

POWERING
STRATEGIC
BOARDROOM
DISCUSSION



INTRODUCTION

— Welcome to Issue #2 of The Pulse (Q1 2023) — your quarterly degustation of local and global construction industry insights designed to power your boardroom strategic discussions and help plan for market demand.

WHAT'S INSIDE?

There are four key sections, all focused on understanding the demand for building materials across residential and commercial construction in New Zealand.

TODAY

-Where are we right now?

The latest data on code completion certificates (CCCs) issued

TOMORROW

--Where are we heading?

Residential and commercial construction forecasts

HORIZON

----- What can we learn from the rest of the world?

Global perspectives on current and expected construction activity, workloads and constraining factors, plus a freight and logistics summary

CONSIDERATION

---- Key future trends that influence product selection:

In-depth insights from a leading New Zealand Quantity Surveyor — this quarter we interview Lawrie Saegers of Rawlinsons

HOW TO USE IT

We present a summary of key data, provide commentary and then share a thought starter to initiate debate and discussion around the opportunities or threats presented.

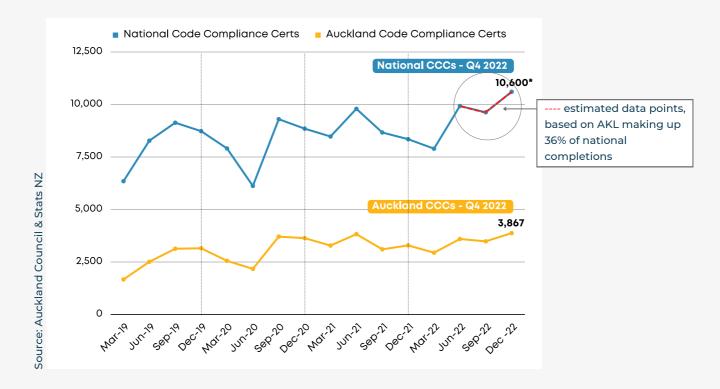


TODAY Trends in completed and forecast (consented) residential builds (December 2022)

Completed Building

Last Quarter (Oct-Dec '22)

- Auckland Council data shows Code Compliance Certificates (CCCs) rose in the last quarter of 2022 to a record quarterly level of 3,867
- Nationally, we estimate 10,600 residential dwellings were completed in that last quarter based on Auckland Council CCCs continuing to make up 36% of national completions
- And applying the same 36% model we estimate a total of **38,029** dwellings were built nationally last year **2,776** more dwellings than in 2021, supported by the growth of townhouses



Consented Future Building

Last Quarter (Oct-Dec '22)

- Nationally, total consents (year on year to Dec '22) rose slightly with 49,538 dwellings consented, though approval numbers have been declining of late
- We estimate that we are completing fewer dwellings nationally than we are consenting — 10,600 vs 11,674 in the last quarter
- Nationally, 60% of all consents are now for attached dwellings
- Each month we are consenting 375 fewer standalone homes than in 2021

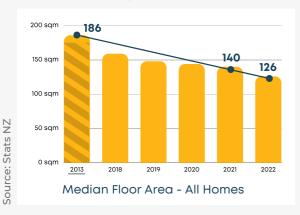




TODAY

Other numbers we're keeping an eye on

Size of Dwellings (2013 - 2023)



- Reflecting the trend towards higher density housing, the median floor area of our homes has dropped 10% in the last 12 months, from 140 to 126 square metres, and 32% in the last decade
- We can no longer approach residential design in the same way we have traditionally — we need to support developers with the appropriate design guidance, material suitability and construction method to suit the decreasing format of new builds.

General Economic Drivers (12 months to Dec '22)



Source: Stats NZ



Source: Stats NZ



Source: Stats NZ

- The latest ANZ Business Outlook Survey (Feb '23)
 suggests inflation expectations remain stuck around 6%
- Compared to surveys during the last 6 months, there's been a marked drop in expected wage growth, however 81% of respondents still expect to raise wages over the next 12 months
- Unemployment remains relatively low from a historical perspective at 3.4% (for last quarter to Dec '22), but it has trended slightly upwards in 2022. Keep an eye on this as it is a key consideration in risk analysis by banks for mortgage lending.



Source: Stats NZ

THOUGHT STARTER:

With more projects including multiple dwellings than any other time in history, we need to constantly analyse the ratio of building starts to consent approvals.

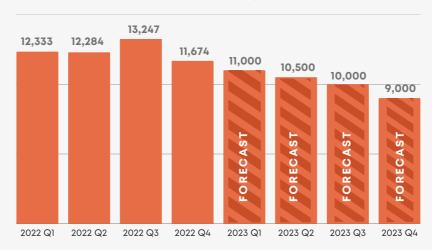
TOMORROW

Residential and commercial construction forecasts

Residential Construction

- The latest BRANZ forecasts continue to show residential consents for new builds falling over the remaining quarters of 2023 after the record numbers seen last year
- However, the expected 32% drop from the record number of 13,000+ consents in Q3 has eased to 24% for Q3 23
- BRANZ forecast estimates ~40,000 residential consents for 2023
- The other key factor yet to be fully understood is the impact of the North Island floods and Cyclone Gabrielle

BRANZ Quarterly Residential Dwelling Consents Forecast



Understanding Future Residential Demand

- RBNZ's February '23 Mortgage Lending figures (<u>see chart over leaf</u>) show overall lending was \$11.7B for the three months Dec '22 to Feb '23
- This is down 36% or \$6.6B when compared to the same three month period last year
- Compared to the previous three months, overall lending was down 15% (Dec '22 to Feb '23), First Home Buyer (FHB) was down 18% and existing homeowners off by 15%
- And FHB lending, as a proportion of total lending, remains consistently at about 22%
- Keeping an eye on this FHB segment, is key to understanding future residential demand for higher-density homes as they account for 25% of all new townhouses, flats & apartments sales which now make up 60% of all building consent approvals

THOUGHT STARTER:

Two strong drivers likely inflating recent residential building consent approvals:

- · Developers building consumer confidence with plans consented ready to build
- Pre-May 2023 approvals to avoid the upcoming residential H1 requirements

New Residential Mortgage Lending by Borrower Type

	Previous years:			Monthly:			
	Feb 2021	Feb 2022	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023
Total lending (\$million)							
All borrower types	7,601	5,730	5,582	6,055	5,121	2,775	3,836
First home buyers	1,182	954	1,219	1,357	1,110	640	815
Other owner-occupiers	4,527	3,656	3,379	3,656	3,020	1,667	2,329
Investors	1,839	1,057	904	957	913	428	626
Business purposes	52	64	80	84	78	39	65

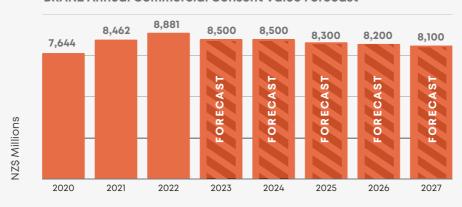
Source: Lending and Monetary Statistics, Reserve Bank of New Zealand

- February saw the OCR increase again to 4.75%, with the RBNZ 'remaining resolute' in its determination to curb inflation, suggesting the Treasury consider tax increases to assist not a typical election-winning manifesto pledge in an election year!
- Run-ups to elections typically deliver delays in OpEx and CapEx decision making, suggesting spring may not have the usual seasonal bounce this year

Commercial Construction

- Thanks to a strong pipeline of education and health work from the government, commercial construction forecasts remain healthy
- Industrial activity currently represents approximately 30% of consent construction value in a continued response to bolstering domestic production and storage
- Recent forecasts consistently predict commercial construction to stay at record levels for the foreseeable future

BRANZ Annual Commercial Consent Value Forecast



THOUGHT STARTER:

With long lead times, could we see even further strength in commercial construction once the hotel and hospitality segment starts returning to pre-COVID levels?

HORIZON

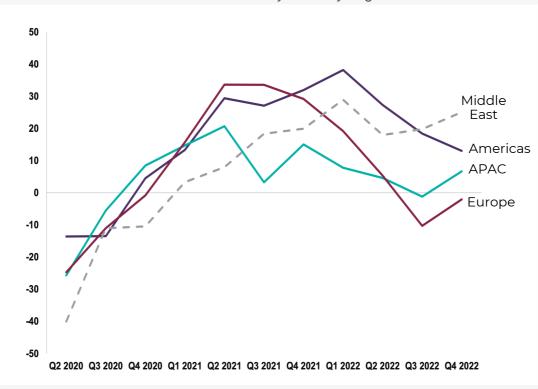
— Global perspectives on current and expected construction activity

To provide an idea of the demand and availability of building materials and resources outside of NZ, we have summarised the latest 2022 Q4 RICS Global Construction Monitor.

Overview

- In Q4, the Global Construction Activity Index (CAI) saw global sentiment improve slightly from +3 to +8, driven by a strengthening outlook in the infrastructure sector
- However, this masks a clear trend globally of a fall in residential construction where global sentiment has fallen from +20 to -16 over 2022, driven primarily by Europe and the USA
- Global sentiment for commercial construction has also dropped from +9 to -6 over 2022
- China continues its sixth quarter of severe negative sentiment, with residential construction at -62 and commercial construction at -65
- From a regional perspective, total construction in the larger American markets is showing a clear decreasing trend
- Europe and APAC figures show growth (albeit from a weak starting point) again due to a growth in infrastructure (see chart below)



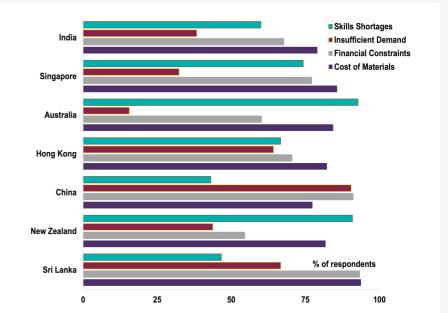


Source: Royal Institution of Chartered Surveyors

At a global level, the cost of materials, financial constraints, along with skills and labour shortages, were considered to be the main factors holding back construction activity.

Turning to APAC, as inflationary pressures mount, a large majority of the respondents continue to view the cost of materials as one of the key factors holding back construction activity in all markets (see chart to right). However, specific issues emerge in different markets.

Factors Limiting Activity in APAC



Source: Royal Institution of Chartered Surveyors

In Australia and New Zealand, the most-cited factors are instead a shortage of labour and skills. Meanwhile, insufficient demand is flagged by 90% of the respondents in China, with financial constraints also proving a barrier for the market.

Current Workloads by Sector



Source: Royal Institution of Chartered Surveyors

Infrastructure is the main workload driver in APAC, and particularly important in New Zealand, with residential falling back sharply compared to Australia. However, do note a 1.15% difference in the OCR rate between the two neighbours, meaning that Australia might also see a similar slowdown if their cash rate rises further.



Clearly supplies for residential and commercial construction should become more available with dropping sentiment.

However, what impact could the rebuild following the recent earthquakes in Turkey and Syria have on the market?

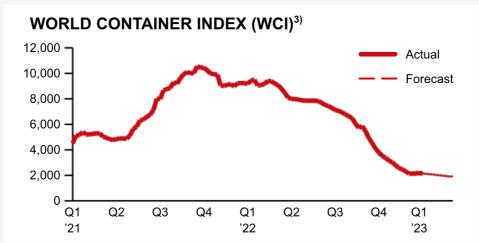


———— Global and regional freight and logistics summary

From the recent DHL Ocean Freight Market Report (Jan 2023), we can review the impact of logistics for suppliers of building materials which has a large impact on the cost and availability of materials. Understanding key trends and changes will allow us to better plan how we structure our supply chain and estimate the cost (and timing) of getting products to building sites.

Current Outlook

- The US\$ spot rates for 40-ft containers, referenced in the World Container Index, fell in Q1 2023 and are forecast to ease further
- With China continuing to emerge from Covid restrictions, there was no usual pre-Chinese New Year rush and in fact many carriers implemented 'blank voyages' in January a term used when a shipping line skips a port or an entire voyage of a scheduled sailing route



Source: DHL Ocean Freight Market Report (Jan '23)

The Forecast

- Demand is expected to continue to soften globally with availability improving and delivery reliability surpassing '20 and '21 levels
- A significant number of new ships are set to hit the water in 2023 and so it's expected for supply to quickly outstrip demand

THOUGHT STARTER:

The continued increase in emission unit prices (NZ ETS) resulted in another increase in Synthetic Greenhouse Gas (Goods) this year.

What impact could this have on our decision to import building materials?



CONSIDERATION

Strategic insights from Lawrie Saegers





Te Pae Christchurch Convention Centre

This month we speak to Lawrie Saegers, Managing Director of Rawlinsons — a leading cost consultancy firm that has provided quantity surveying and cost management services in New Zealand for over 40 years. Rawlinsons provides cost solutions through not only measuring and pricing capital costs, but also considering the full lifecycle of the building or other asset, to help clients maximise value while minimising risk.

Lawrie is Managing Director of Rawlinsons, where he has worked for over 14 years. In his own words: "I'm passionate about the New Zealand construction industry and making sure it remains investible for clients, and a cool, rewarding place to work for the rest of us."

What do you think is working well within NZ's design and construction industry?

Several years ago the industry was a quite stressful place to work — there were adversarial contracts and consultancy agreements, people generally weren't communicating effectively, and NZ's biggest contractor hit big losses. Out of that came the Construction Sector Accord — they've been doing good work with local government and industry towards better risk allocations, better contracts and better outcomes as a result.

Another thing is how we've dealt with Covid-19. No one knew what was going to happen with the industry, but most parties were mature about how they dealt with it. I think that's a benefit of operating in a smaller market like ours; you heard stories from overseas where completely fair and reasonable costs were being rejected by clients. Here I found people were more collaborative.

And what isn't working well?

There are still gaps in some of the documentation that we're using for schedules of quantities for contractors to price. It's better than it was, but subcontractors have to fill those gaps and it means there's more unnecessary reliance on shop drawings and things of that nature which pushes more risk onto contractors and their supply chain. That can be avoided.



And there's not enough competitive tendering — a reflection of the market and the volatility that's still there. Projects will often get a known contractor on board, which in some cases is justified, but in others it's not, and you tend to lose commercial tension with pricing as a result.





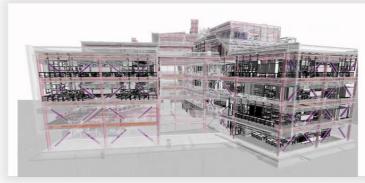
What opportunities are there for the industry to innovate and improve?

Quantifying carbon is going to be a big opportunity as we deal with climate change. Responsible clients will be asking 'what is our carbon footprint if we build this asset and how can we minimise that through its lifecycle?' And then there's how we utilise technology, using computers to do those computational tasks to then free up human brains for thinking and helping clients resolve more gnarly issues based on experience and intuition. Both are massive opportunities for the industry if we work collaboratively and genuinely in the best interests of our project.

What's the single biggest challenge the industry will face during the next 5 years?

There's obviously going to be a lot of work helping with the fallout of Cyclone Gabrielle, and productivity remains a big challenge. The construction industry has suffered from inefficiency and a lack of productivity. We need to raise productivity by taking lessons from overseas where they do things better to get better value for money. It's not that people aren't working hard, but we do need to work smarter, and bring in more diversity of thought to resolve that challenge.

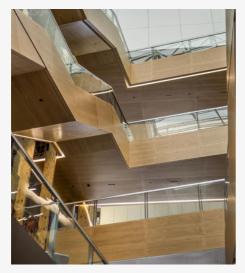


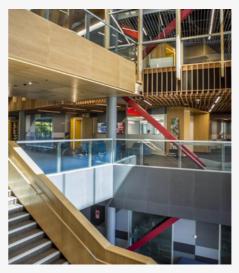


University of Canterbury Regional Sciences and Innovation Centre

What do you think suppliers need to focus on to better support the industry?

Carbon metrics! In my view, it's only a matter of time before the counting of carbon through the lifecycle of the project becomes mandatory for obtaining building consents and within central government business cases. As a quantity surveyor, getting reliable information on costs and carbon is critical. The carbon count needs to be right from the start — from raw material supply through to disposal and reuse of material. We're reliant as an industry on getting that real time and trusted information from suppliers.





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THOUGHT STARTER:

How do we present material data to Quantity Surveyors?

Providing trusted compliance information to all project parties is now the norm, adding cost and environmental performance (including carbon) seems to be a significant future opportunity.

Feedback

We trust that this report has provided some valuable insights. We will develop this resource over time, and warmly accept any feedback on the usefulness of information and opportunities to include other key drivers impacting our industry. Don't hesitate to contact us at matthew@eboss.co.nz or dom@eboss.co.nz



