## Infrastructure Horizons 2025

Industry leaders on the trends in Australian infrastructure



MinterEllison.

The information given in this publication is believed to be accurate at the date of publication. This information may have subsequently changed or have been superseded and should not be relied upon to be accurate or suitable after this date. This publication offers a general overview of its subject matter. It does not necessarily address every aspect of its subject and we disclaim all liability to the fullest extent permitted by law. It is not intended to be, and should not be, used to replace specific advice relating to individual situations and we do not offer, and this should not be seen as, legal, accounting or tax advice. If you intend to take any action or make any decision on the basis of the content of this publication you should first seek specific advice from an appropriate professional. Some of the information in this publication may be compiled from third party sources we consider to be reliable, however we do not guarantee and are not responsible for the accuracy of such.

MINTERELLISON | INFRASTRUCTURE HORIZONS | EDITION 1



**Owen Cooper** Partner, Infrastructure Industry Leader

Infrastructure is a key pillar of Australia's economy and society as a significant contributor to our GDP and workforce.

National public investment remains strong, with a \$213 billion pipeline over 5 years to financial years 2027-28.1 Infrastructure doesn't just drive economic activity – it shapes how we live, work, and connect. It facilitates trade, supports critical services like healthcare and education, and is central to implementing the decarbonisation agenda. Yet, the industry faces mounting challenges: geopolitical uncertainty, rising costs, skilled labour shortages, and tightening fiscal constraints to name a few; all of which make delivering successful high value complex projects on time and within budget more challenging than ever.

Despite these concerns, infrastructure remains one of the most dynamic and opportunity-rich industries. At MinterEllison, we believe there is cause for optimism across the public and private sectors on how solutions are planned, designed, procured, and delivered. It's time for new approaches to funding and execution in order to build and maintain momentum and meet broader decarbonisation and ESG societal imperatives, alleviate housing shortages and more.

With this backdrop in mind, we engaged senior industry leaders to explore the industry's most pressing challenges and opportunities. This Infrastructure report distils their insights, our perspectives, and actionable strategies across eight key topics. We hope these findings spark discussion and drive meaningful progress in the industry.

#### **OUR DATA AND SOURCES**

To produce this report, in the second half of 2024 we spoke to a broad cohort of key industry participants - including directors, general counsel and senior leaders from both government and the private sector.

Our focal point has been on providing a collective outlook on the state of infrastructure in Australia today, including both the challenges and opportunities the industry faces.

To complement the insights we gathered during our interviews, we also sourced data from research conducted by leading global and local institutions, and added further findings of our own in order to stimulate debate and collective action.





Infrastructure Horizons



MinterEllison.

#### Report summary



#### Market dynamics: The state of play

The infrastructure and energy sectors are no strangers to the disruptive cycles of the boombust phenomenon.

These fluctuations don't just affect individual businesses – they ripple across industries, with lost opportunities for long term gains.

To respond to fiscal constraints there needs to be a new approach to the potential of innovation and deeper and earlier engagement between government and industry - starting from project scoping and development.

There is a chance to find new approaches to procurement and unlock new financing models.

Medium-sized projects also have

untapped potential to provide stability alongside super-sized ones. Meanwhile, stronger collaboration between agencies and governments is essential to building a predictable national pipeline – one that allows the entire infrastructure industry to plan and invest.

The question remains:
How can the industry
collaborate to smooth the
peaks and troughs of this
recurring cycle, fostering
a more sustainable and
resilient future?





#### Contract models: It's all about relationships, culture and managing risks



The success of infrastructure projects depends on successful risk allocation, which in turn influences private sector participation and pricing.

Relationship-based contract models have gained considerable traction for delivering large, complex infrastructure projects, but relationship contracts don't quarantee good relationships.

Instead, the industry needs to build a more relationship-based culture across all contract models.

Success hinges on prioritising relationships over rigid frameworks, improving intergovernmental coordination to resolve roadblocks, and developing smarter risk-sharing mechanisms.

Interviewees explored the potential of simplifying and standardising contracts and adopting a more balanced approach to risk allocation – following the lead of the New South Wales and Victorian State Governments. A shift towards more program-based procurements would also be welcomed.

The question remains:
How can the industry strike
the right balance around
equitable risk allocation and
strong relationships to ensure
the long-term effectiveness of
all delivery models?

#### Report summary



#### Capital management: Attracting and leveraging private capital and expertise

Australia faces significant challenges in securing the capital needed to meet its future infrastructure goals.

Rising pressure on public sector borrowing, and resulting project delays and cancellations are slowing momentum across the infrastructure industry.

Sentiments towards Public-Private partnerships (PPPs) have struggled with common issues and disputes, further hindered by a widespread lack of understanding of the model.

Interviewees agree that earlier and stronger private sector involvement is crucial to keeping Australian investment vibrant.

accelerating infrastructure development, and maintaining momentum.

There is work to be done to unblock the barriers to wider adoption of PPPs. The question remains:
What role can private finance
play in protecting and
building infrastructure project
momentum, and what needs
to be done to enable stronger
partnerships between the
public and private sector?





#### Workforce: Competing for talent, rising labour costs and declining productivity

Uncertainty surrounding Australia's future infrastructure pipeline, coupled with the challenge of developing and finding the right domestic talent – particularly in construction, which faces a 72% workforce deficit – remains a significant industry concern.

Local infrastructure employers are facing intense competition from other industries and attractive international opportunities in the ongoing war for talent.

At the same time, trade unions are leveraging labour availability and health and safety standards as part of labour negotiations.

Interviewees agree that addressing this workforce dilemma is urgent, complex and multifaceted.

These challenges are driving up costs, reducing productivity and causing project delays, underscoring the urgent need for more flexible and productive industrial arrangements. The Queensland Government has already taken steps to re-establish the Queensland Productivity Commission to promote healthy competition and boost productivity.

The question remains: How can the industry balance health and safety standards, project-specific training, and career certainty to attract and retain the necessary talent? 7

MINTERELLISON | INFRASTRUCTURE HORIZONS | EDITION 1

#### REPORT SUMMARY

#### Report summary



#### Innovation and technology: Same, same but better

Despite its potential, Australia's infrastructure industry has been slow to fully embrace innovation and technology, lagging behind international markets that are already reaping the benefits of improved productivity, quality, and speed to market.

Many industry participants remain hesitant to fully utilise tools such as Artificial Intelligence (AI), Digital Twins and Modern Methods of Construction (MMC). This reluctance stems from unpredictable demand, concerns over quality and deliverability risks, and skills gaps. A lack of trust further hampers AI uptake.

Procurement processes and limited funding also create barriers to innovation. Interviewees agree that a shift from a compliance-driven mindset to a performance-focused approach is essential.

Despite these challenges, interviewees remain optimistic about new ways of working, and there are plenty of initiatives in both the public and private sector to help unlock the benefits of innovation in infrastructure.

MMC, in particular, is seen as a valuable tool to address workforce constraints – provided it is backed by some degree of pipeline and policy certainty.

The question remains:
Despite these challenges, how can the infrastructure industry build trust and collaboration to accelerate the adoption of innovative solutions?



#### **Decarbonisation:** The energy transition is facing headwinds

Australia has set ambitious energy transition targets, aiming for 82% renewable energy in the National Electricity Market (NEM) grid by 2030 – an objective that demands significant infrastructure investment.

The infrastructure market is at a critical transition point, with energy infrastructure closely linked to the nation's decarbonisation agenda.

However, smooth execution requires careful attention.

Interviewees highlighted key risks such as project delays, fiscal constraints, inconsistent regulations, grid connection uncertainties, and skilled labour shortages. To mitigate these challenges, they advocate for a national regulatory framework that inspires confidence and investment.

As expected, there are also concerns unions will target transmission projects as a negotiation battleground, adding to the general perception that national decarbonisation is anything but straightforward.

With stronger and more consistent government coordination and support, we will see more market participation. The question remains:
How can industry
stakeholders collaborate
to overcome these challenges
and unlock the full potential
of Australia's energy
transition?

#### **Report summary**



#### **ESG:** A complicated opportunity

By embedding ESG principles, Australian infrastructure can achieve long-term resilience, community acceptance, and sustained economic growth. However, practical and financial challenges remain.

Key concerns include unclear funding for sustainability initiatives, inconsistent ESG evaluation across projects, and difficulties in gathering accurate emissions data across the supply chain.

Retrofitting ESG into in-flight and legacy infrastructure further complicates integration.

Articulating the value of ESG goals remains complex, especially when balancing environmental priorities with social expectations – such as community opposition to potential biodiversity impacts. These challenges underscore the need for standardised ESG frameworks across all projects.

Despite these hurdles, interviewees confirmed the industry is adapting. Trends include increased adoption of renewable energy, stronger community engagement, and governance improvements. ESG principles are also being embedded into decision-making, while governments are starting to refine procurement frameworks to attract private investment and drive collaboration.

The question remains:
As ESG continues to evolve,
how can industry participants
align sustainability ambitions
with practical implementation
to ensure long-term value
and impact?



#### Australian housing: Ambitious targets require an innovative solution to drive transformation

A-MARCHEN BARBARA



Australia's housing crisis is driven by persistent supply shortages and rising demand, making affordability a growing challenge. To meet the Federal Government's target of 1.2 million homes by 2029, the national infrastructure industry must collaborate across the private and public sectors, securing the necessary land, skills and resources.

However, multiple factors hinder new housing development, including high interest rates and inflation, material and labour shortages, building industry constraints, complex planning processes, and unbalanced risk allocations in contracts. Additionally, post-pandemic migration and urbanisation continue to accelerate demand, further intensifying the shortfall. Interviewees confirm that despite these challenges, there is both goodwill and strong appetite to engage in tackling the housing challenge – including Community Housing Providers (CHPs). There is growing recognition of the need for tailored (state by state), nationally aligned contracting models. The need to develop regional Australia is also on the agenda to alleviate urban congestion.

The question remains: What solutions can the infrastructure industry bring to help Australia's escalating housing needs?



Infrastructure Horizons



MinterEllison.

10

## 1 > Market dynamics: The state of play

#### The issue

Businesses operating in the infrastructure and energy sectors are continuously challenged by the cyclical nature of the "boom-bust" phenomenon. This 'cycle of uncertainty' is disruptive for the industry, but it also results in significant latent issues for the next upswing in investment.

There is a real downside from any period of underinvestment. There is an erosion of skills and experience and a reduction in competition and innovation, all of which is a loss of opportunity to deliver value and improve efficiencies.

This persistent volatility creates significant hurdles for businesses striving to plan, expand, and thrive with confidence in Australia. Ultimately, the ripple effects extend beyond individual enterprises, impacting the long-term, stable growth of Australia's broader economy.



## The private sector can provide valuable innovation in project scoping and development to improve overall project outcomes and value

In a tight fiscal environment, government needs to get more for less. Across the industry there is a desire for a step change in innovation and frustration about the barriers to achieving this.

Read more about innovation and technology here.

## Governments should embrace a pipeline of medium-sized infrastructure projects, rather than focusing on super-sized ones

This will help to smooth the peaks and troughs of the boom-bust cycle, providing a consistent pipeline of projects valued between A\$300 million to A\$500 million – an investment range that aligns well with private sector capabilities and confidence.

## Effective inter-agency and inter-government alignment is essential to develop synergies and establish a clear national roadmap for infrastructure projects

Australia's multiple tiers of government and election cycles produce an uncertain and fragmented infrastructure outlook. Without a stable, national roadmap it's difficult for businesses to plan and commit resources. The desire for more standardised contracting – with only project-specific amendments and standard, aligned risk allocations across agencies and jurisdictions – was also highlighted.

We have entered a new stage in the infrastructure funding and investment cycle – the infrastructure industry is transitioning from a historic high point of substantial public capital investment in major public transport projects in the major eastern metropolitan areas. Funding for these initiatives came from a number of innovative sources, including asset recycling programs and value capture financing. Many interviewees agree we have now entered a more fiscally constrained cycle, which comes with both risks and opportunities to do things better.

Interviewees hold contrasting views on the impact of this changing landscape. Private sector players describe a "downturn with fewer domestic opportunities ahead," while some government representatives see a continued flow of conventionally funded projects, "especially in health and accommodation."

1 > Market dynamics (continued)

On the one hand, interviewees identified a number of adverse outcomes flowing from the reduction in public infrastructure investment, including:



A substantial **opportunity cost** in failing to maintain
and capitalise on the
workforce skills and capacity
built during the prior wave
of investment



## Loss of intellectual capital to international markets



A decrease in training and investment likely to lead to future long-term capacity and productivity shortfalls



A decline in investor confidence, with a real risk international players will exit the market in future, adversely affecting market capacity and competitiveness The energy transition is a massive and exciting task, but any perception of a seamless industry pivot to delivering energy transition projects is flawed. Ensuring the infrastructure industry's health and sustainability requires a more nuanced approach. It's imperative to maintain a robust pipeline across diverse asset classes, including through PPP models, as well as new thinking on approaches to procurement."

On the other hand, interviewees had mixed sentiments about the alternative opportunities arising from the energy transition. In the short to medium term, there are opportunities within the energy transition that could offset the impacts of a decline in public infrastructure investment. However, there is genuine concern about the industry's capacity to respond. Identified challenges include:



The need for workers to have a different and diverse set of skills specific to energy projects



The difficulty in recruiting both skilled and unskilled workers to regional and remote project locations



Ongoing uncertainty regarding project pipelines and schedules



Regulatory and social licence obstacles and ambiguities



Complications with project delivery and financing structures



Unrealistic expectations about risk allocation



## There is strong appetite for private sector investment in public infrastructure to bridge the gap.

Some industry participants suggest it is the ideal time for the government to increase its reliance on public-private partnerships (PPPs) and similar arrangements to allow private capital to supplement public investment.

There is also a consensus that PPPs can deliver significant innovation benefits, and almost always receive competitive responses from the market. A more standardised and streamlined approach to PPPs across jurisdictions could also substantially reduce transaction costs and timelines for appropriate projects.

Read more about capital here.

Read more about the energy transition here

1 > Market dynamics (continued)



## The New Zealand Government is actively pursuing infrastructure development through PPPs.

The New Zealand Federal Government has adopted policy to partner with private sector investors to help update its aged infrastructure, declaring itself "open for business" with a steady pipeline. It has recently undertaken several innovative initiatives to enhance PPP effectiveness:

**Refreshed PPP framework**: In November 2024, the New Zealand Government released an updated PPP framework, providing a comprehensive blueprint for future PPP transactions.<sup>2</sup> This framework aims to deliver better value for money, encourage innovative design solutions, and improve whole-of-life asset management.

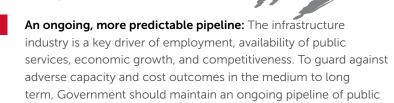
**Centralised PPP oversight**: As of December 2024, the responsibility for developing and overseeing PPP policies, including commercial principles and standard agreements, has been centralised under the New Zealand Treasury. This move is intended to ensure consistency and efficiency in PPP project delivery across various sectors.<sup>3</sup>

Integration with broader infrastructure policies: The refreshed PPP framework is part of a broader strategy to update New Zealand's infrastructure policy settings. Upcoming publications will address the Funding and Financing Framework, Strategic Leasing guidance, and guidelines for Market-led (unsolicited) Proposals, reflecting a holistic approach to infrastructure development. The Government has also implemented the Fast-Track Approvals Act and proposes changes to the Public Works Act to support development of critical infrastructure.



The choice of procurement model and source of funding for any high value infrastructure projects is complex and to be considered carefully, with no single model fitting all projects. Regardless of the approach selected, both public and private sector participants are unanimous in desiring a more stable and predictable pipeline of opportunities with reduced transaction and administrative time and cost, that in turn allows even more efficient bidding on, and delivery of, major projects."





infrastructure development despite competing fiscal constraints.



<sup>&</sup>lt;sup>2</sup> Government launches refreshed Public Private Partnership framework, Beehive, 2024

<sup>&</sup>lt;sup>3</sup> Public Private Partnerships, Treasury NZ, 2024

MINTERELLISON | INFRASTRUCTURE HORIZONS | EDITION 1

OUR FINDINGS

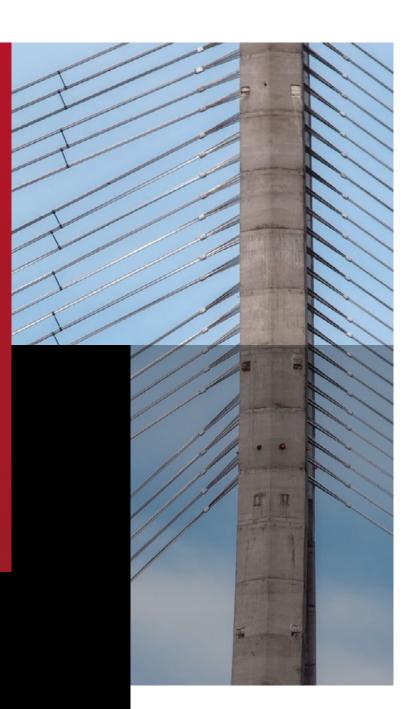
# 2 >Contract models:It's all about relationships,culture and managing risks

#### The issue

Risk allocation is critical to the success of infrastructure projects – significantly influencing the level of private sector participation in each project and project outcomes. In response to the private sector requiring a more equitable risk allocation, in recent years Australian governments have introduced more relationship-based models to deliver major infrastructure projects.

The sustainability of using relationship-based models, which rely heavily on government contingency funding and offer less certainty, is challenging as public sector budgets are tightened.

Relationship-based contract models don't guarantee good relationships. Instead, the industry needs to build a more relationship-based culture to optimise outcomes from all contract models.



## Relationships and a collaborative culture must be prioritised to optimise outcomes from all contract models

We need to find ways to take the best elements from outcome-focused relationship models that focus on how parties work together to manage risks and embed them to create a different culture in contract management generally on both sides.

### Overly conservative approaches to risk allocation leads to bad outcomes

To avoid disputes, provide demonstrable value for money and drive optimal project delivery, risks need to be allocated better between parties. This is particularly the case when risk is passed through too simplistically, or without adequate consideration of project context and circumstances.

## An opportunity exists to push the model towards simpler contracts and more efficient procurement

This involves a shift towards more standardised contracts and harmonising base risk allocations across different jurisdictions and agencies. Notably, interviewees considered that the treasuries from New South Wales and Victoria have demonstrated that this can be done, showcasing the feasibility and benefits of cross-jurisdictional alignment.



2 > Contract models (continued)

The infrastructure industry has **increasingly adopted collaborative contracting models** which focus on strong partnerships and shared risk. This shift was in response to recognising certain risks associated with project delivery are difficult to predict and factor into bids. While traditional contracts encourage parties to meet their own obligations, some interviewees said they don't necessarily foster investment in the success of other parties' contributions.

Interviewees observed a tendency to adopt collaborative "relationship" models, such as ITC and managing contractor arrangements, even when project risks could be clearly defined and fit for traditional fixed-price design and construct (D&C) contracts. One interviewee even described the collaborative contract model as the new default choice "effectively the new D&C."

The use of alliances is dwindling according to interviewees, with a growing popularity of other collaborative models that strike a better balance between sharing and transferring risks. However, there is recognition that alliances remain an important contracting alternative for projects that involve material scope and risk uncertainties.

#### There is debate whether KPI regimes are restricting collaboration.

Contractors observed that collaborative contracting models have moved from an incentive focus to increasingly include onerous KPIs, typically resulting in penalties aligned with and managed in a style more aligned with hard dollar contracts – driven by Government concerns that contractors are "gaming" the system. However, interviewees believe that this undermines the intended benefits of using risk-sharing arrangements , and doesn't promote the desired collaborative behaviours or transparency. In contrast, one Government interviewee considered "KPIs as a very

powerful collaborative tool."

The market's primary goal is to **simplify contract management** during delivery. One interviewee expressed the need for manageable models that can be pragmatically handled. Another emphasised that contract form isn't crucial, rather the "focus should be on the quality of the relationship and the success of the project outcome."

Many interviewees expressed **concern about the current risk landscape.** One interviewee commented that, "risk in the market is hard – everyone is pushing back," and "ultimately, you are going to see projects fall over because the risk profile is wrong."

In particular, contractors discussed finding it **increasingly difficult to manage the regulatory and approvals aspects of project delivery**. For example, the recent <u>Design and Building Practitioners Act 2020 (NSW)</u> amendments are adding further complexity.

Contractors are looking for **better coordination between different levels of government** to resolve issues, instead of being stuck in the middle without the standing or capacity to affect outcomes – "The market is screaming for risk allocation to be dealt with better." However, "risk allocation shouldn't be black and white," and "contracts need to be tailored to project-specific volatilities."

New South Wales Government's steps to promote better partnerships and collaboration with industry is welcomed.

Find out how new state governments' principles highlight the policies dedicated to ensuring successful partnerships.

Lastly, many interviewees are **in favour of more program-based procurements** which group several projects into a single, cooperative partnership structure. Benefits include more efficient processes, taking advantage of lessons learned, and fostering stronger, long-term partnerships. There is a real desire to move away from the perceived inefficiency of "ground zero procurement, where every single project is competitively procured in isolation leading to wasted cost and resources."





Effective risk allocation in construction contracts is crucial for fostering a stable industry that continues to draw top-tier contractors, robust investment and top talent. The transition to relationship-based contracting has been a positive. However, the shift needs to be matched with a change in mindset at all levels of decision making affirming a commitment to collaborative success."



2 > Contract models (continued)

In 2024, the New South Wales Government introduced the <u>Principles for Partnership with the Construction Industry</u> to address industry challenges, while also encouraging improved collaboration between government and industry participants. The principles showcase the policies dedicated to ensuring successful partnerships, including:

- building up domestic manufacturing;
- ensuring safety and wellbeing;
- boosting productivity;
- investing in skills and local jobs;
- enhancing industry culture and diversity;
- improving financial sustainability; and
- decarbonising to meet net zero targets.

The Victorian and New South Wales Treasuries recently completed a joint review and refresh of their linear and social infrastructure PPP principles and project documents. This project was motivated by a recognition by each State that the current PPP model is sometimes scrutinised because of an arguably too onerous risk transfer. The risk allocation on key issues has been refined to ensure that comprehensive risk transfer is not achieved at the expense of project objectives and overall value for money.



#### Next steps

- Strong, transparent collaboration: There is appetite in the market to move back to a more competitive, hard dollar environment and the time is right to encourage strong, transparent collaboration across the industry.
- More considered risk allocation, more often: To optimise relationship models, risks must be allocated in a way that emphasise genuine collaboration in particular around those risks that can't be managed by contractors alone.
- New program-based partnerships: There are also opportunities to deliver savings and other benefits for government from longer term, program-based partnerships.

It's all about managing risks. Newer relationship models have an opportunity to learn lessons from the past where recent disputes have exposed real challenges in resolving project issues. Negotiated resolutions require compromise, but slow-moving participants, cumbersome redocumentation, and costly delays only add to the complexity – making large scale infrastructure disputes especially difficult to navigate."



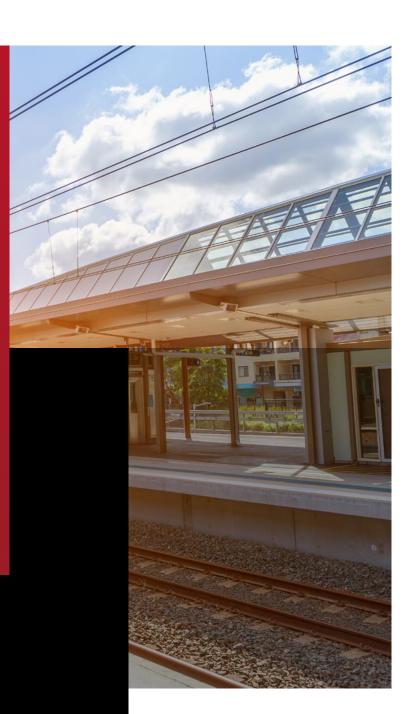
16

# Capital management: Attracting and leveraging private capital and expertise

#### The issue

State borrowing, as a proportion of GSP, is at record levels. An increasing pressure on public sector finances is creating concerns about project delays and cancellations, causing momentum to slow down. By contrast, the private sector has capital, and appetite, but there is a shortage of suitable new projects for investment. In addition, sentiments towards PPPs have been impacted by common issues and disputes, along with a general lack of understanding of the model's benefits.

The key challenge is to understand and unblock the barriers to a more sustainable pipeline of projects where private sector capital is a bigger and more consistent part of the mix.



### Project funding constraints are affecting the momentum we need to see to fulfil the nation's infrastructure needs and ambitions

There is an opportunity to reevaluate the role of private sector capital, through various forms of PPP, as a potential enabler.

## An improved understanding and use of PPPs could reinvigorate this partnership model

There is an opportunity to confront the barriers to wider adoption of PPPs, as well as dispel some urban myths.

## There is a real danger of decline in competition and capability in the Australian market

Recent successful partnerships with the private sector may offer a new way forward to wider adoption and retaining capability.





3 > Capital management (continued)

The increasing pressure on public sector borrowing is leading to **concerns** about project cancellations and delays, such as the Melbourne Airport Rail Link, Queensland Hospital Capacity Expansion Program and other major infrastructure commitments under review. *Infrastructure Partnerships Australia's* Investment Monitor<sup>4</sup> also reported that New South Wales' toll road reform has spooked some investors. Despite this environment, maintaining project momentum is critical to meeting the nation's infrastructure needs.

Strategic partnerships with the private sector can provide a viable solution, leveraging significant pools of both local and international private capital seeking stable and well-structured investment opportunities. Interviewees believe that by "fostering a collaborative approach, governments can alleviate fiscal pressures" while ensuring essential infrastructure projects move forward.

Despite historical challenges around risk allocation, **private sector involvement remains a key driver of successful infrastructure delivery across Australia**. Where government faces capital constraints, private sector partnerships can help maintain momentum. One interviewee said, "there is a significant pool of private capital available locally and internationally, looking for stable jurisdictions and projects to invest in."

Infrastructure Partnerships Australia's recently released Quarter Four 2024 Quarterly Chart Pack highlights a substantial, unmet opportunity for private investment in infrastructure projects. The report identifies a robust pipeline of projects that could attract private capital, with New South Wales leading at an estimated A\$30.5 billion, followed by Queensland (A\$16.5 billion) and Western Australia (A\$10.8 billion).

Energy projects dominate across all states, followed closely by rail and road infrastructure. However, the pipeline spans various stages of development – from early announcement and planning phases to detailed procurement – with some projects still purely prospective.

Interviewees discussed common issues and disputes during the project

**delivery phase** – such as contamination remediation causing delays in the West Gate Tunnel, and solvency issues affecting greenfield toll road projects like the Lane Cove Tunnel – which have influenced sentiment about the desirability of PPPs as a delivery model. This reluctance is also affected by some lack of understanding of the benefits of an availability model, and the many success stories of existing projects.

Successful partnerships in social infrastructure are a key example, such as hospitals, schools, and social housing, further highlighting the benefits of private sector participation to support Australia's response to housing affordability challenges.

Interviewees believe there is a **lack of scope for private sector innovation** to co-deliver adjacent buildings and increase value for money to the State. This could include "complementary projects and precincts that can effectively subsidise the public infrastructure."

The lack of pipeline of projects for private investment is a genuine cause for concern. Interviewes pointed to the withdrawal of international players from the Australian market and Australian businesses are being driven to structure their businesses around the pursuit of better opportunities overseas. A 'brain drain' of important know how and experience is becoming a reality. The end result will be a decline in competition and capability in the Australian market. Interviewees pointed out the lack of deal flow affects public sector capability equally.

Finally, USPs are considered a catalyst for growth, as long as fragmented government frameworks continue to be refined. For example, the New Zealand Government is actively promoting USP opportunities and in late 2024 it released new quidelines for market-led proposals.

Read about how the New South Wales Government is updating its business case guidelines to encourage more private sector proposals.





Private capital plays a critical role in the realisation of infrastructure projects, particularly when aligned with public interests and structured to engage local stakeholders. The VicRoads modernisation project serves as a prime example, attracting A\$7.9 billion in private investment for the State of Victoria. This infusion of private capital was directed into the Victorian Future Fund, providing a buffer against pandemic-induced debts, whilst maintaining State investment in, and oversight of, VicRoads. This demonstrates the potential of private finance to catalyse significant infrastructure developments when synergistically partnered with the public sector."

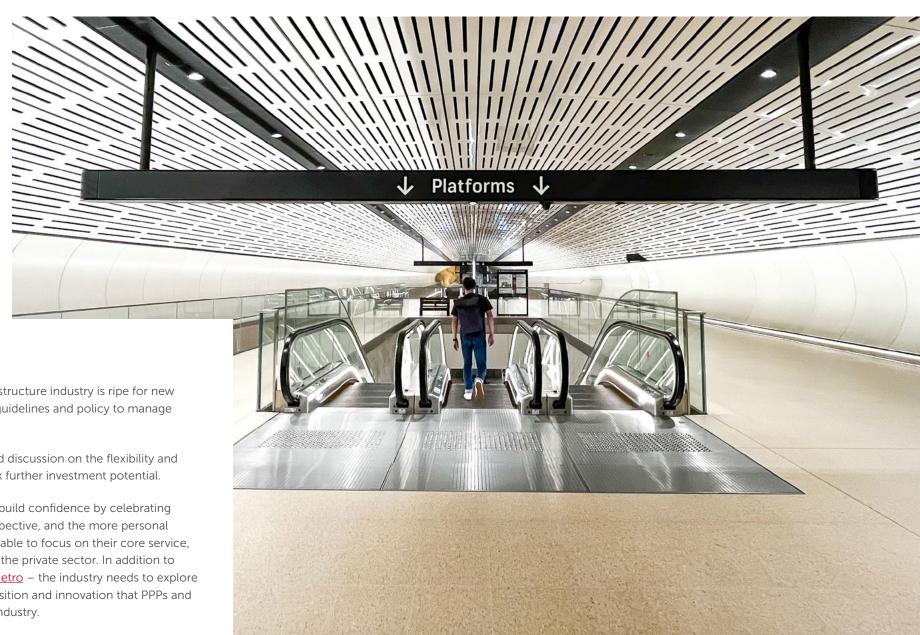
18 MINTERELLISON | INFRASTRUCTURE HORIZONS | EDITION 1

OUR FINDINGS

3 > Capital management (continued)

USPs are a catalyst for industry growth. Following in the New Zealand Government's footsteps, the New South Wales Treasury recently published updates to its <u>business case guidelines</u>, and released a <u>new policy</u> on fast tracking business cases and investment assurance on government capital commitments.

These updated guidelines reflect a streamlined and simplified approach to business case development and allow smaller, lower risk proposals to avoid separate preliminary and full business cases.



#### **Next steps**

A STATE OF THE PARTY OF THE PAR

- Constant refinement to drive growth: Capital management in the infrastructure industry is ripe for new ways of thinking and collaboration, guided by considered government guidelines and policy to manage investor risks and expectations.
- Informed discussions to inspire further collaboration: A more informed discussion on the flexibility and value-for-money benefits of private sector partnerships can help unlock further investment potential.
- Celebrating success to build confidence: In the short term, it's time to build confidence by celebrating successes, both from a value enhancement and financial outcome perspective, and the more personal perspective from doctors, educators and government officials, who are able to focus on their core service, leaving building maintenance and non-core services to specialists from the private sector. In addition to showcasing success stories and learning from them like the <a href="Sydney Metro">Sydney Metro</a> the industry needs to explore what else can be done to re-energise and demonstrate the value proposition and innovation that PPPs and USPs can deliver to government to inject momentum at scale into the industry.

19

Workforce: Competing for talent, rising labour costs and declining productivity

#### The issue

Finding skilled talent to meet the demands of infrastructure projects remains a challenge across the industry. Despite the Australian Government's efforts to promote local employment, local infrastructure employers face strong competition from other industries or attractive international offers in the war for talent.

Uncertainty surrounding Australia's future infrastructure pipeline further intensifies the competition for talent, who seek job security and clear career paths.

Meanwhile, trade unions often leverage labour availability, impacting a project's workforce productivity, costs, and timelines.



## Every participant in the infrastructure industry is struggling to find the right talent, especially in construction

Pipeline uncertainty is impacting this talent shortage, with skilled labour often seeking opportunities in adjacent industries or overseas.

## Industrial action is affecting infrastructure project success, particularly in construction

This has been getting worse in recent times. The industry will need to address this challenge to create more flexible and productive industrial arrangements, so projects don't run over budget and over time.

#### Health and safety remain critical to the industry

Concerns exist about rising, impractical industrial standards. These same measures **can be misused by trade unions** for industrial leverage, causing project cost increases and delays.

Labour is a key risk factor in project negotiations and planning. Interviewees highlighted **a persistent skilled worker deficit in the infrastructure industry** – raising concerns about sourcing the right talent for future projects. Jobs and Skills Australia's 2024 Occupation Shortage List, reported that construction faces the highest workforce shortage pressure (72%), with key gaps in engineering, construction management, trades and truck driving.

**Pipeline uncertainty exacerbates this challenge**, as top talent is "looking to other markets or industries, cherry picking the most attractive roles." Additionally, the global demand for energy transition projects is intensifying competition for Australian workers.



20 MINTERELLISON | INFRASTRUCTURE HORIZONS | EDITION 1 OUR FINDINGS

4 > Workforce (continued)

Despite **government efforts to prioritise local workers and tertiary education initiatives to address talent shortages** – Infrastructure Australia points to the long lead times required to develop infrastructure careers. <sup>5</sup> Interviewees echo this, citing the training required for distinct roles and different projects, and the "repeated difficulties in finding the right people, with the right skills and experience, from our local labour market."

Labour shortages, coupled with industrial relations challenges, are driving up costs **and reducing productivity**. The Australian Bureau of Statistics reported that in the June 2024 quarter, 8,900 working days were lost to industrial action in construction, accounting for 40% of total industry days lost, up from 3,200 in the previous quarter.<sup>6</sup>

The pathway to change is likely to be met with significant disputation by the CFMEU and other unions or require major policy changes, which leaves no option but to create more flexible and productive industrial arrangements. Until then, contractors must navigate their current inflexible arrangements.

In Queensland, the new LNP Government has temporarily suspended the controversial <a href="Best Practice Industry Conditions">Best Practice Industry Conditions</a> (BPIC), previously required for new public-funded projects. The generous BPICs terms and conditions of employment have been widely discussed as leading to declining productivity, project delays and increased labour costs.

Read more about how the Queensland Government is making changes to promote industry competition.

All interviewees agree that **health and safety remain critically important**, but we observed concern that rising industrial standards are becoming impracticable, fostering scepticism about their true intent. Inconsistent safety protocols across jurisdictions add further complexity.

Safety measures can be exploited by unions for industrial leverage, causing project delays. Health and Safety Representatives (HSRs), often union-affiliated, wield significant legislative powers, including issuing stop work orders. As one interviewee notes, "they have the power to bring a job to a standstill." Expanding HSR roles and safety committees further increase site costs.



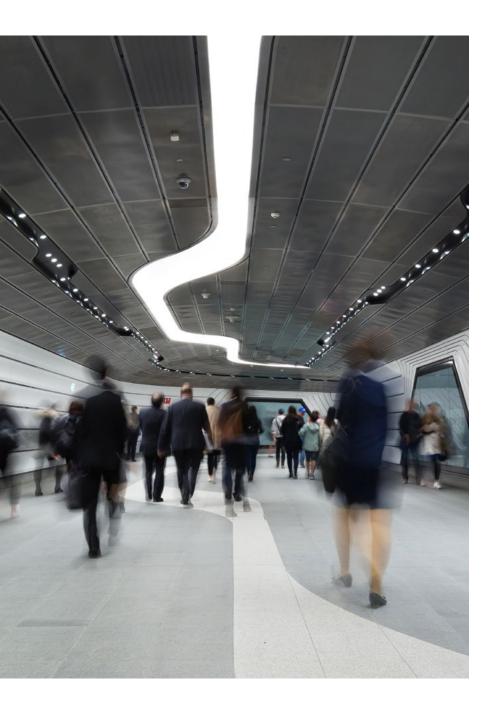
Australia's infrastructure industry faces a projected workforce shortfall of 197,000 infrastructure workers by 2025. Overseas talent can help close this gap and support our infrastructure projects and economic growth. Developing a sustainable, multi-faceted workforce strategy – underpinned by policy reform – is essential to balance domestic with international talent in this vital industry."



<sup>&</sup>lt;sup>5</sup> Infrastructure market Capacity 2023 Report, Infrastructure Australia, 2023

<sup>&</sup>lt;sup>6</sup> Australian Bureau of Statistics, 2024

4 > Workforce (continued)



In an effort to promote competition and increase productivity, the new Queensland Government is planning to introduce legislation to re-establish the <u>Queensland Productivity</u> <u>Commission</u>, which will conduct a review of the building industry in the State.

Different policy requirements may be implemented with a focus on competition and productivity. It's also possible that there will be a form of policy (akin to the former Code for the Tendering and Performance of Building Work 2016) which will influence procurement moving forward.

The current strategy of essentially delegating the recruitment, training and deployment of labour in most trades to subcontractors has obvious financial and risk advantages in a transactional project-based industry. However, in a labour-constrained environment, where head contractors increasingly wear and pay for the risk associated with this model, and with a predictable project pipeline in some sectors, is this the best strategy for the next five-ten years? Fracturing and disruption of the union environment also adds unpredictable future risk. Whoever controls critical skills may flourish. It may be time to consider labour strategies which take back that control. There are engagement models available which can reduce the risk and cost."

#### **Next steps**

- Boosting the labour force: Labour is a lynchpin in the industry and can make or break a project. Given the drivers within the system, the only real way to generate increased productivity and more palatable labour cost outcomes is with an influx of labour into the market and a clear procurement focus on value and competition. The Government's New Energy Apprenticeship Support Program<sup>7</sup> is a start but only provides one part of the solution. Boosting the tertiary pipeline to address the declining supply of apprentices and trainees will take time, with some participants we interviewed taking matters into their own hands to plug capability gaps and grow their workforce through graduate programs.
- Looking overseas to fill the gap: The Australian Government's migration strategy places a strong emphasis on temporary skilled migration. In December 2024, the Federal Government introduced the Skills in Demand visa to help address critical skills shortages. This initiative includes commitments to clear service standards for visa processing times, which will aid in workforce planning, and provides skilled migrants with more defined pathways to permanent residency.
- Unlocking further productivity gains: Innovative construction methodologies may be the only other way to unlock productivity gains however the openness of the market to take on the risk of new methodologies in Australia is unknown.



22

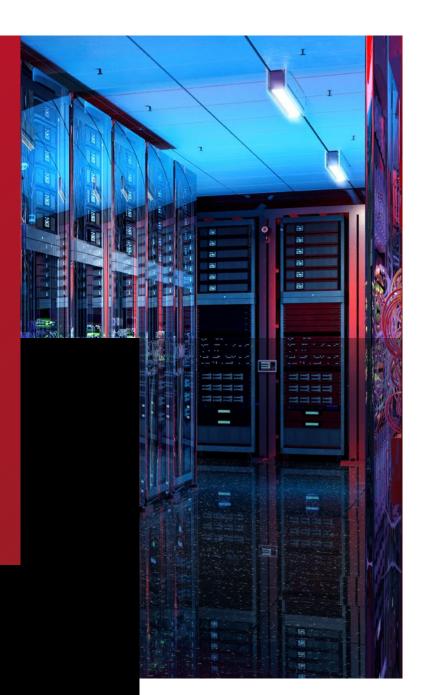
## 5 > Innovation and technology: Same, same but better

#### The issue

Innovation and technology represent value – because together they can improve productivity, quality, and speed to market. This is certainly easier said than done.

The Australian infrastructure sector has significant potential for innovation, but lags behind global standards due to slow adoption, skills gaps, and a risk-averse culture. Procurement processes focus on compliance over performance, which can hinder take-up and full utilisation of tool such as Building Information Modelling (BIM), and Modern Methods of Construction (MMC).

Pipeline uncertainty and regulatory challenges further slow progress, with Artificial Intelligence (AI) adoption primarily focused on safety applications and MMC facing scalability issues due to unpredictable demand.



## Despite its potential, the Australian infrastructure industry is slow to adopt innovation and lags behind overseas markets

A widespread lack of trust and prioritisation of emerging technologies, coupled with significant skills gaps, hinders progress. Many professionals have experienced lower levels of adoption of technologically based innovation in Australia than in other markets, while concerns around quality, safety, and deliverability risks may be reinforcing a risk-averse culture among infrastructure owners and contractors.

#### Procurement processes are a major barrier

We need to shift from an overwhelming focus on compliance and past experience to one on performance and outcomes. Contractors face resistance to innovation, while project owners cite inconsistent expertise among suppliers. Digital scope is sometimes seen as an afterthought, with insufficient attention and investment before and during the procurement process.

#### Despite some of these barriers, optimism remains

Al can enhance automation and decision-making, while MMC can drive productivity and quality improvements under the right pipeline and procurement policy settings and with overarching industry support. Overcoming these barriers will require a cultural shift and strategic investment.

#### Data centres provide a 'new' asset class for infrastructure investment

Digital acceleration requires significant energy and processing power. Data centres are becoming key areas of interest for traditional infrastructure investors. Irrespective of the competing market shares between technology rivals, the major base load energy requirements of data centres will also spur investment in secondary markets for baseload and green energy.



5 > Innovation and technology (continued)



Non-traditional approaches such as MMC can help improve quality and productivity across sectors. Ultimately, this could also help stabilise costs and timeframes on mega projects all the way through to small scale delivery and asset management. However, we'll need appropriate procurement, commercial and policy settings in order to take advantage of these opportunities."



Interviewees identified significant potential for increased innovation and technology use within the infrastructure sector. However, they acknowledged that the Australian industry is "slow to adopt new practices, and continues to lag behind international standards, particularly when compared to Europe."

A key barrier to technology-driven innovation is the **widespread lack of trust and prioritisation**, compounded by a skills gap across the industry. Many interviewees identified a lack of widespread expertise to implement emerging technologies such as AI, digital twins, and modern construction techniques. Concerns about "quality, safety, and deliverability risks" contribute to this reluctance, particularly from the perspectives of infrastructure owners and contractors.

Procurement processes were cited as a major obstacle to innovation, with most interviewees noting that "the focus remains on compliance and past experience, rather than on performance and outcomes." Contractors expressed frustration that clients often respond negatively to innovative proposals, while project owners observed varying levels of enthusiasm and expertise among suppliers. Additionally, budget allocations tend to prioritise physical infrastructure over digital and technological solutions, which are frequently considered later in the project lifecycle rather than being integrated from the outset. On the supply side, there is a prevailing perception that "insufficient funding limits the ability to fully explore and implement new technologies."

Al adoption in the Australian infrastructure industry has been relatively slow, with its primary use currently focused on safety applications such as hazard identification and monitoring. Government interviewees displayed significant risk aversion regarding Al, "particularly when it comes to handling sensitive information", while contractors expressed concerns about the "lack of explainability in Al systems." Legal concerns around liability further hinder its uptake. Importantly, interviewees agreed that building trust is crucial to widespread Al adoption.

Australia's regulatory frameworks are largely based on the principle of legal responsibility, which poses challenges in assigning accountability for Al-driven decisions.

Nevertheless, separate polling of 100 construction clients by MinterEllison in August 2024 confirms **there is optimism that as AI becomes more tailored and sophisticated**, its adoption will accelerate. Polling revealed that while 60% of construction clients are beginning to use AI, only 8% do so frequently. A further 74% recognised AI's potential in their current roles but believed further development is required before widespread implementation.

Modern Methods of Construction (MMC) were also highlighted as a promising avenue for improving productivity, speed, and quality in the industry. However, scaling MMCs remains challenging due to perceived risks such as "insufficient quality, durability, and safety" from the perspective of infrastructure owners. Contractors also face risks related to deliverability, compliance costs, and client rejection. Furthermore, the "lack of predictable demand makes it difficult" to establish a reliable and high-quality supply chain. Despite these challenges, interviewees see MMC as a valuable tool to help address workforce constraints by leveraging the skills and capacity of smaller specialist contractors. Government initiatives, such as the Australian Building Codes Board's proposed Building Product Registration Scheme, aim to provide assurance around supply chain quality and support innovation in the industry.

Find out how the New South Wales and Queensland State Governments are prioritising MMCs.

Overall, interviewees agree that **embracing innovation and technology will be key to enhancing productivity and workforce engagement.**However, achieving this will require addressing existing barriers related to skills, trust, funding, and regulatory frameworks.



5 > Innovation and technology (continued)

Without a clear strategy, government funding cannot support the introduction of MMC. The New South Wales Government's proposal, 'Modern Methods of Construction Taskforce' and Queensland Government's 'Modern Methods of Construction Program' both set out clear plans for the implementation of off-site manufacturing. These coordinated strategies provide a clear pipeline; ensuring consistency in projects and work through standardisation in design, streamlined regulations and support for growth and capacity in the industry. This level of government commitment is essential to creating more efficient, sustainable and resilient construction systems, including MMC. Both State Governments are committed to using MMC to build quality homes, faster.

In his announcement on 13 November 2024, the Federal Treasurer Jim Chalmers emphasised MMC as an area of focus, with intentions to "build greater technical efficiency... lift allocative efficiency and... drive dynamic efficiency." The new A\$900 million National Productivity Fund will reward States and Territories for enacting productivity-enhancing reforms, further incentivising uptake of MMC and other productivity-enhancing technologies.

#### Next steps

- Global MMC insights: Lessons can be learned from the UK Government's commitment to using MMC in capital programs, which resulted in a marked increase in utilisation 2023 figures report 16% of new house builds employed MMC in some way.<sup>8</sup> However secure pipelines are key or modular home builders will face significant challenges in sustaining their operations.
- Making innovation business as usual in procurement: This includes developing and defining necessary financing, contracting, procurement, and commercial models, alongside a strong outcome orientation. For example, procurement frameworks should shift from a compliance-based approach to one that prioritises performance and outcomes. Governments and project owners could revise procurement policies to incentivise innovation, both during the procurement process and during the project lifecycle. This could include adopting outcome-focused procurement models, setting innovation benchmarks, and offering pilot programs to test emerging solutions with reduced risk exposure.
- 3 Frameworks to support innovation at scale: The industry could advocate for digital scope, as well as emergent delivery tools, to be embedded into all relevant projects from concept stage onwards. Targeted government incentives e.g. tax concessions could help encourage investment to scale MMC, 3D printing and other innovative construction solutions, in exchange for prioritised supply in target areas (e.g. affordable housing). Financiers can play a key role in developing suitable frameworks (e.g. to accommodate a greater level of off-site construction activity than in traditional construction).
- 4 Safe and rapid Al adoption: The industry needs to embrace Al safely and swiftly. Notable achievements are happening overseas, such as in the area of predictive analytics. Although this won't solve our labour shortages, Al can help support an uplift in productivity and efficiency.





We are entering a vital new era of regulation – the Australian Government recognises our current regulatory system is not fit for purpose. By implementing new guardrails designed with an international outlook and Al's future in mind, we can positively influence Al adoption across the economy. This will require new robust governance and risk management protocols to inspire trust, along with increased transparency in Al processes."

25 MINTERELLISON | INFRASTRUCTURE HORIZONS | EDITION 1

#### OUR FINDINGS

## **Decarbonisation**: The energy transition is facing headwinds

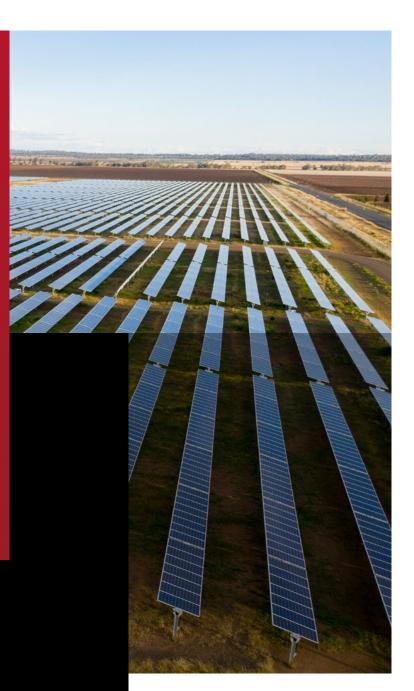
#### The issue

Australia's ambitious energy transition targets aim for 82% renewable energy in the National Electricity Market (NEM) grid by 2030, requiring significant infrastructure investment. The A\$20 billion *Rewiring the Nation* initiative is a major step to support this goal, attracting strong market interest.

As the number of traditional infrastructure projects decline, focus is shifting to energy infrastructure, whose success is closely tied to the nation's energy transition progress.

Despite the opportunities, challenges remain. Project delays, fiscal constraints, inconsistent regulations, grid connection uncertainties, and skilled labour shortages pose significant risks. Social licence issues and inconsistencies between federal and state governments further hinder progress, while concerns about union involvement in transmission projects add to market hesitancy.

However, optimism is growing, with the market signalling confidence in Australia's energy transition prospects given greater government coordination and support.



### Unpredictable project pipelines and slow progress may affect market interest

Infrastructure Partnerships Australia warns of an "air bubble" between the transport infrastructure cycle and upcoming energy projects, potentially leading to underutilised resources and workforce challenges. Accelerating planning and approvals is essential to maintain industry momentum.

## Inconsistent regulatory frameworks in the States and Territories are adding layers of complexity

Interviewees indicated a desire for a more streamlined, national regulatory framework and clear investment signals to inspire confidence.

#### Thorough community and stakeholder engagement are key

This is a critical yet time-consuming challenge, essential for addressing NIMBY-ism (not in my backyard) and building support for transmission projects and renewable energy zones (REZs). Additionally, concerns about unions targeting transmission projects as the next industrial battleground could impact productivity and efficiency.

#### Energy demand up, but market and regulatory risk remains a concern

Electricity demand remains strong with significant levels of generation, firming and long-duration storage required to replace the retiring coal fleet. Transmission projects (REZ and interconnectors) are generally well advanced and will proceed. Higher costs for consumers and political developments in the United States, among other things, have obviously broken a near-consensus domestic view on the benefits of variable renewable energy (VRE) which has resurfaced as a major federal election issue.



6 > Decarbonisation (continued)

The availability of hedging/offtakes remains an acute issue for developers, who are increasingly looking to the government supports scheme (CIS scheme federally and LTESA in New South Wales) to mitigate market risk. However, the CIS scheme will end in 2027 and there remains uncertainty on the outcome of the NEM wholesale market settings review and how it will promote investment in firmed, renewable energy and storage capacity post-CIS. A Coalition government's approach to the CIS or these future plans together with its proposed move towards nuclear and gas baseload generation 'balancing' renewable energy generation is also causing a conservative approach to investment.

#### Strong support for wind and battery projects

From a systems perspective greater attention is being given to patterns of congestion and to getting more wind into the system, and to coordinating investments across a large number of generators/developers. However, this is a work in progress. Falling input costs have also driven recent explosive growth in BESS projects.

Interviewees acknowledged the ambitious goal of achieving 82% renewable energy in the NEM by 2030, which will require substantial investment in wind, solar, hydro, and energy storage infrastructure. The Australian Government's *Rewiring the Nation* initiative, with A\$20 billion in concessional financing, has attracted significant market interest, particularly in New South Wales transmission projects.

As the number of traditional social infrastructure projects diminish, interviewees are increasingly focused on energy transition and related asset classes, "such as crucial components like data centres, recognising these depend on the availability of green energy."

When it comes to the energy infrastructure pipeline, interviewees reflected on five main challenges which could slow progress and deter investment:

- Slow project progression: Many interviewees feel that energy projects are moving too slowly through regulatory and planning processes. This delay raises concerns of what *Infrastructure Partnerships Australia* has termed an "air bubble," where the current transport infrastructure boom ends before energy transition projects scale up, leading to resource underutilisation and workforce disruptions;
- Fiscal constraints: Concerns exist around the Government's fiscal capacity to support all planned transition projects, with market participants urging careful prioritisation of the right investments to avoid overextension;
- Regulatory complexity: The lack of a streamlined national regulatory framework is seen as a significant challenge. Each state and territory operates under its own regulations, creating confusion and slowing investment decisions. Interviewees advocate for a "unified national framework to inspire greater confidence";
- Grid connection risks: Obtaining grid connection approval remains a
  major bottleneck, with approval processes taking up to six years due
  to technical and supply chain challenges, as well as backlogs at the
  Australian Energy Market Operator (AEMO). These delays threaten project
  viability and timelines; and
- Social licence and community resistance: NIMBY-ism remains a significant barrier, particularly for large-scale transmission projects and REZs. Interviewees believe that more effort is needed in "community awareness and early engagement to build trust and demonstrate the long-term benefits of energy projects." At the ground level, social licence, workforce, planning and environmental factors remain key issues.

Interviewees also highlighted workforce-related risks that could impact the successful delivery of energy infrastructure projects. One interviewee said, "there are not enough skilled workers (both blue and white collar) for the needs of the energy and renewables." Many others expressed concern that skilled workers from transport infrastructure projects may shift to other sectors or countries, exacerbating labour shortages. Attracting workers to remote REZs is also a challenge due to limited access to housing and amenities. The renewable energy sector's current investment in skills development and training is seen as insufficient to meet future demands. Some participants also expressed concerns that unions may target transmission projects for industrial disputes, potentially "causing disruptions and inefficiencies in project delivery."

Inconsistencies between federal and state governments present additional challenges. For instance, while Victoria has ambitious offshore wind goals, the federal government's recent decision to refuse an associated enabling port project over ecological concerns has created uncertainty. These mixed signals undermine market confidence and hinder long-term planning.

Although the government's roll out of designated Renewable Energy Zones has been slower than anticipated, private sector interest in renewables projects in these zones is growing, playing a crucial role in Australia's energy transition and progress towards net zero emissions. For example, we were pleased to assist Pacific Partnerships and the CIMIC Group on its recent acquisition of *Cobbora Solar Farm* situated in the Central-West Orana Renewable Energy Zone in New South Wales. This project exemplifies the power of activating private sector investment in driving modern infrastructure and decarbonisation."

27 MINTERELLISON | INFRASTRUCTURE HORIZONS | EDITION 1

OUR FINDINGS

6 > Decarbonisation (continued)

Energy transition projects are progressing well in New South Wales as a result of private and public sector collaboration, such as the recently acquired Cobbora Solar Farm situated in the Central-West Orana Renewable Energy Zone.

Once developed it will be one of the largest solar farms in Australia, projected to generate enough clean renewable energy to power 280,000 average-sized homes, across an area that can accommodate up to 1600MWh of BESS to supply energy on demand. The development rights were purchased by Pacific Partnerships, which will manage development, delivery and operations.

The Cobbora Solar Farm will connect to the national network via infrastructure to be delivered by EnergyCo NSW as part of the CWO REZ. Pacific Partnerships will proactively engage and share benefits with the regional community, as demonstrated through its positive community engagement approach at Glenrowan Solar Farm in North East Victoria. 10

#### 11

Current trends are favouring participants with greater experience, access to supply chains and resources, genuine down-to-earth engagement and a sophisticated and nuanced understanding of risk. Energy will continue to be an area of greater opportunity for those able to anticipate forward trends."

#### Next steps

- Coordination and consistency to enable momentum: A more coordinated effort by governments to address regulatory, workforce, and social concerns is seen as critical to maintaining momentum and ensuring Australia remains a favourable destination for infrastructure investment.
- Early community engagement by developers is key on all energy transition projects: Concerns can vary from environmental to aesthetic, land usage rights to a lack of understanding of equitable or economic benefits. Engaging transparently and collaboratively with local stakeholders and traditional owners is important at all stages to gain social license to develop.
- Taking a whole of life approach: Whilst there is a natural tendency to focus on the early delivery stage, long-term success in regional settings requires the attraction and retention of a regional workforce. Communities are also increasingly aware of end of life and remediation considerations of renewable energy projects, and these will need to be increasingly considered and planned for upfront.



28

## **ESG:** A complicated opportunity

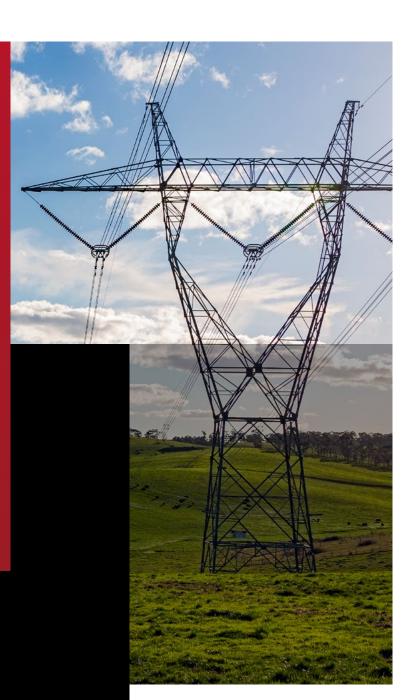
#### The issue

By embedding ESG principles, Australian infrastructure can achieve long-term resilience, community acceptance, and sustained economic growth. However, practical and financial challenges persist.

Key concerns include unclear funding for sustainability initiatives, inconsistent ESG evaluation across projects, and difficulties retrofitting ESG into legacy infrastructure.

The complexity of balancing environmental goals with social expectations – such as community opposition – adds further challenges. Despite these hurdles, the industry is adapting, with trends emerging in renewable energy adoption, community engagement, and governance improvements.

Organisations are embedding ESG principles into decision-making processes, while governments are adjusting procurement frameworks to attract private investment.



#### In-flight and legacy projects face ESG implementation challenges

Interviewees confirmed that the infrastructure industry is adapting to ESG integration across planning, delivery, and operations – but financial constraints are slowing progress. Government procurers struggle with unclear funding for sustainability initiatives, and the gap between perceived and actual financial value placed on ESG persists. Retrofitting ESG standards into existing projects adds complexity, emphasising the need for whole-of-life assessments over capital cost considerations to achieve meaningful ESG outcomes.

#### Consistent ESG evaluation is needed across all infrastructure projects

Early ESG integration in project planning and clear communication during funding proposals are essential for achieving sustainability goals. However, the industry lacks consistent approaches across different projects, with inadequate frameworks to measure long term ESG value and ESG performance. Stronger collaboration between governments and suppliers is needed to ensure alignment with ESG targets and expectations.

#### Mandatory climate-related reporting is posing challenges

While climate risk consideration is critical for resilient infrastructure, gathering accurate emissions data across the supply chain remains a significant challenge. Infrastructure providers and governments must invest in better data collection and management systems to meet compliance requirements and drive sustainable outcomes.



7 > ESG (continued)

Interviewees acknowledged the increasing importance of ESG considerations in infrastructure at "both the corporate and project levels." However, many interviewees highlighted significant practical and financial challenges in embedding ESG into infrastructure planning, delivery, and operations. Many projects, particularly in-flight and legacy infrastructure, face difficulties retrofitting evolving ESG standards due to funding uncertainties and misalignment between perceived and actual financial value placed on ESG by government procurers. One interviewee stated, "there is an ongoing tension between price and value."

The industry is progressing in ESG integration, but financial constraints are slowing implementation. Interviewees noted that **limited funding** for sustainability initiatives, such as renewable energy solutions, makes it difficult to achieve ESG goals. For example: "there is an upfront cost to ESG initiatives, so they are often the first thing to 'go in the bin'". Most interviewees stressed the importance of adopting whole-of-life assessments over capital cost evaluations to avoid undermining ESG outcomes and ensure long-term sustainability benefits.

A key challenge is the lack of consistency in how ESG is integrated and evaluated across projects, particularly those involving government entities. The absence of standardised frameworks creates discrepancies in ESG performance measurement and target-setting. Interviewees cited that "clearer communication and alignment between governments, suppliers, and project stakeholders are needed" to ensure consistency in ESG implementation.

While climate risk consideration is seen as critical for resilient infrastructure, gathering emissions data across the supply chain is proving to be a significant hurdle. Infrastructure providers face complexities in "collecting accurate data to meet mandatory climaterelated reporting requirements," which will likely pose challenges for government compliance.

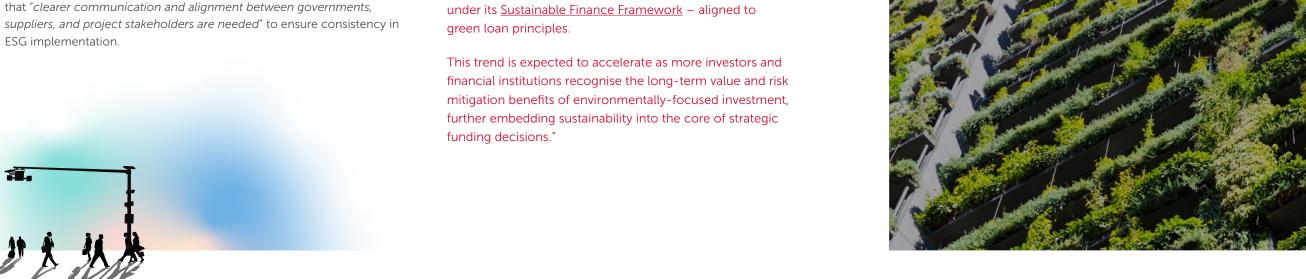
The art is in the balance; ESG objectives do not always align seamlessly - balancing environmental, social, and governance factors can create conflicts. For instance, the urgency to develop renewable energy projects can be slowed by the need for extensive stakeholder and community engagement, as well as concerns over biodiversity impacts. Most interviewees emphasised the need for better coordination to align sustainability goals with stakeholder expectations.



Green financing is already playing a key role in meeting ESG targets across the infrastructure industry. For example, in Victoria, the Government's A\$449.1 million Nyaal Banyul Geelong Convention and Event Centre precinct development, was partly funded by way of a Green Loan

The infrastructure industry is gradually adapting and evolving ESG **practices**. Key trends include a stronger focus on renewable energy integration, use of sustainable materials, and biodiversity initiatives within infrastructure projects. Social considerations, such as local employment, social equity, and community engagement, are also gaining prominence. On the governance front, several interviewees are implementing more sophisticated ESG strategies, with dedicated ESG committees and leadership roles ensuring alignment with longterm sustainability goals.

Last but not least, interviewees believe attracting additional private sector investment requires governments to realign procurement, planning, and delivery frameworks to facilitate ESG integration. A more collaborative approach between the public and private **sectors is necessary** to create sustainable infrastructure that aligns with national ESG ambitions.



7 > ESG (continued)



At MinterEllison, we strive to think beyond compliance, recognising the long-term strategic value that integration of ESG and sustainable business principles can provide. Whilst mandatory climate-related reporting, for example, presents challenges – such as gathering accurate emissions data across the supply chain – it also helps infrastructure players to identify strategic risks and opportunities arising for them as Australia transitions to a lower carbon economy."

Sustainability played a key role in the transformative A\$449.1 million Nyaal Banyul Geelong Convention and Event Centre precinct, one of the biggest developments in regional Victoria. The centre will comprise a purpose-built convention and exhibition space with a 1,000-seat venue, two large exhibition spaces, conference facilities, flexible event spaces and meeting rooms with prime views of Corio Bay.

The Plenary Group consortium is sponsoring, investing and managing this significant asset for the Victorian Government, with a view to completion in 2026. Our team facilitated comprehensive financing negotiations and pivotal partnerships between Plenary Conventions, the Victorian Government and the consortium members ensuring the success of this visionary project – while ensuring green financing was included by Plenary Conventions in the form of a Green Loan issued under the project's Sustainable Finance Framework, which is aligned to green loan principles. In addition, Plenary Conventions has committed to a 5-Star Green Star rating for the GCEC with a pathway to achieve a 6-Star rating. From navigating complex financing to fostering seamless collaboration, we're proud to have played a key role in bringing this purpose-built, waterfront convention space and adjacent hotel and commercial developments to life in a way that upholds ESG targets.

#### **Next steps**

- Whole-of-life ESG assessments: To ensure long-term sustainability, industry stakeholders must prioritise whole-of-life assessments over upfront capital costs. This needs to be led through transparent and clear published assessment criteria that allow private sector bidders to understand their relative importance. This shift will help bridge the gap between price and value, ensuring ESG initiatives are not sidelined due to short-term financial constraints.
- Standardise ESG implementation: Achieving consistent ESG integration requires clear frameworks and alignment across government, suppliers, and project stakeholders. Standardised approaches to ESG performance measurement and reporting will build confidence and drive better outcomes.
- Strengthen climate reporting capabilities: To comply with mandatory climate-related reporting, infrastructure providers must invest in robust data collection systems. Collaboration across the supply chain is essential to gather accurate emissions data and meet evolving regulatory requirements.
- Balance sustainability and stakeholder needs: Balancing ESG objectives with project timelines and stakeholder expectations is critical. Early and proactive community engagement can help address concerns while maintaining progress on sustainability goals.
- Foster public-private collaboration: Government and industry must work together to align procurement and delivery frameworks, and incentivise the private sector to unlock and accelerate ESG integration across infrastructure projects.



MINTERELLISON | INFRASTRUCTURE HORIZONS | EDITION 1

## & / Australian housing:

Ambitious targets require an innovative solution to drive transformation

#### The issue

Australia has a significant and persistent housing issue, widely accepted to be at crisis-level. The issue is two-fold: supply shortages affect the availability of new housing, while increased demand challenges housing affordability.

Data from the Australian Bureau of Statistics confirms that FY24 was the worst in over a decade for new home approvals and commencements. <sup>11</sup> This was compounded by interest rates and inflation, material and skills shortages, and the post-pandemic resumption of migration and urbanisation. <sup>12</sup>

Housing prices has put further pressure on social and affordable housing, with waiting lists and homelessness rising and a genuine concern for many that the "Australian Dream" of home ownership is now out of reach.



## The Federal Government's 1.2 million new homes target by 2029 is ambitious but also driving transparency in delivery outcomes

To meet the target, approximately 60,000 homes need to be built each quarter. However, recent data indicates that only 44,884 homes were completed in the September 2024 quarter, falling short of the required pace.<sup>13</sup> Overcoming this shortfall will require essential collaboration across the national infrastructure industry to find the necessary land, skills and resources.

## State governments are seeking private sector skills, resources and finances to help meet targets

Despite the current challenges that are slowing down transparent collaboration and risk allocation between the sectors, State Governments are making tracks to work in partnership with the private sector.

## Private sector interest may be impacted by the first round of funding announced by the Federal Government in September 2024, but goodwill exists

The Housing Australia Future Fund Facility (HAFFF) and the National Housing Accord Facility (NHAF) selected a preferred pipeline of 185 projects for funding,<sup>14</sup> but interviewees indicated that work needs to be done to improve risk allocation and meet individual State nuances.

<sup>&</sup>lt;sup>11</sup> Australian Bureau of Statistics, 2024

<sup>&</sup>lt;sup>12</sup> The PropTrack Affordability Report, REA Group, 2024

<sup>13</sup> Real Estate.com.au, 2025

<sup>&</sup>lt;sup>14</sup> Housing Australia, 2024

8 > Australian housing (continued)

The Federal Government has identified the need to address our housing shortfall, **targeting 1.2 million new homes by 2029.** However, the National Housing Supply and Affordability Council's State of the Housing System 2024 report estimated that due to building industry constraints, complex planning processes and a lack of land to build on, this 1.2 million ambition is likely to fall short by more than 250,000 homes. Housing System 2024 report estimated that due to build on, this 1.2 million ambition is likely to fall short by more than 250,000 homes.

The Federal Government's Housing Australia Future Fund Facility (HAFF) funding initiative, administered by Housing Australia to support the delivery of 30,000 social and affordable homes nationally over a 5-year period, has generated a lot of market interest.<sup>17</sup>

A preferred pipeline of 185 projects received conditional first round funding in September 2024. On 31 January, Housing Australia announced the approval of 12 project contracts within the initial pipeline. Preferred applicants from round one have until 30 June to enter into funding agreements. Projects which received conditional round one funding were mostly "further developed" or "shovel ready". Interviewees shared that there is still work to be done to "align risk profiles with the latest market conditions", as well as "find more alignment between Housing Australia and the States, where applications relate to the development of State land." We also heard some concerns around cost and time outlays for the bidding process generally. Unaligned risk profiles, different state processes and protracted and costly bidding and negotiation create further delays on top of the practical complications of construction.

State governments are looking to leverage private capital and skills to respond to the housing crisis. One interviewee said that "the only way to get things done at scale and speed is partnering with private sector. Particularly for housing." We can already see this happening across the States.

Read more about how Victoria, Queensland, New South Wales and Western Australia's State Governments are working in partnership with the private sector to meet housing demands.

The discussions with our clients confirmed there is both **goodwill and** strong appetite to engage in tackling housing challenges, including:

- Community Housing Provider (CHP) capacity; and
- The need for bespoke models by both State and site, with interviewees noting that site aggregation may be possible, but with impacts to efficiency.

Moving forward, developing regional Australia is crucial to ease the escalating urban congestion pressures felt by capital cities caused by population growth. There are plenty of high-growth potential regional areas but the scale and speed of development in these regions are limited as the complementary public infrastructure required to facilitate the growth of regional communities such as schools, healthcare and transport will also take time.

Despite the high risk and high cost of large-scale investments, these projects will be required to alleviate urban pressure.





The housing crisis is too big for government to solve alone. Wyn Carr House in Western Australia – which will offer transitional accommodation for women over 55 facing homelessness – exemplifies what's possible when the private sector takes the lead in addressing our housing crisis by incubating solutions – no matter the scale of the project. By identifying mothballed but well-located assets owned by the NFP sector and then securing significant private sector pro bono contributions and donations of goods and materials, we helped create a compelling case for government investment to repurpose existing accommodation."



<sup>&</sup>lt;sup>15</sup> State of the Housing System, National Housing Supply and Affordability Council, 2024

<sup>&</sup>lt;sup>17</sup> Housing Australia, 2025

8 > Australian housing (continued)



The Victorian State Government is successfully working in partnership with the private sector through its **Ground Lease Model to deliver 1,120** social, affordable and market rental homes. Homes Victoria maintains ownership of the land but outsources finance, delivery, operations and maintenance to the private sector, allowing for developments of greater scale and speed. This innovative partnership model increases opportunities for residential developments that may not otherwise be feasible for either party.<sup>18</sup>

While the Victorian implementation focuses largely on redeveloping existing public housing sites, the Queensland State Government has earmarked the possibility of applying a similar model to retrofit vacant State-owned land, though finding land with sufficient scale could be challenging.

Meanwhile, the New South Wales State Government has identified Government-owned sites suitable for new housing as part of its surplus land audit (it held a registration of interest process in December 2024), in addition to the eight high priority growth areas near transport hubs in greater Sydney which will be rezoned to fast-track housing.

The Western Australian State Government has adopted a similar approach to New South Wales in terms of identifying and taking substantial government sites to the market and inviting bids from private sector and CHP consortia.

#### **Next steps**

- New approaches for better outcomes: The Federal Government's bold ambition and national housing crisis demand new ways of thinking, working, and innovation across Australia's entire infrastructure industry. For example, a portfolio-driven approach will enable Government to standardise models for CHA/private sector utilisation of State-owned land. This will trigger a move beyond the consideration of individual site-based parameters, to broaden portfolio-based risks and benefits analysis.
- Scaling to deliver faster, better: The industry needs to develop models and find opportunities for aggregated site development to leverage scale, efficiency, and market engagement.
- Adapting to meet societal needs: The government needs to leverage private sector innovation, coupled with government support, to deliver affordable housing projects in high-demand areas. This could involve adapting uniform national standards and codes to support uniform growth.
- Regional Australia plays a crucial role: Projects in regional Australia will be required to alleviate escalating urban congestion pressures felt by capital cities caused by population growth. As the energy transition will take place outside of major centres, there will also be a need to develop housing and other supporting infrastructure to attract workers to these areas



#### Our team

E owen.cooper@minterellison.com

E meredith.riley@minterellison.com

E sian.keast@minterellison.com

E jonathon.williams@minterellison.com





Ranked Band 1 in both Infrastructure and Construction

"MinterEllison has very good breadth of experience with a strong core delivery team."

MinterEllison