" to refer to environmental approvals. It is different from red tape, which is about general approval timelines.

■ **RIDLER** Exactly. I recently read about an environmental study project on a single bird species that took three years to complete. If this is the reality, we are asking investors to commit to projects their grandchildren might complete. It is difficult.

■ **ANDERSON** We are working through it. But it is not easy.

Craig Super funds and credit enhancement providers both play a part in bridging the gap between private and public capital. How can institutional investors and guarantors work together to expand capacity for long-dated or complex deals?

■ **GRIBBLE** By providing a financial guarantee, Assured Guaranty provides certainty to institutional investors by guaranteeing scheduled interest payments and debt repayments. This can be particularly beneficial for project finance, especially when there is a construction period or a very long maturity, or when it's an offshore investor that has less familiarity with the Australian market but still wants diversification. I also want to note that Assured Guaranty does not guarantee construction only – there must be an operational period as well.

Craig I appreciate the point that there is lots of investment capital out there, but is Australia attracting the right range of investors?

■ **GRIBBLE** Another challenge in this market is the dominance of bank funding. Most lending here is 5-7 years in duration, sometimes shorter. We work with international investors who prefer longer-dated assets – but these are hard to find in Australia. The bank market is regulated in a way that encourages short-term lending, which creates refinancing risk.

For investors like us, who provide long-term guarantees, this is a problem. We do not like refinancing risk. In Australia, refinancing tends to happen without issue – but the risk still exists. For offshore institutional investors, particularly life insurers, the short-dated nature of the local market is a deterrent.

■ **RIDLER** Even the government bond curve is short. The issuance of Commonwealth government securities has extended the curve recently but it is still not as long as other sovereign curves.

This matters, because the sovereign curve is the risk-free benchmark. If it is short, it constrains how risk is priced throughout the system.

■ **GRIBBLE** This is right. There is also the cross-currency swap issue. The US and Australia cross-currency swap curve is solid out to about 20 years, but beyond this it weakens. In other regions – for example, New Zealand – investors are interested, but the curve is even shorter.

■ **KO** Some banks also like to have a right to break on cross-currency swaps. This can be difficult for issuers.

■ **IYER** On the other hand, at least Australian issuance is typically large enough to access offshore markets and deliver longer-dated tenor.

By contrast, many New Zealand issuers struggle to reach sufficient scale. Deals are often around NZ$250-300 million (US$142.9-171.5 million), whereas it typically takes a deal size of at least NZ$500 million to make the economics of offshore issuance work, including the swaps.

■ **BISHOP** Overall, Australia is in a strong position, particularly given the size of the superannuation system. There is a vast pool of long-dated capital and, in theory, plenty of liquidity. The super system should play a core role in funding long-term national priorities.

■ **BAILLIE** The counterpoint is that superannuation is often viewed as one big pot of money looking for a home, which is not quite right. Each fund has a strategic asset allocation with specific risk-return objectives across equities, infrastructure, property and so on. Each sleeve has its own benchmark and risk profile. This structure creates constraints – including where capital can be deployed.

Most infrastructure equity investors are global, and Australia is just one option for them. They compare the internal rate of return available here with elsewhere. Many local funds are already heavily exposed to Australian equities and they are therefore often seeking diversification.

"There will be significant demand for energy in the hyperscale data centre space. Anecdotally, running a question through AI uses about 10 times more data than asking the same thing through Google. This shows how quickly the backbone infrastructure for data is going to have to grow."

LUCIE BISHOP REVOLUTION ASSET MANAGEMENT

■ **ANDERSON** It is easy to treat super as a policy lever but ultimately these funds are managing retirement outcomes for members. Funds will consider liquidity constraints and drawdown dynamics alongside financial interests.

■ **GRIBBLE** Many funds generate long-term value through equity investments – including airports and other infrastructure, domestically and globally. Liquidity, on the other hand, tends to come from fixed income. Super funds are not typically turning to fixed income to generate return. They look to it for defensive characteristics and portfolio balance.

■ **BAILLIE** Fixed income and other lower-volatility assets act as ballast to the growth portfolio. There is also the issue of the performance test. It is a double-edged sword. It brings accountability and transparency to the system but it also creates constraints. If an infrastructure investment does not sit in a well-defined benchmark, it is harder to defend. Yet such investments can be valuable.

■ **ANDERSON** The test has done a good job in highlighting underperformance. But it can add pressure for infrastructure investors as Sonia has noted. Fail the performance test over two consecutive years and the fund is closed to new members. It is less of an issue for investors with strong long-term records but it is still a risk that shapes portfolio decisions.

■ **BAILLIE** It also loops back to technology – specifically, how proven it is and therefore whether we can justify an allocation if the performance track record is still evolving. It always comes back to the risk-return balance. Members want the highest return possible but the fund has to weigh this against responsibility and social licence. Super fund members are increasingly engaged – asking where their retirement savings are invested and what it means for the country and the planet.

■ **CHAN** Infrastructure can improve the Sharpe ratio of a diversified portfolio. It delivers strong returns for the level of risk taken. Meanwhile, responsible investment is central to our process. From early screening, we assess whether an asset does significant harm to nature or communities. During due diligence, we evaluate ESG risks and mitigation plans.

Once the investment is made, we support the portfolio company in building ESG capability. Many smaller companies do not have the scale or systems to measure carbon emissions or other environmental targets. Our role is to help them build those tools.

In this way, responsible investment is not only about selecting the right assets – it is about working with companies to shape the future and reduce risk. Over time, this creates better risk-adjusted returns for investors.

Craig We have covered a number of issues. But which of them, or something we have not discussed, is the biggest challenge in bringing public and private capital together to fund the transition?

■ **RIDLER** Australia has a strong track record with PPPs. We have seen this model work and other countries are now looking to replicate it. But PPPs have not been as active in recent years. One key challenge is valuation – how to value assets that are not yet built or are in development.

This has been a major topic, especially for ASIC [the Australian Securities and Investments Commission], which is focused on valuation practices in private credit. Transparency is essential. We also need a way to value future cash flows – for assets that are still being constructed or planned – to determine if they are investable. This applies across sectors, whether energy, transport or digital.

Some PPPs have struggled – toll roads, for instance, where expected returns did not materialise. More broadly, the challenge is how to value illiquid assets in portfolios. Without this capability, it is hard to bring public and private capital together.

■ **GRIBBLE** I believe there are areas where government needs to take the lead. Energy transition is a good example: it involves policy, planning and land access, which cannot be done without government. This is where public and private capital need to work together, but with government leading.

By contrast, data centres are more commercially driven. We know who the users are and government involvement is less critical. There may be a role in setting a location framework, but the bulk of investment is private.

Energy, on the other hand, is longer term, more complex and involves far more participants. This makes it a fundamentally different proposition.

■ **MERIT** It comes down to sovereignty – like defence. Energy should be treated as a sovereign concern, which means the government must be involved. It cannot happen without private and public capital working together. If we are not aligned, the transition will not succeed.

We need to deal with regulatory barriers, green tape, return expectations, liquidity, timeframes and customer cost impacts –

all in a more open, transparent and structured way. This might sound idealistic, even naïve, but it is the only way forward.

■ **BAILLIE** It also needs longer-term and bipartisan commitment. Government terms are three years in Australia, and these projects take 15 years or more.

■ **MERIT** Exactly. It must be a long-term plan supported by the Australian public.

■ **ANDERSON** Energy is an essential service. One of the key issues is risk sharing. The public sector is particularly effective in the development phase, where government can help de-risk early-stage projects. PPPs can play a role. With the right regulatory framework, prospective return, well-structured long-term agreements and incentives, private investors are better able to calibrate their appetite to invest.

■ **IYER** On PPPs, right now may not be the right time given where interest rates are. The risk-return may not be attractive to private capital. Having said this, population growth means we need more social infrastructure including schools, housing and hospitals. And construction risk is a major issue.

This is not just about cost – it is about productivity, unions, subcontractor failures and more. Historically, the government would contract the project and step back.

This model no longer works, and a more involved and ongoing role in project oversight is needed. Once assets are built and operating, private capital is well placed to support them. But one must solve the upfront risk-sharing problem. On regulation – particularly in energy – we need a framework that reflects current costs. This regulatory framework must also evolve with the market. The cost to consumers will come – it is just a question of whether they pay now or later.

■ **MERIT** This is an important message and one that must come from government. Industry can say it, but we do not always have the social licence or public platform to lead the conversation.

We need to be honest about the real cost of the transition, the timeframe involved and the investment required. But I have not seen any politician – in Australia or globally – prepared to have this conversation openly.

■ **TAM** CEFC makes independent investment decisions on behalf of the Australian government and we work closely with policymakers. In September, the government released its 2035 climate target and the net zero plan, which includes six sectoral transition strategies: electricity and energy, industry, resources, the built environment, agriculture and land, and transport. Each plan is backed by policy and supported by de-risking capital – including funding mechanisms like ours.

At a recent conference, I heard from a battery developer that initially could not secure bank funding. It ultimately pieced together various forms of government support and impact-investor capital to get the project underway. This project has now grown and been partially sold to provide liquidity. The message is that government support mechanisms do exist – the challenge is stitching them together and aligning public and private capital efficiently.

■ **GOLLAMUDI** On PPPs, there are signs of re-emergence in sectors like stadiums – for example, projects in Queensland and the Gold Coast. One could also argue that some of the renewable energy zone developments are quasi-PPPs. For instance, the New England and the Gippsland renewable energy zones involve shortlisted private participants and will require bank finance.

There is no shortage of interest. The challenge remains coordination – particularly with government.

■ **GRIBBLE** It is always a challenge to bring everyone together. It is critical to be very clear about roles, risks and responsibilities. This complexity brings longer timeframes. Also, PPPs sometimes get a bad reputation because the unsuccessful ones get all the attention while the ones that work well go under the radar.

■ **CHAN** This is where the gap can be bridged: when investors have conviction in the project and rating agencies or credit analysts assess the strength of the investors themselves. This type of approach can support project financing in the early stages.

■ **GOLLAMUDI** There is significant interest in the New England renewable energy zone. Globally, meanwhile, plenty of money is seeking to invest in the regulated infrastructure sector. The NSW EnergyCo framework has created confidence in this model. Hopefully, it is executed more quickly than Central-West Orana. •