Property and Construction Report

ADAPTING TO A CHANGING MARKET IN 2023

Find out what's impacting the Australian construction industry.

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FOREWORD

In this report, we provide a comprehensive review of the headwinds and challenges the industry faced in 2022, as well as a preview of the opportunities that lie ahead.

It gives me great pleasure to introduce RSM's Property and Construction Report: Adapting to a changing market in 2023, this thought-leading publication delves into the building and construction industry and the many issues our in-house technical experts can resolve for clients in this industry.

It would be remiss of me to gloss over the economic, financial and geo-political issues the industry has both dealt with and overcome in the past year. Many RSM construction clients have had a challenging couple of years, and the industry more broadly has faced tough trading conditions resulting in a wave of liquidations and administrations. This is not something that you'd wish on any business or individual.

To understand industry sentiment, we conducted a survey of more than 40 Australian builders, developers and investors in 2023. Over 50% of the businesses surveyed have been operating for more than 15 years. Additionally, more than 12 businesses surveyed reported an annual turnover ranging from $50 million to more than $400 million. Thirty one respondents reported working with 10 to 100 contractors and five reported managing more than 200 contractors.

When reflecting on the most challenging aspects of 2022, material costs were identified as the most difficult, followed by cash flow, staffing and interest rates. Other significant concerns included supply chain, access to funds and increased scrutiny on the industry. When asked to identify unanticipated risks that materially impacted the profitability of their business over the past 24 months, respondents ranked material cost increases, followed by labour and then weather.

Unfortunately, many of these challenges, such as the rapidly rising rate cycle we find ourselves in, the increase in cost to shipping, fuel and materials, chronic labour shortages and supply chain issues that have had knock-on effects across the building and construction sector, continue to exist as another year gets underway. This was confirmed by our survey respondents who considered the biggest risks to business operations and revenue forecasts in 2023 to be labour, followed by material costs and rising interest rates.

It was particularly interesting to note that more than half of the industry participants we surveyed (51.61%) have already changed their contract terms in 2023 to better protect their business revenue and gross margin, including adding new clauses that allow for delivery delays or price escalations.

Our experts have come together to produce this report to identify key areas of growth, as well as potential solutions and opportunities, which will assist our clients to move forward and, in many respects, enable them to think outside the box.

This publication is an exemplary demonstration of this knowledge. Written from a business perspective and founded on a deep understanding of the building and construction industry, it provides oversight and practicalities applicable to our clients.

We look at how to adapt to a changing market, delve into the build-to-rent phase and address the need for greater governance in an era of cyber-crime and rapid digital change.

Rather than sitting on the sidelines, this is a time for leaders, directors and boards to upskill and upscale key areas of business. It is time to look ahead, rather than behind. It is time to use experts, such as RSM, to guide and advise you to get through the next phase of your business cycle, in the best way possible.

This is not a time to dwell on the negatives as I believe there are opportunities available for those prepared to innovate and diversify their business operations in 2023.

From talking with our clients, there are many positives for the year ahead. Almost 26% of our survey respondents ranked easing of resourcing issues, including increasing migration, as the biggest opportunity in 2023. Other things respondents said they look forward to in 2023 include working in new or different sectors (25.81%), increased investor confidence (12.90%), government investment in infrastructure projects (12.90%), improved relationships with business partners (12.90%), and potential acquisitions (9.68%).

Growth is high on the agenda for industry participants, with 45.16% of respondents identifying it as what they're focusing on this year, while 35.48% are looking to rationalise operations and 19.35% are staying the same.

Confidence is up, with 58.06% of respondents believing that they will bring in more revenue this year compared with 2022.

When looking at the pipeline of upcoming work, most respondents said they had the right balance of staff required (51.61%), while 35.48% said they had too much work for the staff they have.

Looking further ahead, 54.84% of respondents said that the Federal Government should introduce funding measures or initiatives in the upcoming 2023-24 Federal Budget to support the construction industry. Suggestions included faster planning and regulatory outcomes, supporting employers for flexible work arrangements, introducing skilled migration visas specific to the construction industry, and government supported bonding facilities through EFIC.

We thank you for taking the time to read and consider the trends identified in this report and should you have any questions about its contents, we welcome your call or email. Please get in touch if we can assist your business in taking advantage of the current climate.

Adam Crowley
National Leader, Property and Construction, RSM

1. Adapting to a volatile market: Good governance helps to gain traction

By Adam Crowley, National Leader, Property and Construction, RSM

GOOD GOVERNANCE ROAD MAP

- Do you have a map of your organisation's critical assets–informational, physical and digital, systems and supply chain?
- Do you know where and how your valuable data is stored?
- Do you know who your critical suppliers are?
- Do you have adequate oversight of your supply chain and suppliers?
- Do you have productive information exchanges with industry peers and local, state and federal authorities?
- Have you made sure your organisation is meeting all its reporting obligations under Australia's critical infrastructure laws?
- Can your organisation illustrate it is taking reasonable steps to mitigate threats and bolster its security?

It has been a rough couple of years for the Australian construction industry. Amid pandemics, extreme weather conditions, supply and labour shortages, not to mention high interest rates and increasing inflation, the industry has had its fair share of challenges.

In a survey RSM conducted in 2023, 35.48% of respondents ranked weather as the main risk that they had not predicted but had a significant impact on the profitability of their business over the past 24 months. It was closely followed by material cost increases (29.03%), labour (22.58%) and rising interest rates (12.90%).Cashflow (22.58%), supply chain (19.35%), material costs (16.13%) and interest rates (12.90%) were considered some of the most challenging aspects of our respondents' work in 2022.

However, as a sector renowned for its resilience, there are signs of confidence and business strategies are in place to make the most of 2023, through diversification, technological investment and expansion of portfolio operations.

The construction industry continues to generate nearly $360 billion in revenue, or 9% of the country's Gross Domestic Product (GDP), with a projected annual growth rate of 2.4%.[1]

Overall, employment levels in the construction industry increased from 702,700 people in 2002 to almost 1.2 million in 2022, with growth projections forecast at 1.264 million within three years.

Given the importance of the sector, renewed investment by the Federal Government and the reopening of borders, this imperative industry will no doubt be propelled forward in 2023, allowing it to overcome the myriad of challenges, both past and present.

1.1. Current challenges within the construction industry

For the Australian market specifically, the rising cost of key building materials is one of the biggest challenges currently being experienced. According to the ABS, since 2021, steel costs have surged by up to 42%, and timber and electrical materials costs are up by 30%.

Freight costs are at record highs and with so many construction products sourced from China, accounting for as much as 20% of total construction costs, Australian contractors are advising their clients to expect project delays.

Adding to this are supply chain disruptions, due to a global surge in demand for building materials, the pandemic closing down factories and the ongoing trade disputes with China.

The cost of Russia's invasion of Ukraine has been exacerbated through further strain to fuel costs and global supply chain issues, intensifying Australia's existing inflationary pressures.

Rising interest rates and the increased cost of borrowing has detrimentally affected new housing demand, resulting in increased project costs and hindering progress on operations, either currently under construction, or in the later stages of pre-execution.

Finally, RSM National Leader, Property and Construction and Director of the Business Advisory division, Adam Crowley, said that labour shortages in the Australian workforce are also causing excruciatingly long delays and other issues for the sector.

[1] Australian Bureau of Statistics (ABS)

"The lack of labour has also forced many operators to try and hold onto subcontractors, staff and other employees, retaining them on construction sites to avoid losing them to other sites or competitors. From a resource perspective, that in and of itself comes with additional costs, as it also blows out budgets and puts pressure on margins," he said.

In fact, a 2023 survey by RSM found that labour was seen to be the biggest risk to business operations and revenue forecasts in 2023 with a mean score of 2.26, followed by material costs with a score of 2.29. Rising interest rates took third place with a mean score of 2.42.

Another factor, which doesn't garner a great deal of attention, but has had impactful consequences, particularly for the east coast of Australia, is the weather.

"When you have one of the wettest years in history, combined with all of the other supply, cost and production challenges, it can break a lot of companies and sadly, we've seen record numbers of liquidations within the construction industry," Adam said.

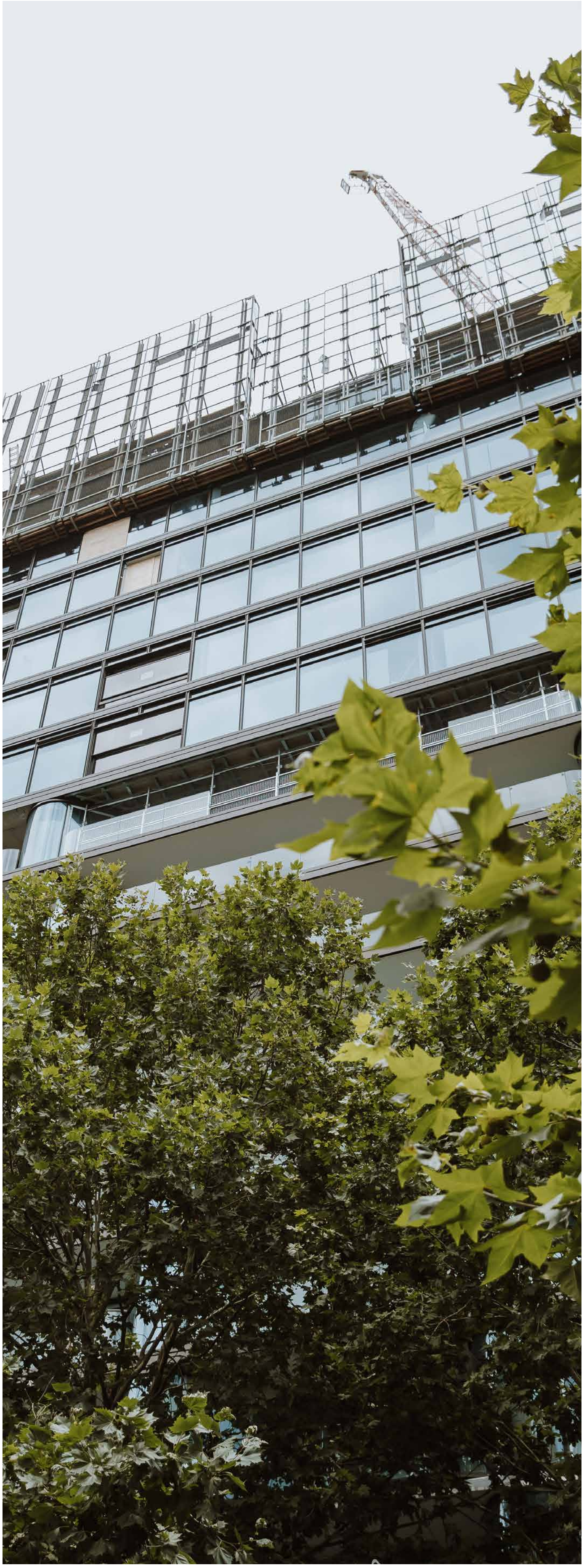
1.2. Opportunities for the Australian construction sector

When respondents to RSM's 2023 survey were asked to rank areas of opportunity for their businesses in 2023, the easing of resourcing issues was seen as the biggest opportunity, followed by improved confidence among investors and potential acquisitions.

Confidence is increasing, with 58.06% of respondents saying that they will bring in more revenue than in 2022. Despite a litany of headwinds, the industry is in a strong position of growth for the short-term, with the Australian construction industry predicted to grow annually by 3.4% between 2023 and 2025, largely due to a strong pipeline of sizeable infrastructure projects.[2]

The reopening of international borders is also likely to allow for contractors from countries such as Spain, Korea, Italy and Malaysia to return to work on Australian projects, with the number of employees in the construction sector expected to grow by 5.2% this year, allowing for 55,000 more tradespeople and building professionals to enter the workforce.[3]

This is one example of where businesses that are willing to think laterally and beyond the doom and gloom of the COVID years, will flourish and move forward with opportunities 2023 presents.



[2] The Australia Construction (State and Territory) Market Trends and Opportunities Report 2021-2025

[3] The Australia Construction (State and Territory) Market Trends and Opportunities Report 2021-2025

1.3. Internal trends

Those that have identified cost savings in the transaction and operation side of the business over the past few years, are also primed to capitalise on the upside on the horizon. Developers are applying a more forensic rigour into buying quality assets at the right price in high growth areas. Companies are being more astute with due diligence, acquiring assets under market rates, leveraging their networks, showing patience and not shooting from the hip. They're are also prepared to walk away and let things go when they don't fit.

Adam Crowley believes that given Australia's current economic climate, there's little fat in anyone's budget to make a misstep or blunder. Previously, this might have been possible and there was still profit to be made, not necessarily through skill or expertise as a developer, but purely through frothy market conditions.

Those circumstances, however, no longer exist. The economy has turned and the tide has gone out, exposing people and businesses who lack the necessary experience and expertise. As a result, leading construction companies are prioritising their communications and interactions with their clients. Key to their success has been transparency around financial risk, and partnering on joint venture transactions and developments.

Considerable time is being spent on sourcing and identifying strategic assets, arranging the right finance to fund the transaction and completing an in-depth due diligence process. These factors, along with the ability to identify and apply a handbrake on deals that just don't stack up, are non-negotiable.

1.4. A more sophisticated industry

The construction industry is without doubt maturing. It's had no choice but to evolve and improve, particularly, in light of the financial difficulties many businesses faced through fixed contracts, in 2021-22.

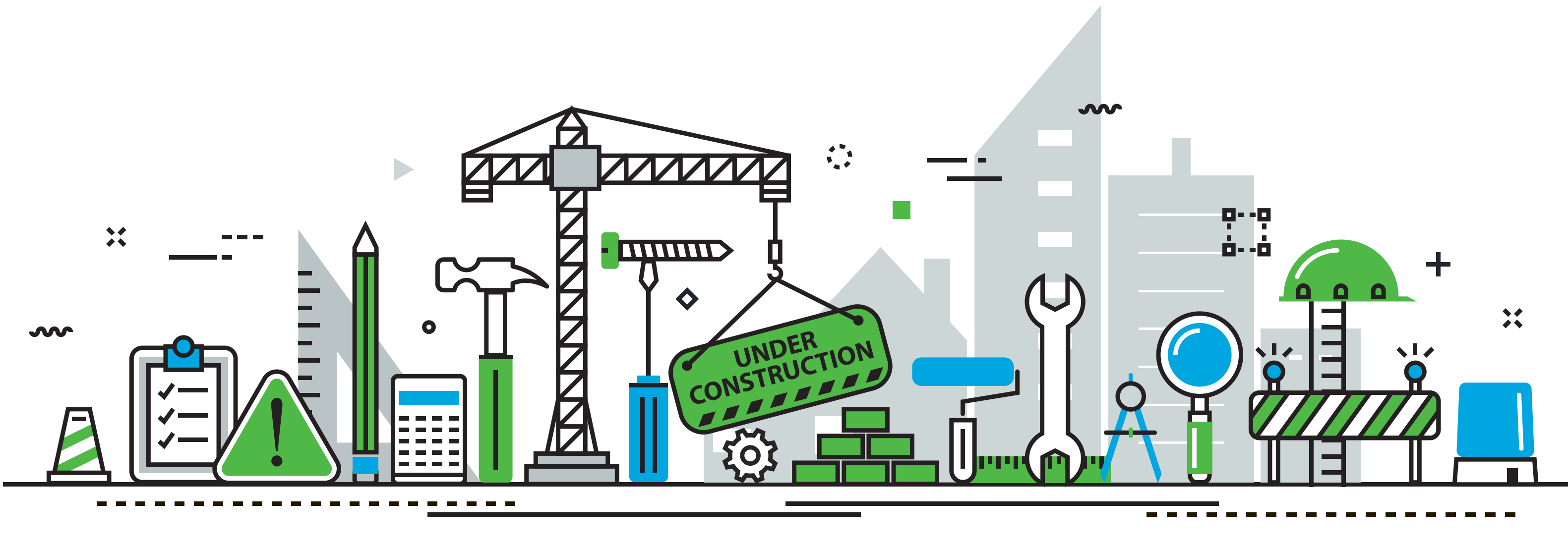
During this time, it was customary for the majority of building contracts to be negotiated based on a fixed price, which given the rising cost of materials, labour shortages and supply chain issues, the builder consequently bore the brunt of any budget blowouts.This has resulted in a significant change in approach, requiring builders and project managers to review contracts to include cost escalation and add extension of time clauses to accommodate the current climate of supply or weather issues.

We have been told by our survey respondents that this is happening already, with builders adding clauses enabling costs outside of their control, such as extension of time costs, weather delay costs, increase in material costs) to be passed onto developers. Others are looking to use collaborative framework contracts as they work best for both parties, while tender prices are being limited to the current market rate at the time of tender close.

Implementing and understanding the systems, processes, procedures and technology available to construction businesses will also mean these potential issues are identified earlier on, allowing operations to pivot or renegotiate, before running into financial difficulty.

Our recommendation to all construction clients is to incorporate good governance practices and roadmaps to provide additional safeguards that can ensure business operations and ultimately, profits, are not significantly impacted.

- Learn and understand the intricate details around supply chains and establish strong relations with suppliers.
- Invest the time to implement advanced technology to ensure valuable data is measured and understood.
- Familiarise yourself with Australia's infrastructure laws and take the necessary steps to draft contractual clauses that allow for time delays in sourcing materials without penalties, or stockpiling building materials that are used regularly.



2. Sustainability and the future of construction

By Jacob Elkhishin, National Leader, Resources, Mining, Energy and Sustainability, RSM and Tim Pittaway, Partner, Sydney, RSM

ESG: A SNAPSHOT

90% of Australian CEOs have 'some level of concern' about a lack of sustainable initiatives in construction

35% have greenhouse gas emissions targets built into their long-term corporate strategies

70% of Australian companies have a sustainability strategy in place

38% of construction businesses provide short-medium, timelines for ESG targets

36% of construction organisations currently have a net-zero target

Climate and the environment are two of the biggest topics on the agenda for business in 2023. This isn't a surprise given the global emphasis placed on sustainability initiatives and reducing carbon emissions.

For the construction industry in particular, the focus is largely on how waste and carbon emissions can effectively be reduced in a manageable and cost-effective way. Increasingly, RSM clients are actively seeking strategies to implement sustainability practices that have a real-world impact on decreasing greenhouse gas emissions, their carbon footprint and waste.

2.1. Environmental Social Governance (ESG) explained

Environmental Social Governance (ESG) is a holistic concept regarding an organisation's ability to create and sustain long-term value in a rapidly changing world, as well as being able to manage the risks and opportunities associated with these changes.

RSM National Leader, Resources, Mining, Energy and Sustainability, Jacob Elkhishin, said given the vast amount of waste produced within the construction sector, the environmental aspect of ESG has become more prominent than ever, particularly given the ongoing effects of climate change.

"However, health and safety, as well as a high reliance on labour, mean the social aspects of the ESG agenda also remain a high priority for the construction industry. Similarly, given the size and complexity of contracts, competitive bidding processes and the need to engage with both private and public stakeholders, governance remains paramount to the industry's ESG policies," Jacob said.

2.2. Importance of ESG for the construction industry

Investors across the globe are increasingly searching for businesses that demonstrate a more sustainable, ethical and good-governance approach. They've also demonstrated a willingness to pay premium prices if corporations have strong ESG principles in place.

Recently, clients have been making purchasing or investment decisions based on the sustainability of products and in the current economic and environmental climate, banks and investors are more inclined to invest in companies with ESG policies in place.

There is an undeniable demand, in terms of the stakeholders, around businesses that are investing in sustainable practices in response to ESG and this extends to the workforce, with employees reporting an inclination to work for a company if they can demonstrate ESG principles.

Transparent ESG practices have also been proven to:

- Improve a corporation's reputation
- Assist in the identification of immediate and long-term risks
- Create new opportunities for changes in management
- Open the door to collaborative and strategic relationships
- Demonstrate a company's commitment to a high-performance and inclusive culture

RSM Partner, Sydney, Tim Pittaway, said that construction businesses have also demonstrated significant cost savings once an ESG strategy has been developed and implemented, thanks to enhanced financial oversight.

"For example, a strong ESG proposition can assist companies tap into new markets and expand into existing ones. The reason being that when governing authorities trust businesses, they are more likely to award them the access, approvals and licenses that subsequently afford fresh opportunities for growth," Tim said.

"Operational costs of a business can also be reduced by implementing ESG initiatives that promote reduced water and energy consumption. Regarding the social and governance aspects, cultural enhancement of the workforce can result in reduced employee turnover, which in turn, increases productivity and reduces training and overhead costs. A strong ESG approach also lowers the risk of regulatory and legal intervention, which can reduce costs by eliminating project delays and mitigating risk of liability," he said.

While implementing ESG strategies does involve upfront costs and effort, it is a forward-thinking process that will pay dividends in the future.

2.3. ESG challenges

Despite its widespread corporate adoption, Jacob Elkhishin said that currently, ESG has no globally consistent, comparable, or reliable, sustainability disclosure standards.

"While companies are being asked to provide metrics and targets used to assess and manage ESG risks on carbon emissions, pay equity, diversity, inclusion and wellbeing, this data is difficult to capture," he said.

There is an expectation that ESG reporting is integrated and granular insights are provided to help identify accompanying risks and potential opportunities. Yet, for many construction organisations, this level of detail and data is not readily available, making the process arduous and time consuming. Regardless, ESG reports are crucial in demonstrating efficacy and impact. Our advice to clients in this position is to collaborate and collate as much meaningful information as soon as possible. Merely mentioning ESG is no longer considered acceptable.

2.4. Steps for implementing an ESG policy

In the tendering and early planning stages of projects, construction companies and their supply chains are now expected to demonstrate their ESG credentials and innovation. Tim Pittaway said they also need to focus more intently on nurturing a highly innovative mindset, workforce and supply chain.

"A measured and purposeful approach to creating an ESG policy is imperative to understanding how operations affect sustainability, business risks, such as supply chain issues, operational procedures and staff culture. The need to understand stakeholder expectations and identify areas of weakness, as well as where they could improve operations, is also part of the policy process," he said.

Completing a risk assessment to capture accurate and trusted data is a vital element to producing an ESG report. In the current climate of extreme weather events, pandemics, supply chain issues and ongoing labour shortages, assessing the full spectrum of environmental and social risk that applies to a business, as well as how efficiently one operates during such events, must be considered.

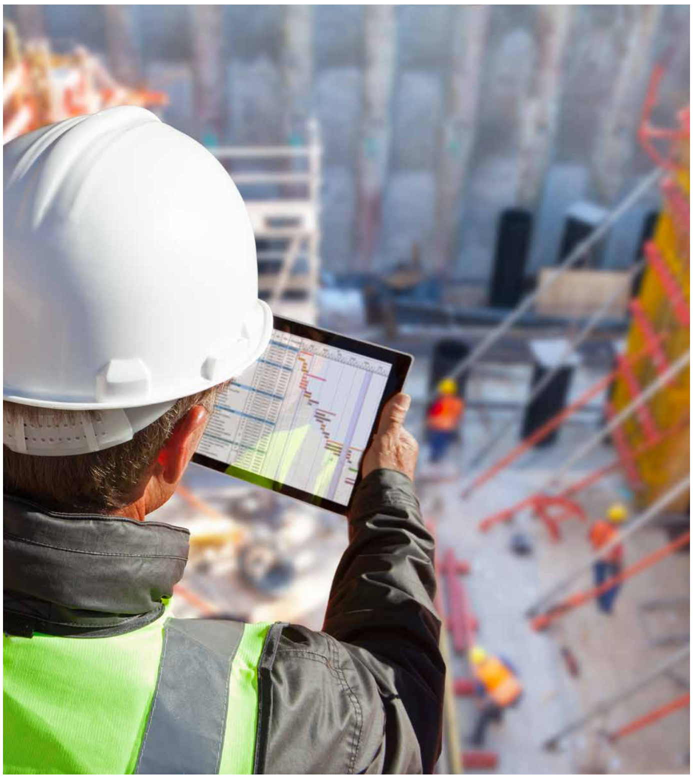
The use of 'carbon tools', such as SAP, Carbon Trust and Sphera, to measure carbon emissions across project delivery that tracks the use of plant, transportation methods, welfare facilities and the sourcing and delivery of materials is essential.

How building materials are sourced, their adaptability and ecological impacts, should also be considered in regards to how resources will be used in relation to waste output, with special attention on circular economy opportunities.

2.5. Pro-active ESG steps

Today's ESG benchmark is to demonstrate genuine objectives that will enhance the environmental, social and governance operations of a company, making virtue signalling and 'green-washing' ESG principles disingenuous and likely to cause reputational harm for a company.

At a minimum to remain competitive and relevant, construction companies should be implementing strategies for sustainable growth and development that goes beyond profits. Goals to achieve net-zero emissions, the creation of an inclusive workplace and providing stakeholders with transparency around the decision-making processes are just some of the ESG principles the construction sector need to embrace.



CASE STUDY:
ESG at the Forefront at EG

With $5.1 billion of real estate assets under management, EG is a disciplined, data-driven investment manager and developer, whose approach is to provide outstanding returns with lasting social impact.

As a pioneer in the real estate sector, EG has a 'real zero' carbon target of 2030. It's not the same as 'net zero' EG's Head of ESG Ian Lieblich said, as it avoids using carbon offsets or bulk Renewable Energy Certificate purchases to 'net off' total emissions at zero.

"We take a data driven approach that considers energy usage and procurement at a far more granular basis," he said.

"Traditionally, carbon is reported on a monthly, or even a quarterly basis, however, EG is going above and beyond, tracking the carbon content of the energy their assets are using every 15 minutes. In 24 hours, that is 96 data points a day, 35,000 data points per year that allows us to match our building's energy use to the carbon content of the energy in the grid at that time."

EG, he said, would rather save or reduce energy in the evening when the sun has set, than in the middle of the day when there's a lot of solar in the grid. This is because the carbon content of that energy is significantly less – 21% on average in NSW during FY22 – compared to later in the day.

Social and governance aspects of ESG is driven by EG's founders, Mr Lieblich said, as part of their legacy.

The creation of EG's 'Little BIG' Foundation in 2020, focuses on combating loneliness and its associated effects on mental health and social isolation. Its mandate is to ensure those living within EG's communities lead happy, healthy lives.

> EG hopes other businesses will be inspired to make their own significant impact by prioritising environmental and social factors, enhancing the capacity to attract institutional capital and wealth, particularly from overseas.

Mr Lieblich said a robust ESG policy also has significant business benefits through improved risk management, the reduction of operating costs, staff retention, environmental and social risk and increased foreign investment opportunities.

"A lot of institutional wealth is increasing its focusing on ESG issues and looking to companies that can seize the opportunities presented by this transition to a net zero economy."

3. Embracing technology in the construction and development sector

By Mathavan Parameswaran, National Leader, Technology, RSM and Laurel Grey, National Manager, Digital Advisory, RSM

Global events of the past two years have fast-tracked the implementation of new technology and the digitalisation of the construction and development industry.

The pandemic forced many companies to establish a digital transformation roadmap, as they recognised technology's ability to connect vast volumes of data, people, processes, workflows and project phases during a period of restricted movement.

Given the size, scope and rapid transformation of digital practices, RSM's technology experts have reviewed the most commonly used solutions and those at the forefront of this new era.

3.1. Enterprise Resource Planning (ERP) Programs

Enterprise Resource Planning (ERP) programs connect construction and integrated technologies, saving time and money, while also improving project efficiency and safety.

ERP software is capable of managing day-to-day business activity, such as accounting, projects, risk compliance, supply chain operations and in general, assist companies in planning, budgeting and reporting on their financial situation.

Offering tailored support to businesses, ranging from small to large enterprises, RSM National Manager, Digital Advisory, Laurel Grey, said that ERP systems are complete, integrated platforms that provide a wide range of benefits to a business.

"Not only do they align separate departments and improve workflows, but they also lower operational costs through streamlined business processes, improve efficiency through a common-user experience, reduce risk through improved data integrity and lower management and operational costs, thanks to uniform and integrated systems," Laurel said.

"More time for innovation and growth has also come about through the evolution of software-as-a-service (SaaS) delivery model for ERP. Regularly updated and enhanced, it means there's been an additional reduction in both operational and capital expenses, as companies have outsourced the management of their IT programs and eliminated the need to purchase software and hardware," she said.

The benefits of ERP for construction companies far outweighs the cost of software, with powerful capabilities to manage budgets and keep track of the number of employees and subcontractors working onsite.

Functions include identifying the possibility of budget overruns and remedying these before it's too late to make critical cost changes. Also, unlike a manual system, an ERP program delivers reliable and timely information, stores data and is able to understand what works for a company, what needs to be improved and how future projects can be more effectively priced.

COMBATING CYBER THREATS: HOW TO PROTECT YOUR DATA

The increasing number of data breaches is alarming. For the construction and building industry, the biggest security risks are around the loss of digital lease information, personal tenant details and financial data.

Avoid the cost and reputational damage of a data breach by implementing these critical security steps:

- Install Anti-virus software
- Backup and restore all files
- Encrypt important information
- Use multi-factor authentication (MFA)
- Monitor use of computer equipment and systems
- Train staff to be safe online
- Keep computer software up to date
- Consider cyber security insurance

3.2. Exploring new technologies

The building and construction industry has seen plenty of new and exciting technologies emerge in the past five years, all designed to enhance operations, speed up processes, reduce costs and risks and ultimately improve a project's final outcome.

3D printing

3D printing (3DP) technology can drastically lower the cost of building materials and labour by an estimated 80%, reduce production time by up to 70% and lower overall waste by 60%.[4] It has also provided architects with the tools to push the design envelope by using new shapes and forms.

First introduced in the mid 1980s, it has advanced considerably in scale and application, presenting an opportunity for the construction industry to greatly mitigate the harmful effects of construction. In the current climate, these benefits are particularly notable when labour shortage, supply chains, material costs and environmental impact are all major project variables.

World-leading 3D printing building and construction company Luyten[5] is driving much of the technology's advancement, building the first ever 3D-printed house in Melbourne and opening up a myriad of possibilities for the Australian construction industry.

The Platypus X12 for example, is the world's largest mobile 3D smart AI-powered concrete printer for the construction industry. Launched in 2022, it is the first of its kind in the southern hemisphere and the largest worldwide, and in less than 12 months, was already being hailed a global success. The prediction is that this cost-effective technology will have evolved so significantly by 2030, around 30 to 50% of housing in Australia's regional and remote areas will be built using 3D printing technology.

Drones

Drones, also called unmanned aerial vehicles (UAVs), have been a game-changer for many companies operating in the construction industry as they reduce the need for constant on-site visits and effortlessly capture real-time footage that can be viewed directly from the user's computer and shared through cloud-based project collaboration and management systems.

The global market for construction drones is forecast to be worth $11 billion by 2027, according to Allied Market Research. Significant upsides include monitoring inaccessible areas, providing a complete, visual representation of construction sites and the identification of potential challenges, such as uneven surfaces, unusual terrain or road deterioration. Images and videos captured are geotagged with detailed GPS information, crucial for estimating accurate distance, measuring progress and providing complex calculations about the project.

Artificial Intelligence (AI)

Artificial Intelligence in the construction industry is already in play, maintaining operations on difficult sites, assisting project managers to effectively map areas and collecting real-time information on projects, in remote or regional locations.

In fact, Australia could become a leader in using Artificial intelligence (AI) to design and build better cities, towns and infrastructure, according to the CSIRO's *Artificial Intelligence: Solving problems, growing the economy and improving our quality of life*[6] roadmap.

The report outlines how important it is for Australia to capture the benefits of AI, which is estimated will be worth $22.17 trillion to the global economy by 2030.[7] Among the findings, it reveals that AI could not only improve the safety, efficiency and cost effectiveness of the construction and development industry, but also deliver significant social, environmental and economic benefits. The roadmap also cites that AI can boost productivity through its strong potential to enable the construction industry to make better products, deliver enhanced services, faster, cheaper and safer, preventing cost overruns, improving site safety, and efficiently managing projects.

Although there has been substantial growth within certain areas of AI, such as big data and analytics, robotics, automation, data integration, and wearable technology, greater investment into AI technology needs to happen for the construction industry to fully reap the benefits and potential AI can deliver.

3D helmet cameras

A relatively new technology, 3D helmet cameras, worn by onsite staff and contractors, can track the changing nature of projects on a daily basis, providing a digital historical reference and job site data to keep track of hazards, or instances where workers' safety is compromised.

As the specialised cameras map a path, digitally converting images to create an online 3D map that can be viewed from anywhere, 3D cameras have brought a range of time and cost-saving benefits to the construction sector.

They also allow for the physical structure of a site and the team workflow to be mapped out ahead of time, resulting in the avoidance of potential issues and enhancing communication with clients in regards to the progression of the project.

Modular construction

Modular construction and the off-site construction of building materials under controlled conditions can slash production times, without compromising on quality.

Modular, or prefabricated, construction is not a new concept, but technological improvements, economic demands and changing mind-sets, mean it is attracting an unprecedented wave of interest and investment across Australia.

In 2019 the Victorian State Government estimated the Australian prefabricated construction industry represented five% of Australia's current $150 billion construction industry, a proportion that is expected to grow to 15% in 2025.

[4] '3D Printed Homes Likely to Take Off in Australia' Your Investment Property Article,2022

[5] https://www.luyten3d.com

[6] 'https://data61.csiro.au/en/Our-Research/Our-Work/AI-Roadmap

[7] Artificial Intelligent Technologies for the Construction Industry: How Are They Perceived and Utilised in Australia? Regina et al. (2022).

Melbourne construction company, Hickory, is utilising modular construction techniques on relatively modest high-rise projects, located on narrow land blocks, to great success for both architectural functionality, aesthetics and construction costs.

It is this adoption and pioneering use of modular construction that will help drive the acceptance of more cost-effective and well-designed inner-city developments at higher densities, while enhancing competitiveness, as well as improved efficiency and productivity, within the sector.

3.3. Associated risks with using new technology

RSM National Leader, Technology, Mathavan Parameswaran said that when implementing new technology, businesses within the construction industry must also commit to collaborating and communicating the changes with executive managers and staff.

"Although it sounds simple, understanding the benefits modernised systems can bring to a firm can help with the onboarding process, and ultimately, take full advantage of the new technology," Mathavan said.

"A tailored digital transformation strategy should also be established before preparing the organisation's systems for cloud adoption.

"All systems must be secure and engaging with the right experts before, during and after the process, can streamline procedures and avoid any risk of downtime or loss of productivity," he said.

Finally, investing in training and skill upgrades of your employees should be mandatory, and there must be clear communication around the benefits of both the changes and new technology, to assist with a smooth transition.

3.4. The future of technology in the construction industry

Laurel Grey said that the objective of introducing ERPs and new technology within the construction industry should always be to connect and streamline a business.

"Cloud-based project collaboration and management systems, integrated with innovative technology such as 3D printing, drone deployment and modular construction, come with an upfront cost. However, the continued development of these systems and technologies will save time and money in the long term for clients and contractors at all stages of the construction process, and ultimately improve the quality and final outcome of any project," she said.

[8] https://www.hickory.com.au

4. Making the build-to-rent (BTR) model work for your business

By Adam Crowley, National Leader, Property and Construction, RSM

Build to Rent 101

BTR is multi-unit development, with a unified ownership structure, where the property is held for rental purposes, rather than sold individually

They are communities created around resident's needs and are designed and priced for the customer

Traditionally BTR developments offer longer leases providing greater security over tenure of tenancy and moderated rentals

Pros of BTR

- Consistent stream of income for the property owner
- Potential for better returns
- Ability to minimise costs
- Improved construction quality
- Strong demand and scarcity of new supply

Cons of BTR

- Risk of investing in an emerging concept
- Possible higher vacancy rates
- Lack of rental increases

4.1. A rental market in crisis

Achieving the 'great Australian dream' of owning a property has become increasingly challenging due to the country's high real estate prices, rising inflation, limited supply and difficulties in obtaining finance.

With approximately one in three Australians renting and the rate of growth for residential rents increasing at a record rate of 10.2% nationally in the year to November 30, 2022[9] due to a shortage in available properties, it's little wonder the build-to-rent (BTR) industry is attracting significant attention as a potential supply solution.

4.2. Build to rent 101

Build to rent projects are large-scale residential developments, commonly high-density blocks of apartments, where all the properties are owned and managed by a single entity and are rented out over mid- to long-term periods.

As opposed to the conventional build to sell (BTS) model, where a developer builds an apartment block, then sells off each individual apartment or unit, BTR is focused on longevity and a sense of community.

With an emphasis on creating more desirable dwellings for renters, build to rent apartments offer long-term leases, usually three years, with annual rent increases often locked in when signing the lease. This gives tenants a greater sense of security regarding tenure, as well as greater flexibility and choice than a regular lease.

RSM National Leader, Property and Construction, Adam Crowley said BTR projects focus on sustainability, community and affordability, with most developments implementing sensitive design and sustainable initiatives. Yet, despite these benefits, Australia has been slow to adopt the model, compared to European and American cities, who have a well-established BTR housing market.

"Australia's efforts to date are generally located on city fringes and are underdeveloped. Despite the potential market and investor opportunities the BTR sector offers, build to rent projects still require major investment and financial backing, and the industry overall requires specific guidelines and further policy reform for it to become more viable," he said.

4.3. Current barriers preventing BTR expansion in Australia

Under the current goods and services tax (GST) laws, BTR developers are typically unable to claim GST credits on the land and construction costs incurred throughout the development, costs which can be reimbursed on a build to sell project. As residential rents are typically not subject to GST, developers may have to pay an additional 10% upfront cost on BTR projects.

Also, unlike a traditional BTS development, the sale of the residential premises is not usually a part of the BTR business model, thus removing further opportunities for income through capital gains.

Another barrier Adam Crowley said is that long term holding costs including interest, rates and land tax may not make the development as financially attractive when compared to the BTS alternative.

[9] CoreLogic

"Although there are exceptions to the input taxed treatment, such as housing provided by a charity, accommodation in commercial residential premises, specialist disability or aged care accommodation, a typical BTR model is unlikely to meet many of these requirements," he said.

Given BTR developments are often closer to city centres, land is generally more expensive than the outer fringes of the CBD areas. Also, as there is no historical data of BTR in Australia, banks are increasingly reluctant to provide construction financing and as the units in a BTR model are rented individually following the completion of the development, there are no pre-sales, resulting in reduced security and a longer repayment period.

4.4. Catalyst for change

BTR has the potential to bring innumerable benefits to the Australian economy, such as an overall increase in housing supply and diversity, a more secure form of rental and the creation of new jobs throughout the construction period and afterwards in the ongoing and daily management of the asset.

State governments are gradually coming to accept BTR as a viable housing model. In 2020, the NSW State Revenue Legislation Amendment (COVID-19 Housing Response) Bill 2020 (NSW), introduced a change to reduce land tax by 50% for the next 20 years for new BTR housing projects. Provided the BTR development adheres to several requirements, they also removed certain tax constraints on foreign investors, abolishing stamp duty and land tax surcharges until 2040, in order to encourage investment from abroad.

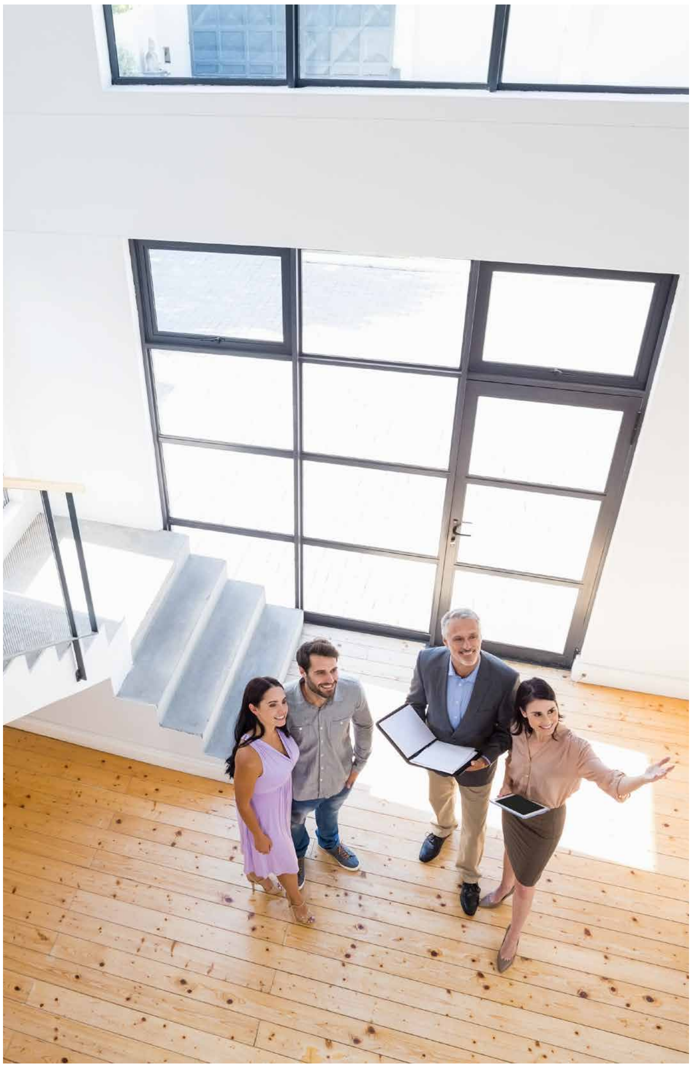
In its 2020/2021 budget, the Victorian State Government announced a plan to stimulate the build to rent sector by offering a 50% land tax discount and an exemption from the absentee owner surcharge, two issues that have previously been major roadblocks to the development of the BTR sector in Australia.

As part of the Queensland Government's BTR Pilot Project to provide the city with more affordable housing, a BTR development in Fortitude Valley commenced construction in early 2022. On completion, the project will provide 366 apartments for renters, with approximately 40% to be made available at a discounted rent through a Queensland Government subsidy.

4.5. Where to next for the BTR industry

Regardless of the current obstacles facing the BTR industry, such developments are beginning to gain momentum and attract more mainstream attention in Australia. The Savills Australia *Build to Rent Market Update Q3*, 2022[10], noted the BTR sector grew exponentially in the 18 months to June 2022, with more than $3.5 billion raised and committed to the sector since January 2021.

Additionally, the pipeline of 10,000 BTR units starting construction in the two years to June 2023, with 6,600 to be built in Victoria and another 1,300 planned for NSW, is yet another sign of the sector's growth and momentum. The reduction in land tax, as well as the relief for foreign owners from stamp duty and land tax surcharge for certain BTR properties, should further stimulate such developments and invigorate the growth of the important build to rent sector within Australia.



[10] https://pdf.savills.asia/asia-pacific-research/australian-research/australia-student-accommodation/australia-build-to-rent-market-update-q3.pdf

CASE STUDY:
Mirvac's LIV Build-to-Rent Developments: Indigo and Munro

Committed to the expansion and development of the Build-to-Rent (BTR) category, leading development, owner and management property group Mirvac aims to deliver 5,000 operational apartments, by 2030.

Benefitting from an integrated and innovative business model that leverages its existing and established customer-centric approach, Mirvac has established LIV, a portfolio of communities for renters only, that will substantially increase neighbourhood rental opportunities in prime urban locations.

LIV Munro, a world class development, located next to the Queen Victoria Market on the northern fringe of Melbourne's CBD is integral to the City of Melbourne's$268 million precinct renewal project.

Opened in December 2022, LIV Munro has 490 apartments complimented by two floors of resident amenity including indoor/outdoor gym, lap pool, yoga studio, spa, sauna, steam room, rooftop terrace, co-working spaces, games room, lounge, media rooms, private dining spaces and dog park. The resident app and on-site support staff, provide a new level of service, tenants are also provided white goods, such as fridge, microwave, washing machine and dryer, as well as exclusive access to two Tesla electric vehicles through a partnership with Australian e-mobility tech startup, Ohmie Go.

When fully occupied it's estimated LIV Munro will provide accommodation to up tp1,000 residents, typically paying 10-20% more in rent compared to apartments in the same area, covering the inclusive use of all facilities.

Such projects have been particularly popular among the under 40 age group and renters who want security of tenure, access to great amenity and a sense of community a building like LIV Munro creates.

The project follows the success of LIV Indigo, which opened at Sydney Olympic Park in 2020 and now sits consistently at 95- 98% occupancy across its one, two and three-bedroom apartments.

While rents at LIV Indigo are roughly 20-25% above the suburb median, the development offers longer, secure leases, onsite resident services, and a high standard of amenity including cinema room, rooftop terrace, shared barbecue areas, commercial kitchen, gym, yoga studio, children's playroom, dog park and grooming station, bicycle share, co-working spaces and garden areas.

Sustainability is also a key feature of LIV developments, meeting Mirvac's ambitious 'This Changes Everything' sustainability strategy, which aims to be net positive carbon and water and send zero waste to landfill by 2030.

With an overarching objective to create a sense of security and belonging, Mirvac's LIV communities have been overwhelmingly popular among tenants by empowering residents to shape their own neighbourhoods while creating developments that reinvigorate established suburban areas. They've set a benchmark for how the BTR model can be executed in our high demand city centres, one which we expect other developers and investors will follow in the coming years.

5. Looking ahead: What are the changes coming to the sector in 2023?

By Adam Crowley, National Leader, Property and Construction, RSM and Liam Delahunty, Director, International Tax and Transfer Pricing Leader, RSM

2023: Australia's construction sector under the spotlight

- Commodity prices are rising and there is set to be a concomitant increase in investment in resources and energy projects.
- The Federal Government has an increasing focus on renewables projects.
- The anticipated extent of construction work is more than the industry can currently handle, resulting in shortfalls in human resources and materials.
- There will continue to be supply chain disruptions. This, combined with inflationary pressures, will mean ongoing increases in construction and materials costs.
- There is a continuing likelihood of contractor insolvencies and distressed projects.
- Market conditions should drive specific changes to contracting arrangements and a continued push for more equitable contractual risk allocations

Here is RSM's summary of the top 10 topics likely to impact the building and construction industry in 2023

5.1. Global pressures

Following a strong rebound in 2021, the global economy's pronounced slowdown is still underway, amid new COVID-19 variants, rising in inflation, geo-political uncertainty and high government debt levels. In 2023, the Australian construction sector is likely to experience continued supply shortages. To cope with this growing challenge, construction companies will need to focus their time and money on identifying, fostering and adopting technological advancement, as well as revising their fixed-price contractual agreements and implementing more adhesive ESG policies into their daily practice.

5.2. Investment opportunities

Globally, Australia is still viewed as an attractive and lucrative place to invest, despite rising interest rates. As a well-regulated market, investors are drawn to Australian construction assets because of the overall positive returns and find comfort in Australia's strong focus on compliance and its robust legal and regulatory system. This has the potential to lead to an increase in foreign investment and a particular interest in the Australian construction and property sector.

5.3. Interest rates

In an RSM 2023 survey of 40 industry participants, 35.48% identified rising interest rates as the biggest risk to their operations and revenue forecasts in 2023.

The rapid rate hikes of 2022 and 2023, with further increases expected, have been a necessary tool to regain control over Australia's runaway inflation rate. Forecast to fall to around 4.75% in the second half of 2023 and a little above 3% in 2024, the stabilisation of inflation and interest rates will bring about more confidence and investment in the sector.

5.4. Declining property prices

The forecast for house prices is uncertain, having fallen consistently since the first rate rise in May 2022. However median values in all capital cities and regional areas remain ahead of their pre-COVID levels and there are some positives underpinning value in 2023 with an undersupply of homes and surge in overseas migration. Ultimately, property industry changes impact the health of the construction industry. The Federal HomeBuilder scheme has ended, interest rates are expected to increase further, as is the cost of raw materials making house and apartment construction more expensive for some time to come. This has led to a reduction in demand for new homes and apartment buildings, which has had a knock-on effect to the commercial and industrial sector.

5.5. Stamp duty changes

Under the former Perrottet Government, changes were made to the NSW property tax system, providing first home buyers with the option to choose between an annual ongoing property tax or one-off upfront stamp duty payment, and was expected to offer support to approximately 97% of all first home buyers, or about 57,000 people per year. This is set to change on 1 July, following Labor's March 2023 election win. Now, Labor plans to scrap the property tax option and instead offer a stamp duty exemption for first home buyers who purchase properties worth up to $850,000 and concessions for homes up to $1 million. Purchasers who chose to pay the ongoing property tax will continue to be able to use the property tax.

5.6. Supply chain disruption

If there was a silver lining to come from the pandemic's supply chain issues, it is the move by Australian construction businesses to better assess the potential risks to their supply chains and business operations, strategically implementing a range of actions to avoid disruptions.

Some of these include mapping suppliers, mitigating any risks and identifying solutions, if an existing supplier cannot deliver required materials. Negotiating preferred supplier contracts, forecasting requirements for upcoming projects and simplifying the process, by bulk or staggered ordering, are other actions the construction sector is adopting to ease pressures of the supply chains and forge ahead in 2023.

5.7. Business liquidity

Rampant inflation, inclement weather and increasing material and labour costs have created a perfect storm for the construction industry, with delayed access to materials and completion times blown out. The predominance of fixed price contracts also limited cash flow meaning contractors have had to absorb the shocks of price increases and delays and disruption.

Inevitably this myriad of pressures has resulted in the unfortunate the collapse of dozens of construction companies and contractors in the past 18 months, leaving hundreds of unfinished building projects around the country.

As we move into 2023, the situation may worsen before it improves and construction businesses are being encouraged to 'think outside the box', embrace new technologies and diversify business operations in order to thrive and survive the coming year.

5.8. Contracting transformation

Australia's traditional contracting arrangement involving traditional lump sum, fixed-price contracts is on the way out. Having failed to cover the costs of building, businesses have had little choice but to compromise their contractual positions, resulting in an overhaul of the contract risk allocation.

Our 2023 survey found that 51.61% of respondents had changed their contract terms in 2023 to better protect their business revenue. Tactics included reducing the number of days that a tender is valid for, adding new clauses that allow for delivery delays and price escalations, as well as requesting collaborative framework contracts.

Other changes include extension of time provisions to accommodate delays in delivery, provision of escalation clauses for fluctuating material prices, introduction of deposit payments for better cash flow and the inclusion of a 'provisional sum' to cover material and transport price changes. We see this change being permanent and as a result strongly believe there is a need for further regulatory changes to support the sector.

5.9. Hybrid working

In the past two years, the traditional office environment has been replaced by hybrid workspace ecosystems, giving employees greater flexibility to either work from home or onsite. The result is that businesses, including those within the construction industry, need to provide a flexible, technology-enabled workplace, for the hybrid work environment to thrive. This trend will evolve further as workers and employers settle into the new and widely accepted working arrangements, taking full advantage of the adopted digital changes and enhanced workplace flexibility.

5.10. Business technology revolution

For this new hybrid working arrangement to be successful, technology is being leveraged to provide the optimal tenant experience to attract and retain talent. The office of the future will prioritise technology to enhance convenience and improve productivity and efficiency.

Streamlined technical resources and infrastructure, across a network of sites, will allow for scalability. Also, network security will be a key foundation to protect data and deliver a seamless digital experience for employees and customers.

The benefits of ERP for construction companies far outweighs the cost of software, with powerful capabilities to manage budgets and keep track of the number of employees and subcontractors working onsite.

Functions include identifying the possibility of budget overruns and remedying these before it's too late to make critical cost changes. Also, unlike a manual system, an ERP program delivers reliable and timely information, stores data and is able to understand what works for a company, what needs to be improved and how future projects can be more effectively priced.

CASE STUDY:
Rise Wall — forward-thinking technology

Product efficiencies and new technology solutions have become paramount within the construction industry as shipping delays, the rising cost of supplies and ongoing labour shortages lead to project hold ups and cost blowouts.

Fuelled by frustration and understanding the need for change within the industry, founder of leading Australian-owned construction manufacturer Rise Projects, Daniel Pszczonka, has designed and produced an innovative new formwork solution, Rise Wall, that addresses the cost, time and inflexibility associated with using traditional fibre cement systems.

Mr Pszczonka said the new formwork technology, 'designed by builders for builders', has brought significant advantages to the construction industry.

"Rise Wall is supplied fully assembled in a lay-flat format (essentially a flatpack), which reduces volume for transport, material handling and storage by 5 times.. The lay-flat format means it can be easily cut onsite reducing the need for labour significantly. Rise Wall is also the only PVC formwork with an internal perforated truss supporting the panel face making Rise Wall twice as strong as any other PVC formwork currently on the market, delivering straight, flat walls," he said.

The white PVC panels are a viable alternative to traditional formwork and core filled blockwork, as they not only create straighter walls, improve watertightness and offer a higher-quality solution for applied finishes, but Rise Wall is also interchangeable with block work design.

Rise Products Chief Executive, Tim Pope said another advantage of Rise Wall is once it is built into the structure of a building it is permanent with no need for removal, disposal or recycling

"The design life of PVC is over 100 years, so it's built to last," Mr Pope said.

"Due to lay-flat format, off-cuts can easily be re-located and be re-used for other projects so there is minimal waste created as a byproduct and of course, when you consider that transport and landfill is also drastically reduced, Rise Wall is both reducing carbon emissions and delivering up to 30 per cent of savings on the permanent formwork component of projects."

Given the popularity of permanent formwork in the building sector, Rise Wall has sold more than 100,000 square metres of the product since introduced to the market in 2020, and is continuing to grow every month.

With plans to expand into international markets in the future, Rise Wall is thrilled to be supplying the Australian building and construction industry with this cost-competitive and innovative product.

CONCLUSION

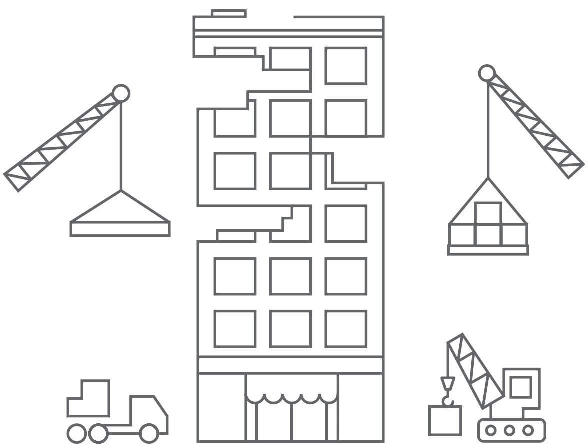
If there's a word that sums up the building and construction industry, it would be resilience. And despite the challenges every stakeholder has faced in the past two years, there is light at the end of the tunnel and a range of positive aspects to come, in the short and medium term.

From RSM's perspective, we have made sure to stay ahead of trends and considered the oncoming issues – both headwinds and tailwinds – and how our extensive network of accountants, tax experts and consultants can provide the utmost support to those in the industry.

This means helping to understand the implications of tax changes, supply change disruptions, contracting changes and technological advancements. Our team of experts are unequivocally focused on providing the necessary tools for business diversification and future expansion.

If the trends and issues covered in RSM's Property and Construction Report: Adapting to a changing market in 2023 raises any questions for you or your business, the team at RSM would love to hear from you.

Through our holistic and innovative approach, our tailored advice and solutions will propel both your business, and the construction industry in general, forward. Together, we hope we can assist your company to thrive in the current climate and help you through the next phase of your business cycle, in the most advantageous way possible.



ABOUT RSM

RSM has a long history and reputation as an industry leader, due to our attention to detail and specialised services that are specifically tailored to meet a company's needs and requirements.

Our ability to narrow down the focus of our technical expertise means our clients receive support and advice from industry specialists, who consider every aspect of a business and are dedicated to elevating output and performance to the next level.

This is what RSM clients want from a multinational audit, tax and consulting partner and through our robust network of industry experts, RSM is renowned for its holistic culture and approach to business, leveraging our strong collaborative partnerships and strategic alliances.

As the sixth largest audit, tax and consulting network globally, RSM is a voice of authority, providing clients with trusted advice, as well as up-to-date and cutting-edge information about the big issues and minutia, no matter how nuanced.

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