

THE PULSE

POWERING
STRATEGIC
BOARDROOM
DISCUSSION

Introduction

————— Welcome to the 2022 Q4 EBOSS Pulse — 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 focussed on understanding the demand for building materials across residential and commercial construction in NZ.

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 and the availability of building materials

CONSIDERATION

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

In-depth insights from a leading New Zealand architect — this quarter we interview Ewan Brown of Tennent Brown

HOW TO USE IT

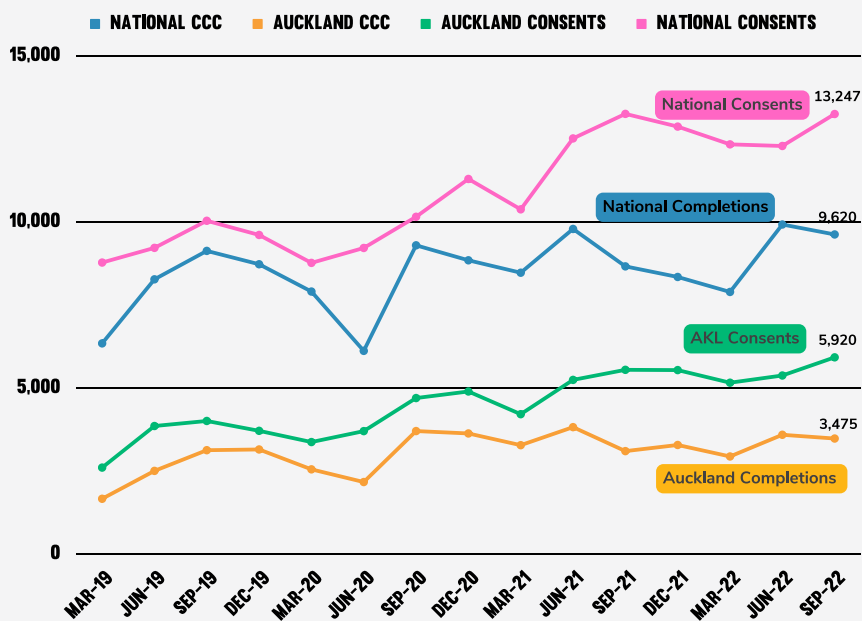
We present a summary of key data, provide commentary and then share a thought starter to initiate debate and discussion around the opportunities or threats presented.



TODAY

Completed residential builds as indicated by CCCs issued (October 2022)

- Auckland Council records show CCC's fell in the last quarter (July - September 2022).
- We estimate 9,620 residential dwellings were completed nationally in the last quarter to September 2022 (based on Auckland Council Code Completions (CCCs) continuing to make up 36% of national completions).
- We estimate 35,769 dwellings were built nationally over the last 12 months (to September 2022), slightly more homes than in the previous 12 month period.



Source: Auckland Council & Stats NZ

- Monthly Code Completions tell us that on average 380 stand-alone and 1,593 attached dwellings were signed off every month in Auckland over the last 3 months.
- Monthly Building Consent approvals tell us that on average 361 stand-alone and 1,484 attached dwellings were consented in Auckland over the last 3 months — so we are consenting a smaller number of residential dwellings in Auckland than we are actually completing.
- Of late, the consents to completions ratio is diverging. We suspect that the increase in consents for townhouses and apartments is an influence here; these higher density homes typically have longer build times, resulting in an extended period before they filter into the market.
- Looking forward, quarterly residential consent approvals have slipped from an all-time high (Aug - Oct 2022). Compared to the same quarter in 2021, North Island detached dwellings are down 25% and interestingly South Island townhouses, flats and apartments are up 33%.

THOUGHT STARTER:

With continued strength in approvals for townhouses and a longer build time, we should expect to see strong levels of townhouse completions in the new year. However, what proportion of these approvals are an early wave avoiding the new H1 requirements?



TOMORROW

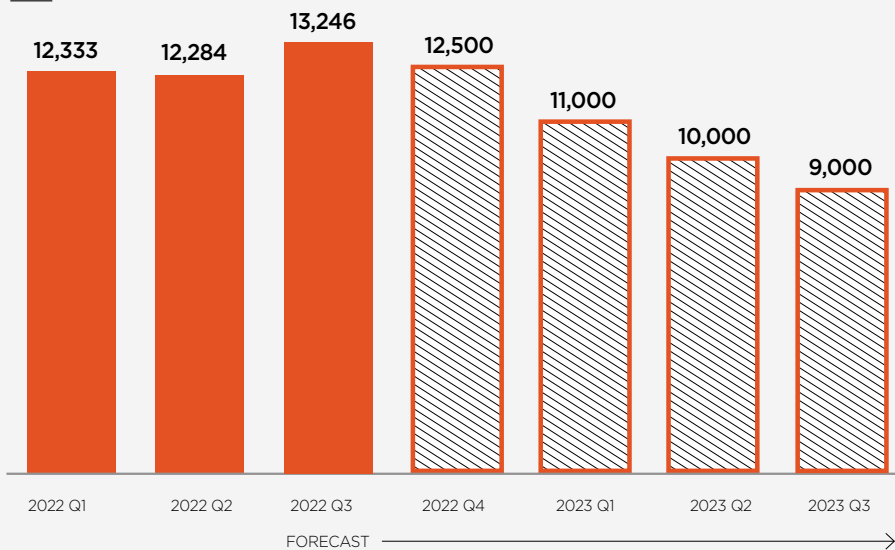
Residential and commercial construction forecasts

Residential Construction

Looking ahead, BRANZ forecasts show residential consents for new builds falling over the next few quarters from recent record levels. 2022 Q3 approvals were stronger than expected, which has stretched the tail in the BRANZ forecast out over the next four quarters. In comparison, Q3 in 2023 is forecast to be 32% lower than the same quarter this year.

With merchants reporting healthy levels of stock, the big question is how quickly will consent approvals turn into jobs? And what is the strength of consent applications in the new year?

BRANZ QUARTERLY RESIDENTIAL DWELLING CONSENTS FORECAST



Understanding Future Residential Demand

Immigration and easy access to finance has fuelled a decade of growth in new residential construction. Looking forward, a key market to understand is those new to the property market. We can see from RBNZ's New Residential Mortgage Lending figures that first home buyers are a significant part of the market, growing to 21% of all new lending over the last quarter. This is a key segment underpinning the demand for townhouses and lower cost detached dwellings.



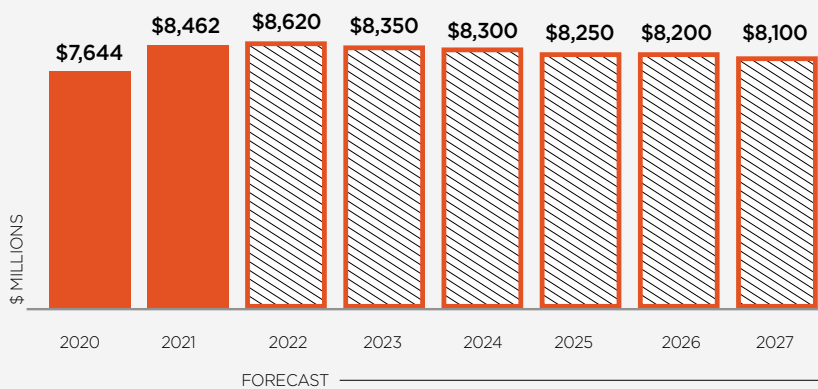
	Previous years:			Monthly:			
	Oct 2020	Oct 2021	Jun 2022	Jul 2022	Aug 2022	Sep 2022	Oct 2022
Total lending (\$million)							
All borrower types	7,782	7,717	6,056	5,402	5,413	5,135	5,588
First home buyers	1,396	1,452	1,109	1,021	1,124	1,064	1,219
Other owner-occupiers	4,422	4,886	3,824	3,471	3,320	3,207	3,379
Investors	1,882	1,306	1,054	852	905	809	909
Business purposes	81	73	70	58	63	55	80

Source: Lending and monetary statistics, Reserve Bank of New Zealand

Commercial Construction

Underpinned by a strong commitment from the government to education and health, commercial construction forecasts remain bullish. Industrial activity currently represents approximately 30% of consent value. Recent forecasts consistently predict commercial construction to stay at record levels for the foreseeable future. The question is when will the more traditional institutional development strengthen along with the hotel and hospitality segment?

BRANZ COMMERCIAL CONSENTS FORECAST*



*forecast value of consents in constant December 2021 dollars

THOUGHT STARTER:

How much impact will the recent OCR hikes have on first time home buyers? With supply chain restrictions behind us, what impact will improved supply have on demand for new storage and factory facilities?



HORIZON

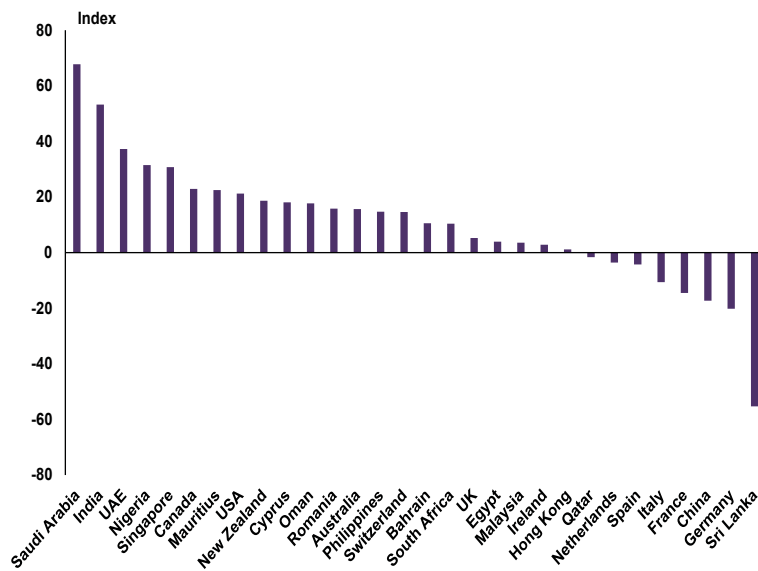
Global perspectives on current and expected construction activity

Global and Regional Construction Forecasts

For an overview of global construction trends, we have summarised the 2022 Q3 RICS Global Construction Monitor. This gives us an idea of the demand for, and the availability of, building materials and resources outside of NZ.

CONSTRUCTION ACTIVITY INDEX

Construction Activity Index by country



Construction Activity Index



The RICS Global Construction Activity Index measures changes in sentiment in key regions, and the Q3 results demonstrate how activity in Europe and China is slowing considerably against stronger sentiment through the Americas, Africa, the Middle East and India. Closer to home, there are levels of solid activity persisting for some APAC countries — Singapore, New Zealand, Australia and the Philippines.

The cost of materials remains the key activity constraining factor, although inflation expectations may have peaked in Q3. With OCR rates rising, it's not surprising to see financial constraints as the next key factor. Material and labour shortages both drop in Q3

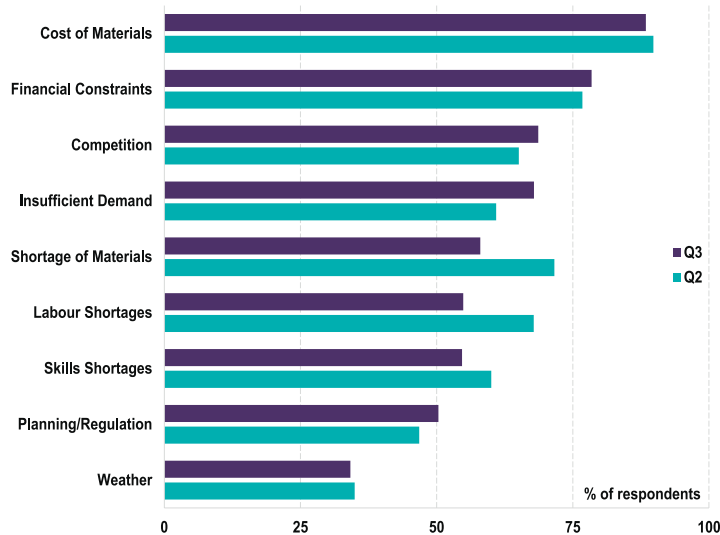
THOUGHT STARTER:

What is the opportunity to drive better support and pricing from overseas suppliers who have increased production to meet the rising demands for building materials post Covid?



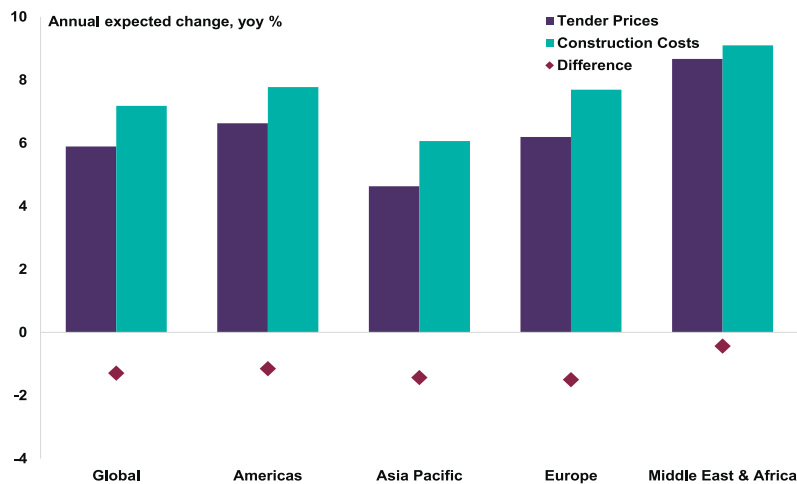
ACTIVITY CONSTRAINING FACTORS — APAC

Key factors holding back activity across APAC



12 MONTH TENDER PRICES & CONSTRUCTION COSTS EXPECTATIONS

Twelve-month cost projections by region



Source: RICS Global Construction Monitor Q3 2022

as mitigating factors, which is encouraging as supply chains and border movements improve.

Macro headwinds have been seen across most APAC regions. In particular, high inflation and finance costs were recorded as key constraints. The result is margins continue to remain under pressure in APAC, with the forecast rise in the cost of construction not able to keep up with the increased cost of materials and labour.

Global and Regional Logistics Forecasts

The demand for logistics, particularly sea freight, 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. We have provided a quick summary of the latest DHL Ocean Freight Market Report (November 2022) below.

THOUGHT STARTER:

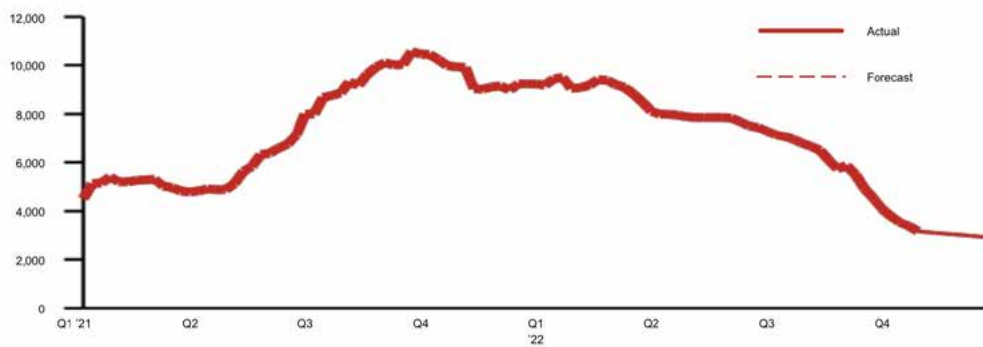
With global demand for building materials softening, what is the opportunity for reducing local inventory of imported materials, based on shorter lead times and improved reliability of sea freight?



Current Outlook

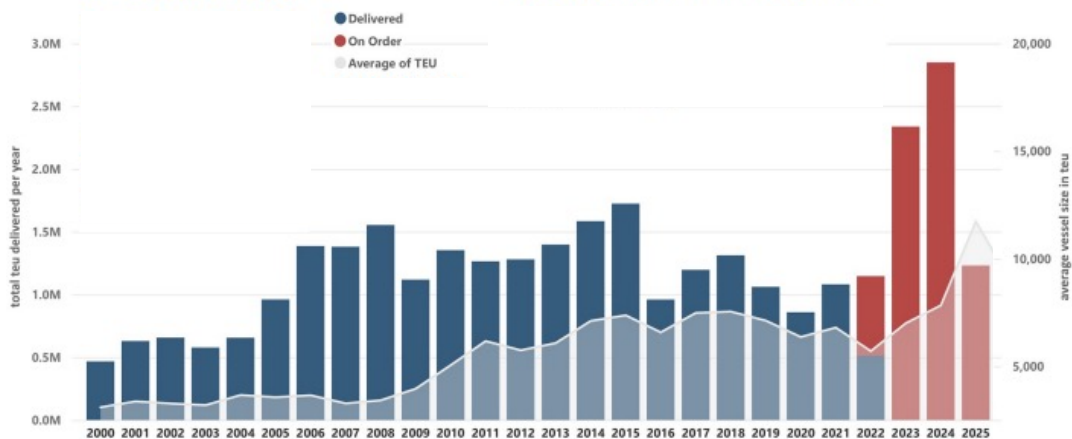
- Across European and Asian trade lanes, sea freight cargo volumes are weakening, and spot rates are coming down swiftly.
- As referenced in the World Container Index below, Liner shipping’s traditional peak season barely materialised in 2022 and many industry observers feel that the slump is structural, rather than seasonal, with fears of a global recession.

WORLD CONTAINER INDEX (WCI)³⁾



The Forecast

- Demand is expected to soften globally with delivery reliability and availability improving.
- A huge number of new ships are set to hit the water in 2023 and so it’s expected for supply to quickly outstrip demand.
- The chart below shows a 30% increase in global shipping capacity over the next three years peaking in 2024, with the introduction of faster, larger ships.



Actual and projected container ship deliveries from 2000 to 2025



CONSIDERATION

Strategic insights from Ewan Brown



In each edition we will focus on a particular area of developing importance in product specification. To kick off the series we interviewed Ewan Brown, Managing Director of Tennent Brown — a leading national architecture practice with a strong commitment to sustainable design. Tennent Brown are currently in the middle of delivering a significant Living Building Challenge project for the University of Victoria in Wellington.

Ewan is responsible for leading the office on all VUW projects — which have totalled over 100 since 2003. His passion for sustainability sees him almost exclusively focused on Te Ao Māori projects aiming to meet Living Building Challenge requirements.

What do you think is working well within the industry?

Bringing Māori narratives to projects has really evolved and improved over the last few years. Sustainability has an affinity with Kaitiakitanga [the customary Māori approach towards guardianship of the land], and working with Tuhoē in Te Urewera has helped us connect with the Living Building approach. Through the Living Building Challenge, we are really pushing boundaries — getting collaboration not only from our design team, but also working with contractors to find new ways of working with the focus being on the big picture outcome for the client. That's an exciting change.

And what isn't working so well?

Everyone has been under pressure over the last couple of years between Covid and the industry being so busy, and dealing with a lack of resources and staff. I don't think people have had enough of a mental break. My hope for the next couple of years is that everyone — architects, consultants, contractors and clients — will be able to get that mental rest.

What opportunities are there for the industry to innovate?

We have to keep innovating, particularly for climate change goals. Some answers and solutions just aren't there yet, so rapid innovation over the next decade is critical. Climate scientists say that with a 1.5 degree global temperature increase half the coral in the world will die, and with 2 degrees all the coral will die, so we need to make sure everyone does their best in this next decade to drive down the embodied and operational carbon of buildings.

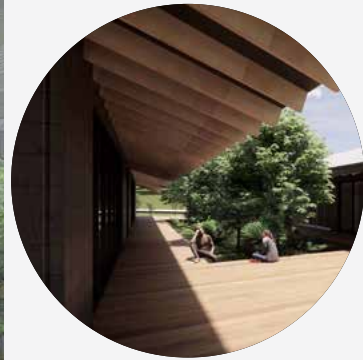
What's the biggest challenge the industry will face over the next 5 years?

Carbon will start to be counted in all buildings within two years and the industry isn't well prepared. Globally 28% of all operational and 9% of all embodied greenhouse gas emissions are from buildings, so the construction industry really does need to make changes. There is a whole series of things we need to do to reduce carbon: we have to reduce waste, carbon analysis will be important, and so will decarbonising our energy system.

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

As soon as the building process includes carbon, every supplier will be asked ‘what’s your carbon data?’ Suppliers need to be getting LCAs (life cycle assessments) on their products — they can use tools or consultants like Toitū, eTool and One Click LCA to do this. EPDs (environmental product declarations) are also important — if a supplier has an EPD and their carbon footprint information is low, then I’ll likely specify that product.

And then recycling, upcycling and take-back schemes are going to become more important. As an example, Saveboard takes packaging waste product and makes it into a wall lining. This diverts waste, upcycles, and creates a product for sale that has a much better carbon footprint. These sorts of products will fly off the shelves as NZ pivots to low carbon design.



**THOUGHT
STARTER:**

How developed is your carbon analysis? Every supplier, whether focussed on residential or commercial construction, will need to be able to confidently state the levels of embodied and operational carbon from their products by 2024.

Summary

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.

