



Building resilience  
through disruption

# Contents

Welcome

3

## 1. Supply chain context

4

Supply chain: A year like no other

Deloitte Access Economics: A year of disrupted recovery

Supply chain: National state-of-play

## 2. In focus: Thought leadership from across Deloitte

21

Supply chain resilience through digital technology

ESG: Beyond relevance and risk to materiality and value

Decarbonising Aviation: Cleared for take-off

Wellbeing: Not a matter of luck, but design

## 3. Port sector insights

36

Financial and operational trends

Comparator tables and analytics

Port summaries

## 4. Deloitte's Infrastructure and Capital Projects Offering

67

Glossary

71



# Welcome

The Deloitte New Zealand Ports and Freight Yearbook provides a concise snapshot of domestic port and freight activity. In addition, we present insight into the global and domestic environment, and a series of “in focus” thought leadership pieces relevant to the sector.

In the past 12 months, the sector has been in the spotlight like never before. Our Yearbook provides reflections and insights on the extraordinary year that was, but also keeps an eye to the future. We begin with commentary on recent supply chain challenges and the economic outlook. This section has been prepared with contribution from Deloitte’s specialist economic advisory team, Deloitte Access Economics, who have provided global and domestic economic insights. To accompany our economic insights, we also provide an overview of recent policy and other developments touching on ports and freight.

Via a series of “in focus” pieces from across Deloitte, we also present insights and guidance on topics relevant to an increasingly complex operating environment. These thought leadership pieces include:

- Opportunities to improve supply chain resilience through digital technology,
- Perspectives on the changing nature of ESG considerations,
- Insights into workforce wellbeing, and
- Insights into the decarbonisation of aviation.

As always, the Yearbook details operational and financial performance data for New Zealand’s major ports. For the second year, this data is also presented via an [interactive dashboard](#), which we encourage you to explore.

We are pleased to release this Yearbook as part of Deloitte’s [Infrastructure & Capital Projects \(ICP\)](#) integrated market offering.

Our domestic and global network of ICP professionals allows us to bring together deep skills and provide integrated solutions to all segments of the infrastructure sector and across the asset lifecycle.

If you have any questions, please reach out to either myself or the other contributing authors.

We welcome your feedback and look forward to future discussion and engagement.



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# Supply chain context

## Strategic and economic insights





# Supply chain: A year like no other

The domestic and global supply chain has been in focus like never before. Supply chain woes are making headlines on a regular basis, leaving little doubt that the pandemic has both highlighted and exacerbated vulnerabilities of a 'just in time' supply chain.

The ports and freight sector is a key enabler of the supply chain, which in turn impacts the performance of our economy and our standard of living. While New Zealand has weathered the COVID-19 pandemic relatively well, it has not been immune to impacts on its supply chains. These effects are anticipated to persist in the near term.

To set the scene for this Yearbook, we highlight some drivers of disruption, both at a global and domestic level, and provide a view of the outlook.

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# A global supply chain under pressure

## The impact of the pandemic has been significant

Shipping capacity was idled in the early stages of the pandemic. However, an unexpected surge in consumer demand, combined with reduced capacity, as well as industrial action and COVID-19 related disruptions at key international ports, has caused ongoing congestion throughout the global supply chain. This has had consequent flow on effects for New Zealand, being at the end of international freight routes.

There is now an international shortage of containers and most available shipping capacity is in use. Schedule reliability is currently well below pre-pandemic levels (see figure bottom right), reflecting congestion at major international ports. This disruption continued throughout 2021, with reliability hovering between 33% - 35% in the past six months. Maersk recently estimated that between 12 to 15% of current global capacity is void because of slow vessel turnarounds.<sup>1</sup>

As a result of unreliable schedules, more vessels are needed on the water to carry the same amount of cargo. However, while ship orders surged in 2021, significant additional capacity is unlikely to arrive until 2023, as it takes an average of 18 months to build a container ship. Container lines will also be wary of investing in excess additional capacity, recalling earlier boom and bust cycles experienced by the industry.

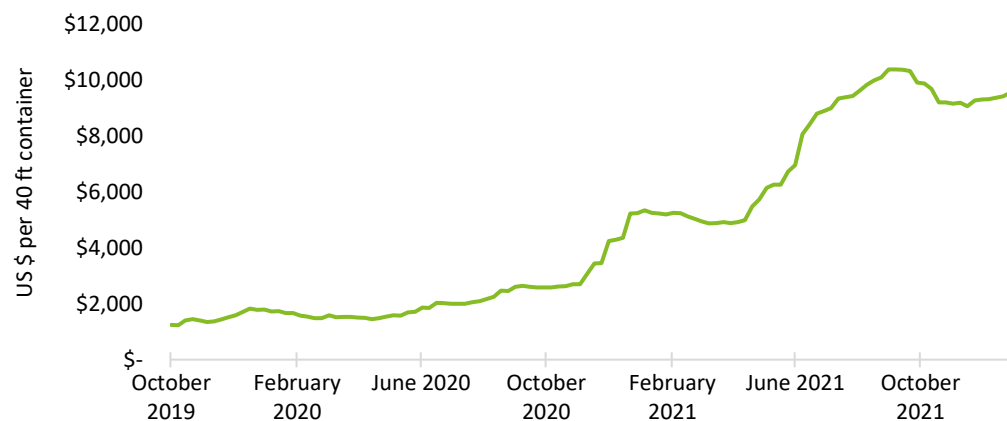
Global container rates increased dramatically in 2021 (see figure top right). The cost of international shipping has increased by up to ten times when compared with 2019 levels. While in recent months this has decreased slightly, rates continue to be well in excess of a pre-pandemic environment.

*“The pressures have been relentless, with logistics teams suffering sustained and systemic global supply chain disruption, record port congestion, cargo delays, chronic capacity shortages, breaches or near breaches of shipping contract commitments – and ocean freight rates surging to extreme levels.” – Phillip Damas, Managing Director, Drewry*

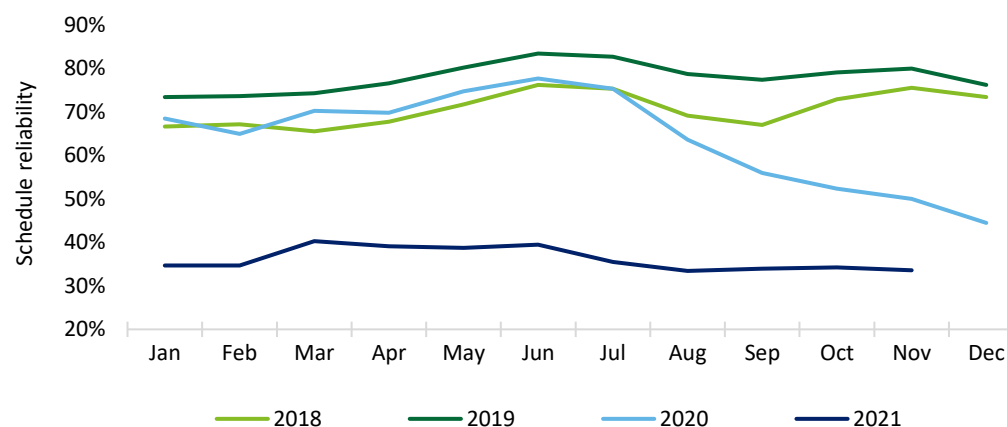
While operating costs for shipping lines have increased (the cost of marine fuel more than doubled in 2021), collectively the lines have made more profit in the last 12 months than at any other time in the last decade on the back of surging freight rates.<sup>2</sup> AP Moller-Maersk A/S, one of the world’s largest container shipping lines, reported EBITDA for 2021 of US\$ 24 billion, compared to US\$ 8 billion in 2020.

During the pandemic, the cost of air freight has become more competitive relative to sea freight. Pre-pandemic, the average price to move air cargo was 12.5 times more expensive than sea shipping. In September 2021, it was only three times more expensive. However, air freight has still faced capacity constraints as demand surged while capacity reduced.<sup>3</sup>

World Container Index



Global Schedule Reliability



Source: Sea-Intelligence, GLP report issue 124

1. Maersk: <https://www.maersk.com/news/articles/2021/11/23/asia-pacific-market-update-november>  
 2. Bloomberg: <https://www.bloomberg.com/news/articles/2021-09-12/the-world-s-shippers-are-earning-the-most-money-since-2008>  
 3. IATA: <https://www.airlines.iata.org/news/capacity-problems-but-cargo-still-strong>



# Domestic impacts

## Less reliable, more expensive

New Zealand is a minnow in the global supply chain. Our ports and freight sector has been significantly impacted by disrupted international shipping and reduced air travel, compounded by local COVID-19 impacts and domestic port operational issues.

In the past year, there has been strong domestic demand for goods as well as ongoing demand for capacity from exporters. However, capacity has not kept pace due to unreliable shipping schedules and congestion at key New Zealand ports. Airfreight capacity is also under pressure, notwithstanding that government subsidies have kept capacity at 90% of pre-pandemic levels, in light of strong demand.

Shipping unreliability for imports and exports has had ripple effects throughout the domestic supply chain. Due to shipping delays and congestion experienced, goods are being offloaded at ports

different to their original destination as lines attempt to maintain international schedules.

Local transport is required to shift to whichever port has received offloaded goods, thereby moving logistics patterns out of sync and further reducing effective capacity in the system. Capacity has also been constrained in the trucking industry by a shortage of truck drivers.

International vessels are also unavailable to undertake key coastal shipping services and are less willing to take on empty containers, which has further exacerbated the impact to New Zealand's supply chain.

*"We are at the mercy of some very large, global shipping lines, we don't have very much ability to influence a lot of the global issues because of the size of our country and position" – Harriet Shelton, Manager, Supply Chain, Ministry of Transport*

In line with global trends, container rates to and from New Zealand have increased by up to six times pre-pandemic rates, reflecting global shortages of containers and limited shipping capacity. However, commercial arrangements, such as the Kotahi supply chain collaboration initiative, have provided some insulation from this.

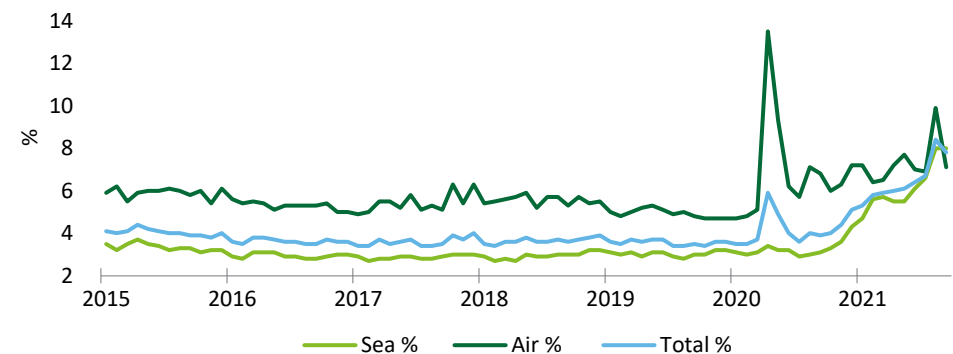
Ships are regularly arriving off window at New Zealand ports due to the ongoing delays and disruptions. Berth windows were suspended at most main New Zealand ports in 2021. Media reports suggested it was taking up to three weeks to move product from Tauranga to Auckland by truck, when it previously took three days. The ongoing shortage of truck drivers and increasing fuel costs in New Zealand could likely add further pressure to logistics costs.

Supply chain challenges are seeping into domestic inflation. While shipping costs for imported goods (as a percentage of value) have eased in recent months, they remain significantly higher than pre-pandemic levels (see figure below). Statistics New Zealand revealed transport prices also increased by 15 percent in 2021, boosted by record petrol prices. On average, the price of 91 octane petrol increased 30 per cent in Q4 2021, from \$1.87 per litre to \$2.45. Diesel prices increased by approximately 50 percent in 2021.

Cost pressures show few signs of abating, as we look at the outlook of New Zealand's supply chain over the page. Deloitte Access Economics, in the next article, also provides insight into the impacts of this disruption, and the global and national economic outlook.



## Shipping costs for imported consumer goods



Source: Stats NZ, RBNZ, Deloitte

Chart derived by taking the value of consumer merchandise imports including freight and insurance costs (CIF) and subtracting the reported value for duty (VFD), which excludes these costs. It is expressed as a percentage of the VFD figure.



# ‘Just in Time’ to ‘Just in Case’?

## Outlook

The outlook for global supply chain disruption is the subject of debate. However, with the pandemic unresolved, global logistics are likely to be disrupted for another 12-24 months. Disruption has a cascading effect which takes a long time to resolve. At the time of writing, the full impacts of the Omicron outbreak have yet to be felt in New Zealand. The Russian invasion of Ukraine is sending further shockwaves through global supply chains as well as driving up energy costs.

A key driver of how quickly the supply chain normalises will be consumer behaviour. If consumer demand falls, and firms reduce inventory, this may take pressure off the system. However, elevated shipping rates are now flowing into long term contracts between shipping lines and their customers. The hangover from the disruption experienced in 2021 may continue for many years.

## A focus on resilience

The issues affecting the New Zealand supply chain will likely only settle when wider international constraints on capacity are resolved. With that being said, there is a good chance that the post-pandemic supply chain will look different to the previous ‘just in time’ approach, with businesses seeking to build more resilience into their logistics operations.

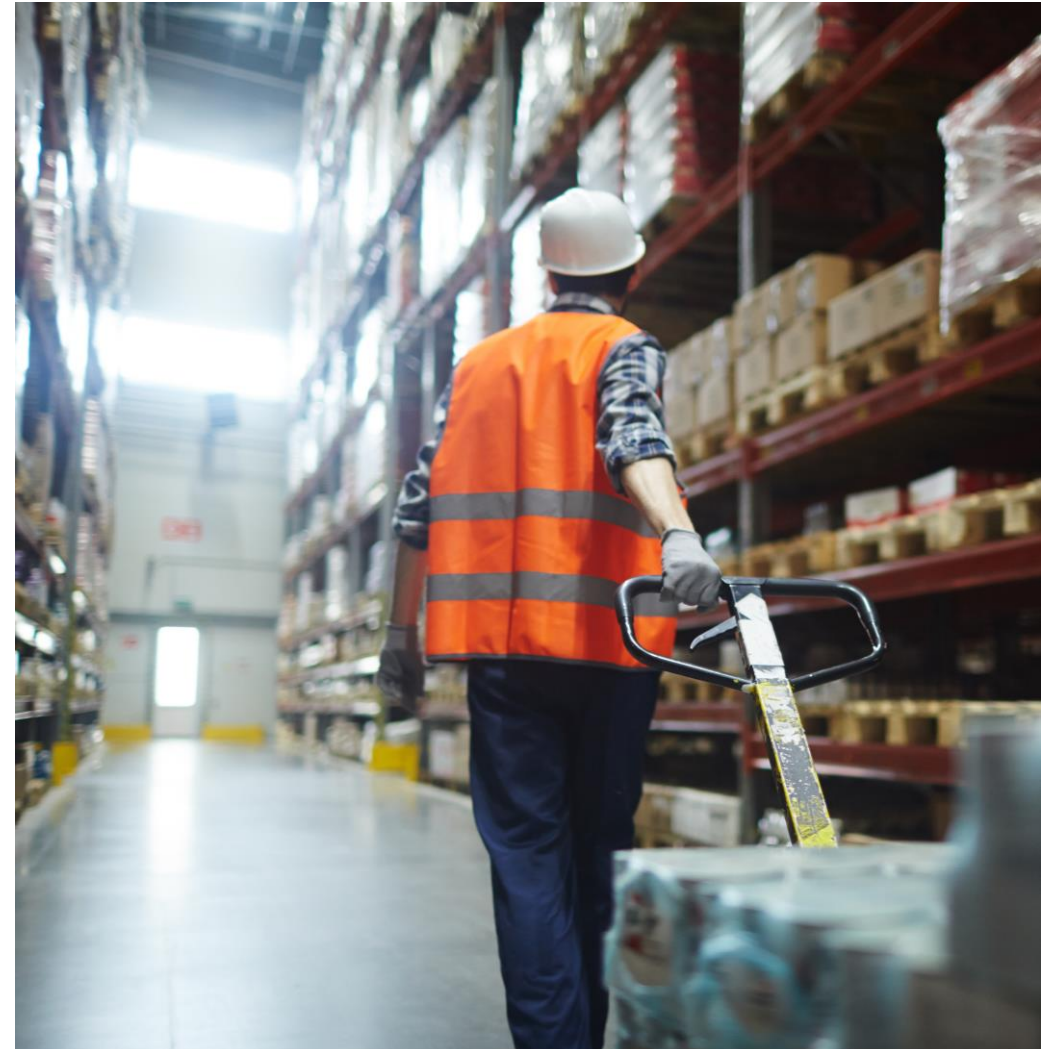
We expect firms will increasingly take risk mitigation into their supply chain strategy going forward. This may involve diversifying suppliers, including across geographies, near-shoring manufacturing to key markets, or holding additional inventory. Another mitigant could include forming freight alliances. An increased focus on digital technology will be also important to improve resilience and productivity.

Reflecting on observed supply chain constraints, and in anticipation of environmental challenges and commitments, the Government is working on a national supply chain strategy, with a draft strategy to be completed by the end of 2022.

At a national level, we are also seeing a greater focus on rail for the transportation of goods, as well as a focus on coastal shipping. These policy developments are discussed in more detail on pages 16 to 20.

It remains to be seen if the sustained supply chain pressures will see a need to expand investment in port-side and related infrastructure. Major ports, such as Tauranga and Auckland, have plans underway for terminal automations and other capacity enhancements. Container depots have been at capacity and will be looking to expand. However, firms may also be reluctant to accelerate and expand investment plans given the uncertain outlook.

For better or worse, these are interesting times for ports and freight in New Zealand.







# Deloitte Access Economics: A year of disrupted recovery

Ports and logistics infrastructure have been, and will continue to, play a key role in ensuring security of supply of products into New Zealand, especially given our limited domestic manufacturing capacity. This is especially important for intermediate goods or specialised parts that support wider economic growth.

The COVID-19 pandemic and geopolitical tensions continue to significantly impact economic activity throughout the globe and in New Zealand. Over 2021, continued disruption has meant that shipping rates, availability, access and delay have all affected the supply chain and impacted consumer access, choice and prices. We had a year of record high inflation, oil and electricity prices, record low unemployment and migration and supply-chain gridlock.

The disruption caused by COVID-19 and measures taken by governments to support both human

health and economic activity had a profound effect on global and domestic supply chains in particular, putting into sharp focus some of the vulnerabilities of a “just in time” approach and a greater need to shift to a “just in case” approach.

In this article, we take a closer look at the performance of the global and New Zealand economy across 2021, providing insight into the key events and factors driving economic performance and trade.

We also provide an overview of our outlook for New Zealand over 2022 and beyond, and the key issues facing the economy and the logistics sector.

Our outlook is current as at 25 February 2022. Events are moving apace in New Zealand and abroad and our view may change as the impact of recent developments play out.

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# Global economy – A year of recovery but doubts lie ahead

## Delta and Omicron stall recovery

The global economy bounced back strongly at the start of 2021, spurred on by increasing vaccination rates, easing of restrictions and significant fiscal and monetary stimulus. However, the growth was not even across the globe, with vaccine access emerging as the principal fault line along which the global recovery was split; those that could look forward to normalisation of activities (most advanced economies) and those that still faced the prospect of resurgent infections.

The emergence of the Delta and Omicron variants has dulled what was expected to be a strong global economic recovery in 2021. The more transmissible Omicron variant has meant that many countries have had to reimpose restrictions, which are now gradually being phased out.

Growth in the Chinese economy also slowed down in the latter part of 2021 amid a property market correction. Decades of debt-driven growth had stretched the nation's developers and recent policy tightening has impacted them. A slowdown in the property sector in China will have significant flow on effects to other parts of the economy. China's economy has also suffered from increasing energy costs and shortages, resulting in rolling blackouts for energy intensive industries, disrupting manufacturing.

Overall, the International Monetary Fund (IMF) projects the world economy to have grown by 5.9% year on year in 2021.

## Doubts lie ahead

Despite the strong recovery in 2021, the global economy enters 2022 in a weaker position than previously expected. The IMF now projects that global growth will moderate from 5.9% in 2021 to 4.4% in 2022, half a percentage point lower than their projections in July 2021.

The markdown is a reflection of earlier than expected withdrawal of fiscal stimulus, continued supply shortages in the United States, and continued financial stress among property developers in China.

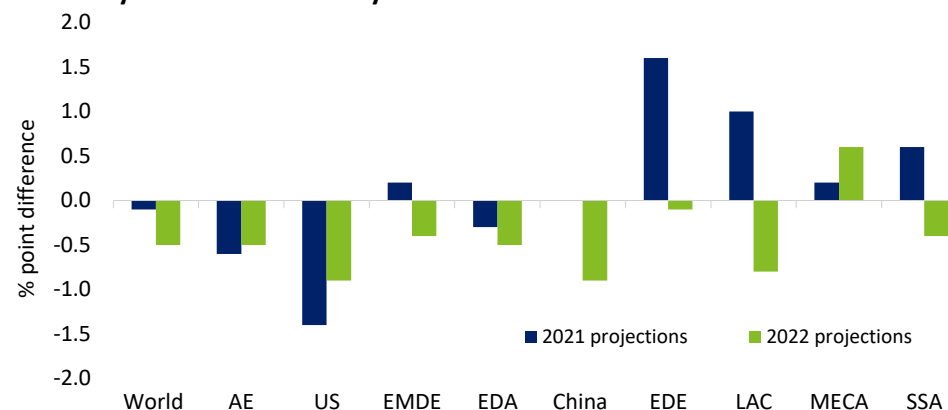
We now expect global growth is likely to be lower than 4.4% with the risk of new COVID-19 variants, further supply chain disruptions and inflationary pressures as a result of the Ukraine crisis.

## Trade mirrors global economy

Global trade rebounded strongly in 2021. UNCTAD expects global trade to reach US \$28 trillion in 2021, a 23% increase on the previous year and 11% higher compared to pre-COVID-19 levels. Global trade in goods also reached record levels in the third quarter of 2021, reflecting the dramatic shift of consumer demand from services to goods due to the pandemic.

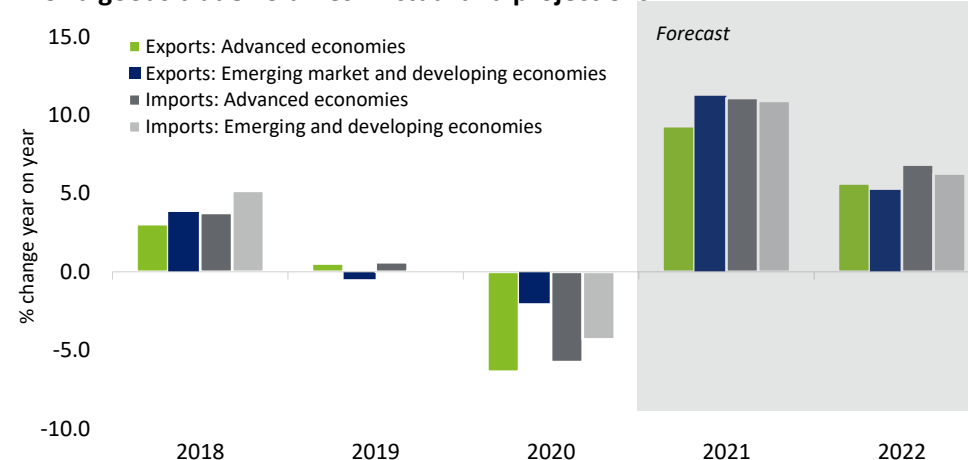
However, as with the global economy, the global trade outlook looks patchy. Slowing economic growth globally, energy costs, tightening fiscal and monetary policy and the crisis in Ukraine all mean that trade volume growth is expected to moderate compared to 2021.

Percentage difference in regional GDP projections for 2021 - IMF WOE July 2021 versus January 2022



Source: IMF World Economic Outlook July 2021 and January 2022  
 Notes: AE = Advanced economies; US = United States; EMDE = Emerging market and developing economies; EDA = Emerging and Developing Asia; EDE = Emerging and developing Europe; LAC = Latin America and the Caribbean; MECA = Middle East and Central Asia; SSA = Sub-Saharan Africa

World goods trade volumes - Actual and projections



Source: IMF World Economic Outlook data October 2021



# Global economy – Inflationary pressures abound

## Record levels of inflation

Inflation is back in the news for many countries across the globe.

Measures by governments to stimulate economies through fiscal stimulus and loose monetary policy had the intended effect – demand has been strong across most of the globe and has centred on goods, rather than services, given ongoing travel and movement restrictions.

This surge in demand has come at the same time as supply chain disruptions, which resulted in the increasing shipping costs described earlier. Rising energy and food prices have also recently added to costs, raising inflation rates across the globe. Consumer prices were up 7.5% in January in the United States and Europe from the year prior. The inflation figure in the United States is the highest since the early 1980s. Energy prices were also up 27% from a year earlier in the United States. In New Zealand, the Consumer Price Index (CPI) in the December quarter of 2021 increased by 5.9% compared to the previous year. This was the biggest increase in consumer prices since 1990 and was driven by housing, utilities and higher prices for petrol. Since we prepared our analysis, we note that oil prices have now reached over US\$ 140 a barrel following Russia's invasion of Ukraine, adding further inflationary pressure.

Core consumer inflation – a measure that strips out volatile fuel and food inflation – has also been strong in several large economies such as the United States, United Kingdom and Canada.

## Difficult decisions lie ahead

At the onset of the pandemic, policy makers around all the world took to easing monetary policy and expanding fiscal stimulus. This helped prevent a sustained global recession, despite lockdowns. Indeed, the strength of consumer demand for goods stemming from these policies have caused, in large part, the global supply chains issues discussed, as supply chains were not able to ramp back up at the same pace as demand.

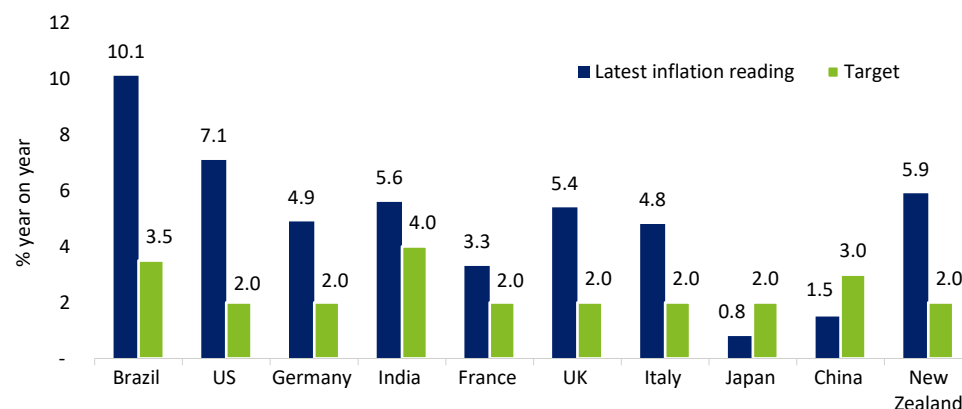
The sustained inflationary pressures worldwide, and the presence of Omicron, present challenges for policy makers. While the supply and demand imbalances are likely to ease to some extent over the course of 2022, it is clear that loose monetary policy and fiscal stimulus cannot carry on as is in many countries.

The global policy response to sustained inflation is unlikely to be synchronised as it was at the onset of the pandemic. Individual countries are likely to tailor policies to the specific inflationary pressures they are facing as well as the extent of their economic recoveries. Policy makers around the world face the unenviable task of getting ahead of inflationary pressures while avoiding sharp reductions in output and employment that may derail economic recovery from COVID-19.

*“With inflationary pressures intensifying and Omicron generating new uncertainties, monetary policymakers are facing new and challenging trade-offs” – IMF*

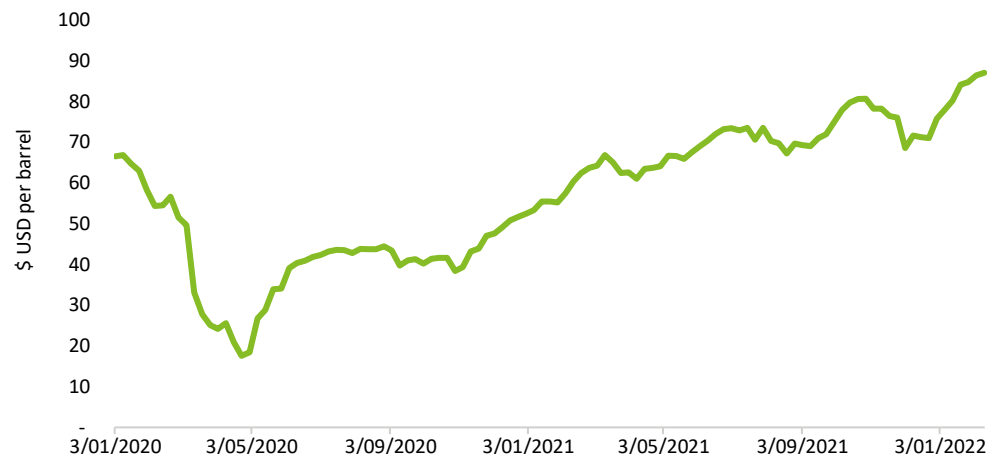
Differing policies of key trading partners will impact goods trade with New Zealand, with faster and more sharp policy tightening acting to dampen demand and trade volume growth.

## Inflation and inflation targets



Source: Refinitive Datastream, Statistics New Zealand

## Crude oil price (Dubai)



Source: Ministry of Business, Innovation & Employment Oil Statistics



# New Zealand economy – Another year of disruption



## COVID-19 continues to disrupt

The Delta and Omicron variants disrupted what promised to be strong economic recovery from the onset of COVID-19. Growth in the June 2021 quarter was up 17.4% on the previous year, reflecting a strong rebound from the previous year's lockdown, and was driven by the services sector and the “travel bubble” with Australia.

However, the Delta induced lockdown meant that the economy shrank by 3.7% in the September quarter of 2021. Despite the September decline, economic activity outperformed market expectations, reflecting the fact that both firms and consumers were much better prepared to deal with lockdowns than expected.

New Zealand is now much more match fit for fighting COVID-19 in 2022 than previously, due in large part to high vaccination levels and a move away from a “zero COVID-19” strategy. We forecast the economy to grow in 2022 with border restrictions easing and more positive consumer and business sentiment under the new COVID-19 strategy. However, the spread of Omicron means that economic growth will be slower in the near term. Other factors shaping this slower near-term outlook include ongoing labour shortages, supply chain disruption, heightened inflation and policy responses to increased interest rates.



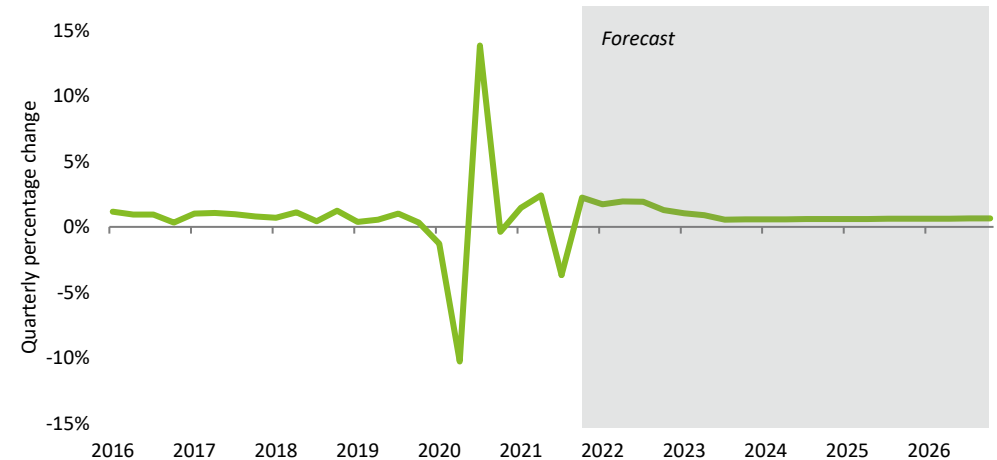
## Rising inflation and interest rates

Heightened demand from loose monetary policy and fiscal stimulus, supply chain disruptions, a tight labour market, and strong wage inflation have all led to strong inflationary pressures. The Consumer Price Index hit 5.9% in the year to December 2021 – a level not seen since 1991. The quarter prior it was 4.9%, which was the fastest annual price increase since 2008 (excluding GST hikes).

Trimmed-mean measures – the average rate of inflation after ‘trimming away’ price changes at both ends of the distribution – show headline inflation is backed by high underlying core inflation, with quarterly growth varying from 1.4% to 1.7% in December 2021. Inflationary pressure is also coming from both tradable and non-tradable goods, each increasing at a quarterly rate of 1.3% and 1.4%, respectively.

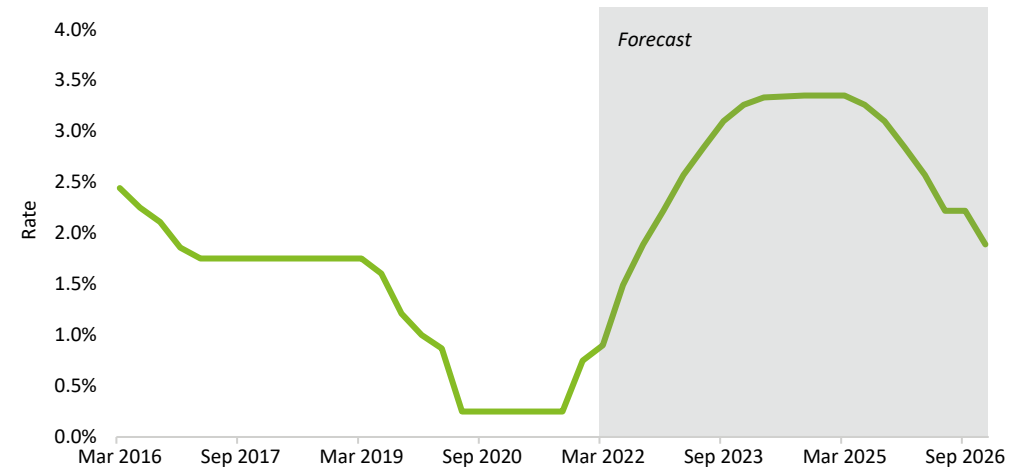
There is increasing pressure on the Reserve Bank of New Zealand (RBNZ) to increase rates and bring inflation down to its 1-3% target band, notwithstanding the current Omicron outbreak. Indeed, the RBNZ did just that in February, raising the Official Cash Rate (OCR) by 0.25 basis points to 1%. Given the persistent inflationary pressures and low employment, we expect the RBNZ to continue to raise the OCR, which is likely to reach more than 3% by the end of 2023.

## New Zealand GDP – Actuals and forecast



Source: Statistics New Zealand; Deloitte Access Economics

## OCR - Actual and forecast



Source: Reserve Bank of New Zealand; Deloitte Access Economics



# New Zealand economy – Labour shortages to dominate



## Continued border closures

Borders remained essentially shut throughout 2021, continuing restrictions instigated in early 2020 at the onset of the pandemic. Prior to 2020, net migration had been a key driver of population change and dynamics. New Zealand’s population had grown around 2% each year prior to 2020. We now expect the growth rate to hover around 1% between 2021 and 2024. This lower growth rate is largely driven by the substantial decline in migration, which has fallen significantly as a result of border closures. Net migration was the lowest in nine years and was negative for the first time since 2012.

Low net migration can hinder economic growth. With New Zealand’s population ageing, the proportion of those aged 15-64 (i.e. the working age population), is likely to shrink – especially if there are fewer migrants to bolster the workforce, capping the ability of firms to invest and grow.

With the government signalling the easing of border restrictions recently, we expect net migration to rise slightly from March 2022 onwards and recover from the lockdown induced lows, provided no further delays or changes to border settings are announced or required.



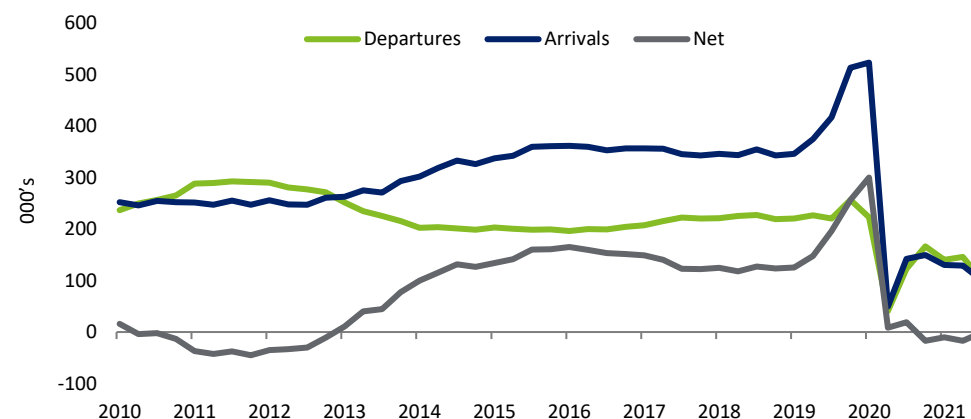
## Tight labour market

New Zealand has been in the grips of an acute labour shortage throughout 2021. The latest Quarterly Survey of Business Opinion (QSBO) indicates that 73% of firms are having difficulty finding skilled workers, while 60% are struggling to find unskilled workers, driven by border closures over the past two years. The shortage of labour has been broad based, affecting most sectors of the economy.

Unemployment continued to fall over 2021. The unemployment rate fell to a record low of 3.2% in the December quarter of 2021, down 0.2% on the September quarter. Wage inflation (measured by the labour cost index) increased by 2.6% over the year to the December quarter in 2021, reflecting businesses’ willingness to raise wages to attract and retain staff. We expect wage inflation to grow at 3.2% annually in 2022, driven by businesses desire to attract staff and increasing living costs.

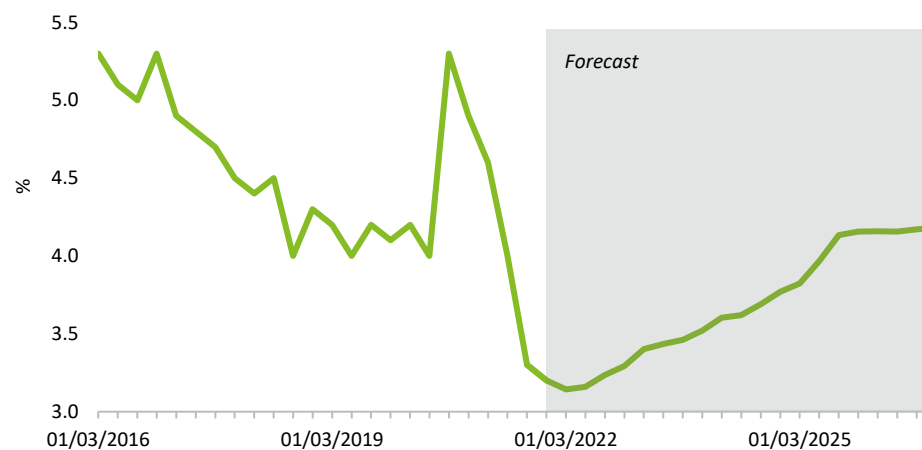
We forecast the unemployment rate to remain low throughout 2022. We do not expect relaxing border restrictions to be an immediate cure for the widespread labour shortages many businesses are facing, as we expect there to be outward migration from those whose overseas plans have been put on hold. Over the longer term, we expect unemployment to rise gradually, reaching 4% in 2025. The Ukraine crisis has the potential to increase the unemployment rate even further.

## Net migration, seasonally adjusted



Source: Statistics New Zealand

## Unemployment rate



Source: Statistics New Zealand; Deloitte Access Economics

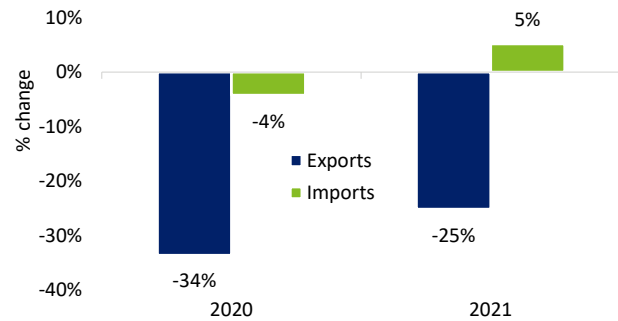


# New Zealand economy – Port activity shows signs of recovery

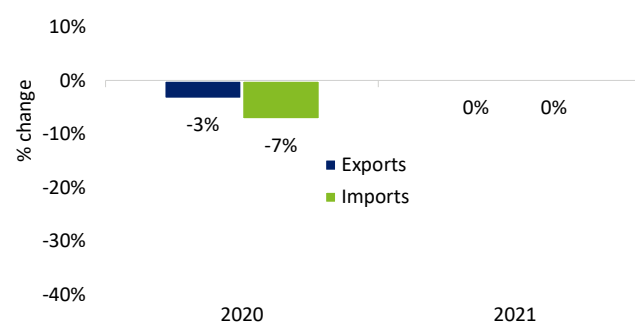
## Trade volumes largely mirror economic recovery

The recovery of the global and New Zealand economies, due to increasing vaccination rates in the early part of 2021 and stimulatory policy, led to strong consumer demand, especially for goods. This recovery has been mirrored in port activity over 2021, with import and export volumes recovering from the downturn experienced in 2020 in the selected ports below, except for import volumes for Whangarei and Nelson. However, the emergence of the Delta and Omicron variants appears to have dulled what would have been stronger recovery. Shipping supply chain disruptions will have also hampered the recovery as well. The outlook for trade and port activity for 2022 looks weaker. Tightening policy to rein in inflation locally and in key trading partners, such as in Australia and the United States, the faltering economy in China, and the current Ukraine crisis, can be expected to moderate trading activity.

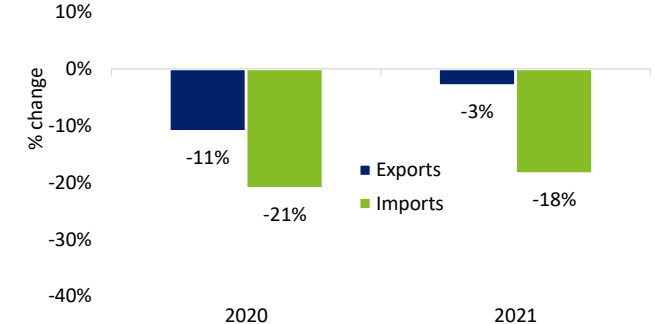
**Auckland - Change in trade volumes relative to 2019**



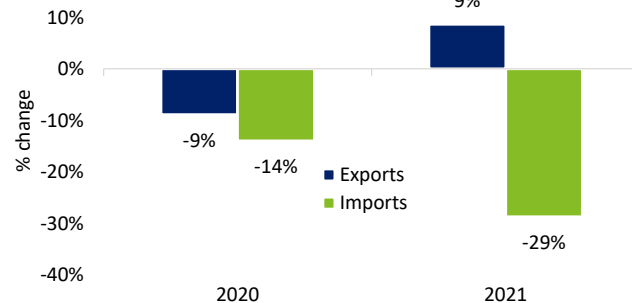
**Tauranga - Change in trade volumes relative to 2019**



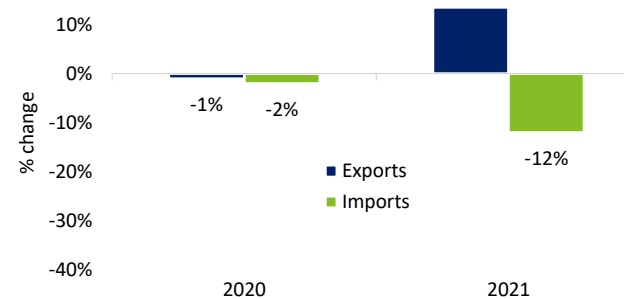
**Christchurch (Lyttelton) - Change in trade volumes relative to 2019**



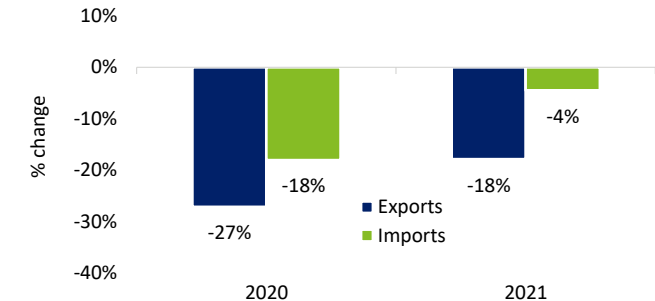
**Whangarei - Change in trade volumes relative to 2019**



**Napier - Change in trade volumes relative to 2019**



**Nelson - Change in trade volumes relative to 2019**



Source: Statistics New Zealand; Deloitte Access Economics  
Notes: Trade volumes refer gross weight (tonnes) of exports and imports



# Risk of modern day stagflation ahead

As a result of pandemic-related challenges, which will intensify with the current Ukraine crisis, we expect slow economic growth to coincide with rising inflation - this brings the risk of modern day stagflation (i.e. a combination of rising inflation and slow growth).

## Higher inflation and compromised supply chains

Inflation and supply chain disruptions have been a key theme for New Zealand and the world. Idled capacity due to the pandemic and buoyant consumer demand, especially for goods, led to the elevated shipping rates and the drop in reliability described previously.

We expect consumer demand to moderate in 2022, given lower projected economic growth, tightening monetary and fiscal conditions and the prospect of elevated energy and oil prices. The easing of travel restrictions worldwide may also revert consumer demand towards services, all of which may help alleviate the supply chain disruptions experienced over the past two years.

However, the conflict in Ukraine and sanctions could further result in disruptions to global trade flows, including energy supplies, and potentially hamper the already burdened supply chains, contributing to further inflation risks.

*COVID-19 has brought into sharp relief the importance of ports and logistics infrastructure in ensuring security of supply of products into New Zealand. Difficult decisions lie ahead for logistics organisations on how risk and resiliency are managed going forward. Supporting the transition to a “Just in Case” approach will require the right policy settings and incentives.*

## Striking the right balance between inflation and growth

The RBNZ faces the unenviable task of reining in rampant inflation in the midst of the ongoing COVID-19 outbreak and a slowing global economy. The RBNZ has already indicated that it expects to raise rates higher and faster than previously expected.

However, it will need to take care not to unnecessarily put the brakes on the New Zealand economy. Careful consideration of developing global economic conditions, particularly relevant to the logistics sector, will be crucial.

## Building resilience in the logistics sector

The logistics sector faces some difficult decisions ahead. The effect of COVID-19 on supply chains and recent geopolitical and trade risks made existing challenges in the logistics sector more prominent.

We expect firms to increasingly take risk mitigation into account for future supply chain strategies and investment, as well as considering ways of increasing productivity and reducing emissions. Careful forward planning, with a focus on technology and supply contracts with strategic companies, is likely to be key into the future, especially given the uncertain economic outlook.

We note that transitioning to a “just in case” approach is likely to impose costs, which may include necessary investment in warehousing capacity, local manufacturing capacity, costs of holding extra working capital and obsolescence risks. Such costs of promoting resilience in the system are likely to be borne by end-consumers.

Supply chain disruptions have highlighted the benefits of a diversified supply chain, including local manufacturing and access to a broad range of imported supplies which together promote resilience. A key advantage is ensuring products continue to be available in New Zealand during periods of intense supply chain disruption. Supporting the transition to a “just in case” approach will require the right policy settings and incentives.





# Supply chain: National state-of-play

Over the past year, the Government has progressed initiatives that have an impact on ports and freight. Various plans and policies affecting land transport have been released, with further initiatives underway. The pandemic has shone a spotlight on the importance of a resilient and sustainable supply chain. Key themes of resilience, decarbonisation and productivity are seen across key policy initiatives.

In the following pages, we provide context on the New Zealand freight task and the role of each mode in the supply chain. We then outline policy developments affecting key freight modes and the wider transport sector. This includes developments in relation to rail and coastal shipping, the Transport Emissions Action Plan and developing a New Zealand Freight and Supply Chain Strategy.

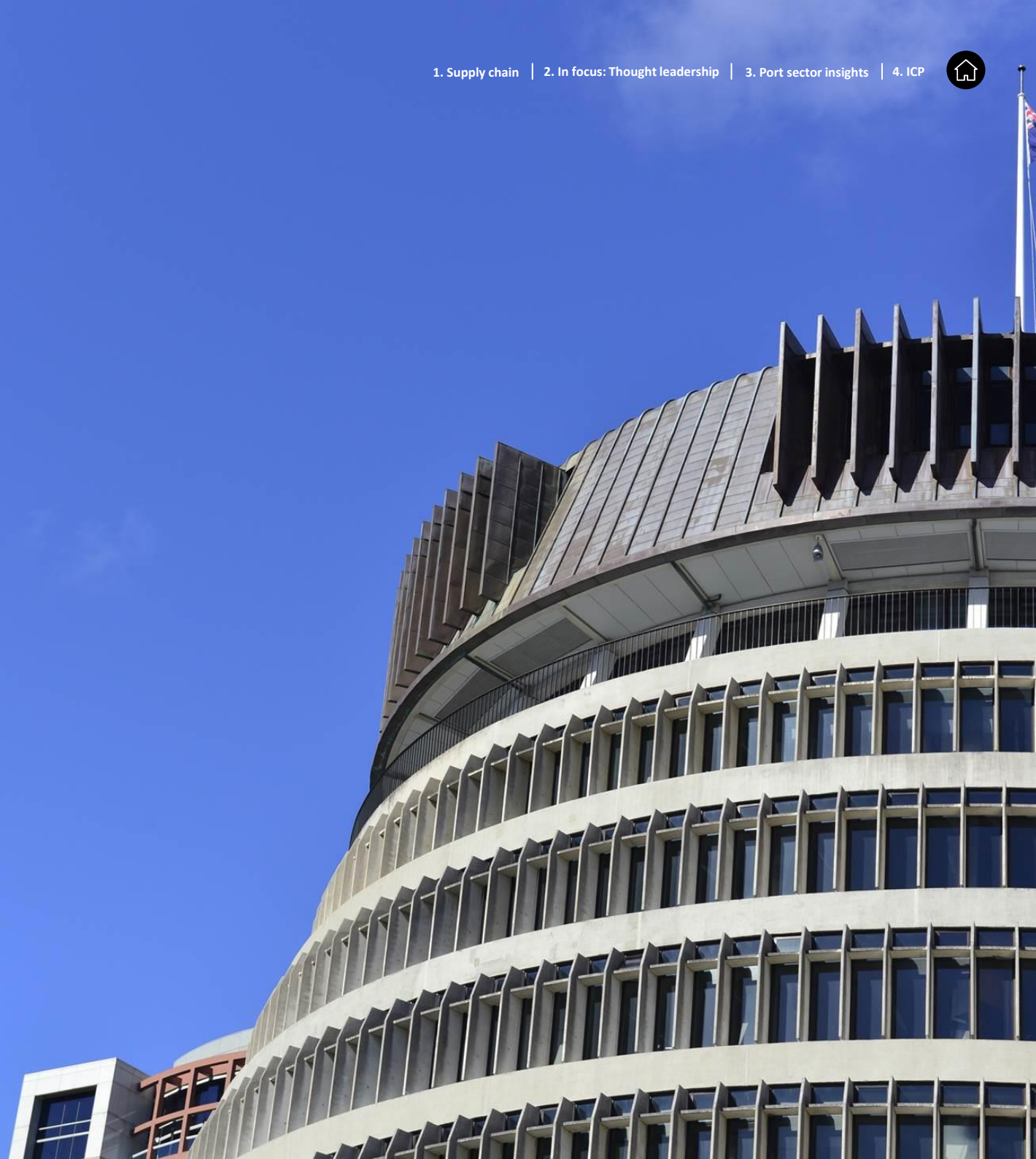
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# Freight task

## National Freight Demand Study (NFDS)

Key information in this section has been drawn from the National Freight Demand Study (NFDS). The NFDS forms an important role in understanding current and future freight patterns in New Zealand. However, the most recent report was commissioned in 2019 and focussed on 2017/2018 data, and as a result the study is becoming increasingly outdated and has been covered in our previous Yearbooks.

A detailed overview of the 2019 NFDS findings can be found in our [2021 Ports and Freight Yearbook](#) at page 36.

## Total freight task

Within New Zealand, an estimated 280 million tonnes of freight is moved by trucks, trains and coastal shipping. The majority of the freight is moved by road, with 93% of the total tonnes moved with trucks, with rail and coastal shipping forming up the remainder at approximately 6% and 2% of total tonnes moved respectively.

## Freight generation

Clear patterns are evident in domestic freight flows. Primary producing areas generate flows to export ports, typically via processing facilities. Population is a major driver of both consumption and manufacturing activity.

The “Golden Triangle” (Auckland, Waikato, Bay of Plenty) combines both population and primary industry production (forestry and dairy) to account for 45% of all freight tonnage produced.

Canterbury is the dominant freight generator in the South Island producing 15% of the national freight task.

Manufacturing and retail freight tonnage correlate strongly with population, notably in Auckland and Canterbury, which host manufacturing hubs, large scale distribution centres, and receive consumer goods through their ports.

The primary sector is located in regions offering favourable topography, climate, and soil. Waikato, Taranaki, Manawatu, and

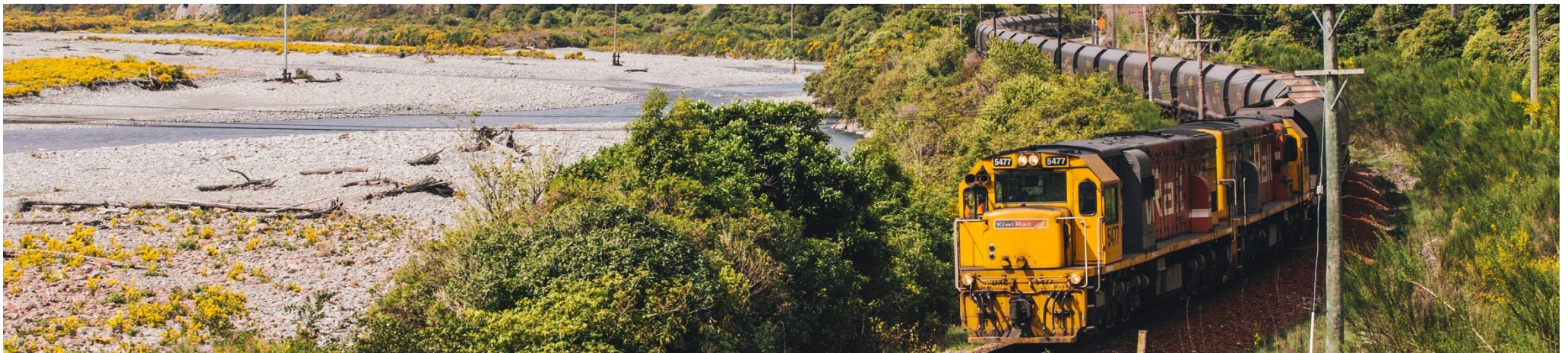
Southland are well-suited to dairy production, as is Canterbury if suitable irrigation is available.

This is similar for forestry, where warm climate and lower-value land have attracted substantial plantings in Northland, Waikato, Bay of Plenty, Gisborne, Hawkes Bay, and Tasman / Nelson / Marlborough.

Crude oil flows are either a direct export (from Taranaki) or direct import (to Marsden Point in Northland). Domestic transport of petroleum products is primarily from the Northland refinery via pipeline and coastal distribution, with a rising direct import share, and then by truck to the nation’s service stations.

Cement is manufactured at a plant in Northland for distribution by coastal ships and then road and rail. Cement was also manufactured in the West Coast of the South Island but this has been superseded by direct import.

Southland hosts the Tiwai Point Aluminium Smelter which generates import and export flows.





# Key transport modes

## By ship

Shipping supports over 99% of New Zealand's international trade by volume. Coastal shipping also plays a key role in New Zealand's domestic freight task, being principally specialist bulk ships (such as petroleum and cement) and inter-island Roll-on Roll-off (RORO) ferries. In the general freight market, domestic ship operators are confronted by two key challenges; competition with other transport modes (road, rail and air) and competition with international ship operators.

While coastal shipping provides slower transit times relative to other modes, it does deliver lower emissions. Only 1.6% of freight volumes within New Zealand are transported by coastal shipping, however coastal capacity can be readily expanded and requires limited additional port infrastructure.

## By rail

Rail transports approximately 6% of freight volumes within New Zealand (2019 NFDS). Over the years, rail infrastructure has deteriorated with limited investment provided to the sector. Despite its comparatively lower transport emissions, moving freight via rail is slower than by road and greater volumes of cargo must be aggregated to maximise their utilisation on each journey. In 2021, 20 million tonnes of freight was moved by rail, which is on par with 2019 rail freight volumes and a slight increase from 18.4 million tonnes in 2020.

## By road

The majority of the freight is moved by road, with 93% of the total tonnes moved with trucks. Road freight movements tend to be localised, with about 77% of freight (tonnes) remaining within the region from which it was sourced, and an additional 14% being transported to an adjacent region.<sup>1</sup> There is very little movement of freight by road between the North and South Islands. Road freight's core advantage is the ability to offer faster, more reliable, and flexible freight services.

Cargo can be delivered to most parts of the country by road within 24 hours, and to all parts of the country within 36 hours.

Despite heavy vehicles making up only 3.5% of vehicle fleet in New Zealand, they are significant contributors to our total transport emissions as highlighted in the Green Freight Strategic Working Paper.<sup>1</sup>

## By air

Air freight makes up a significant proportion of value, 16% of export value and 24% of import value in 2019, for a comparatively small proportion of volume, 0.3% of export tonnage and 0.4% of import tonnage. Domestic air freight volumes were so small that they were not included in the 2019 NFDS figures.

## New Zealand's Ports and Rail Network



<sup>1</sup> Ministry of Transport, 2020 Green Freight Strategic Working Paper, 2020; accessible at: [https://www.transport.govt.nz/assets/Uploads/Paper/Green-Freight-Strategic-Working-Paper\\_FINAL-May-2020.pdf](https://www.transport.govt.nz/assets/Uploads/Paper/Green-Freight-Strategic-Working-Paper_FINAL-May-2020.pdf)



# Developments affecting key transport modes

## Rail

Rail has been a priority transport focus for the Government. In recent decades, the national rail network has deteriorated with limited investment provided to the system outside of the urban passenger networks. To address this, the Government released the New Zealand Rail Plan in 2021, which provides the vision for rail over the next decade and the investment priorities for the system, and has introduced a new long-term planning and funding framework for the rail network.

Since 2017, over \$6 billion has been committed to rail to support investment and resilience in New Zealand's rail network. The Government's 2021 Budget reinforced the importance of rail investment, by providing \$1.3 billion in funding for operating and capital expenditure.

The aspiration is for New Zealand's rail network to provide modern transit systems in our largest cities, and to enable increasing volumes of freight to be moved by rail. By 2052, freight tonnage moved by rail is expected to have increased by more than 40 percent. The rail network is projected to play a larger role in supporting this growth than in prior years. While rail's mode share was impacted by the 2016 Kaikōura earthquake and a reduction in coal traffic, the rolling 12 month tonnage total for rail is now well above 2016 levels.

## Coastal Shipping

The Government Policy Statement on land transport 2021 established a coastal shipping activity class for the first time. Waka Kotahi New Zealand Transport Agency

has released the 'Coastal Shipping Investment Approach State-of-Play' report, which will inform how the \$30 million of funding for coastal shipping will be apportioned. Suggestions from the report include assisting or underwriting the deployment of additional coastal vessels, pilot projects for alternative fuels and a feasibility study of Manukau Harbour as a hub port. Waka Kotahi intend to engage with the coastal shipping sector in 2022 to discuss the next steps, including applications for funding.

In 2021, government-owned KiwiRail announced it had entered into contracts for two new inter-island ferries, anticipated to enter service in 2025. KiwiRail's competitor, StraitNZ, which owns the Bluebridge ferry, was recently sold to Morgan Stanley Infrastructure Partners. The ferry and freight company, was sold by CPE Capital in December 2021, and transacted for more than \$500 million.

## Aviation

Over the last two years, the Government has spent more than \$700 million subsidising freight flights in and out of the country to ensure international trade links stay open. The current MAIC (Maintaining International Air Connectivity) scheme began in May 2021 and provides subsidies to airlines to continue to provide set routes.

Securing sufficient air freight capacity in 2022 is expected to be challenging. Estimated weekly demand for air freight is 4,400–4,800 tonnes, with an estimated weekly shortfall of 273 tonnes.<sup>2</sup> The MAIC scheme is set to cease in March 2022, however Cabinet is considering an extension at the time of writing. The planned reopening of the border will also help sustain capacity.



<sup>2</sup> RNZ, *Signs of few options for air freight to New Zealand next year - Govt officials*, December 2021; accessible at:

<https://www.rnz.co.nz/news/national/458483/signs-of-few-options-for-air-freight-to-new-zealand-next-year-govt-officials#:~:text=The%20MAIC%20%2D%20Maintaining%20International%20Air,2021%20to%20October%2031%202021.>



# Other policy initiatives

## National Supply Chain Strategy

The Ministry of Transport is leading the development of the New Zealand Freight and Supply Chain Strategy focusing on the next 15-30 years. The strategy will provide an overview of the issues facing the sector and aims to identify the best possible mix of investment, regulation, and other approaches to address these issues. The main drivers for change that the strategy will address are:

- Decarbonisation – Net zero carbon emissions by 2050 to meet New Zealand’s climate change mitigation obligations.
- Resilience – Prepared for future threats and events including extreme weather and other natural disasters, rising sea levels, national security, and disruption to supply lines.
- Productivity and innovation – While facing the challenges of decarbonisation and resilience, adopt new technologies, access skilled labour, ensure health and safety and support the economy to grow.
- Wellbeing – Freight investment and infrastructure provide broader benefits to people, communities, and the country.

The Ministry of Transport intends to release an issues paper in early 2022 for the Minister of Transport’s consideration. It is expected to take two years for the strategy to be completed, with public and targeted consultation planned for 2022 / 2023.

## Decarbonisation

Transport is the second largest source of greenhouse gas emissions and contributes 20% of total domestic CO<sup>2</sup> emissions. Achieving zero emissions in transport is fundamental to the 2050 emissions reduction targets.

The first New Zealand Emissions Reduction Plan, which will set out how the country will meet its first emissions budget, is due in May 2022. The first emissions budget covers the 2022-2025 period. A large component of the plan will focus on the supply chain and transport.

In October 2021, the Government released a discussion document on the Emissions Reduction Plan, which outlined two proposed targets for freight and the supply chain:

- reduce emissions from freight transport by 25 percent by 2035, and
- reduce the emissions intensity of transport fuel by 15 per cent by 2035.

Shifting some of the freight task to less carbon intensive modes will help reduce emissions, including to rail and coastal shipping. However, transitioning the heavy vehicle fleet to zero-emissions, which is the mainstay of the national supply chain, will be a significant challenge. In an interesting recent development, Fonterra announced it is deploying its first battery electric milk tanker as a pilot to help understand the potential for electric heavy transport.

For aviation, the Government is proposing to do the following during its first emissions budget:

- work with the air transport industry to investigate the feasibility of sustainable aviation fuels,
- support the establishment of an industry-led advisory body on decarbonising aviation, and
- develop policy and regulatory settings to support the development of zero-emission aircraft.





# In focus

## Thought leadership from across Deloitte





# Supply chain resilience through digital technology

Businesses and society alike have truly felt the impact of COVID-19 through their respective supply chains and are constantly finding alternatives to alleviate increasing pressure. Growing concern from a broad set of stakeholders continue to influence organisations to adapt, respond and take corrective action. With freight volumes and cost predicted to increase in the coming years, fit for purpose port and wider supply chain infrastructure is critical to ensuring the supply chain performance meets expectations.

As we evolve into our new normal, focus should be placed on building not only the physical infrastructure but also technology solutions. Technology solutions like robotics and the IoT are needed to increase productivity, resulting in more automated, digitalised and connected supply chains. It helps the supply chain transform from a simple logistics and transport operation to an open and efficient community that can participate in the global landscape of integrated world trade.

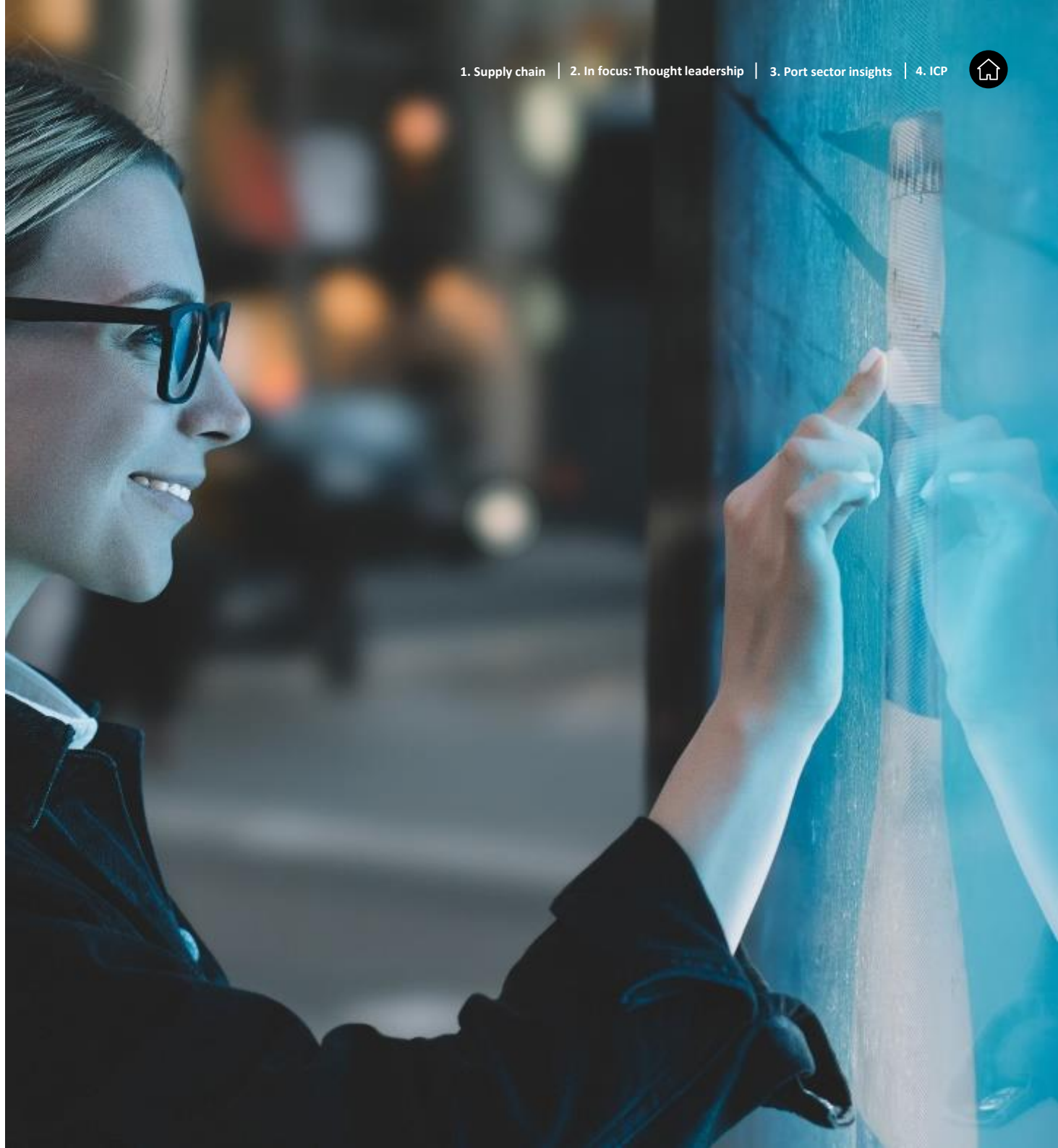
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## Digitisation of the supply chain is gaining momentum, both as a response to the pandemic and underlying structural forces

### Responding to short term disruption

COVID-19 had a profound impact on our economy as the ports and freight industry became disrupted. The pandemic highlighted existing practices lacked resilience and the ability to adapt quickly. The challenge during the pandemic has been to effectively deploy the appropriate digital solutions (i.e. Internet of Things (IoT), blockchain, automation and artificial intelligence (AI)) to mitigate disruption and create resilience – while delivering value to all stakeholders.

The economic downturn took a huge toll on businesses and society as unemployment rates grew to new heights along with other major setbacks. Implications evolved as organisations searched for new alternatives to grow revenue while limiting their FTEs. At the demand end, retailers were severely impacted as consumers looked to create extra buffer stock due to the disruption caused, prompting organisations to rethink their fulfilment and inventory strategies. Protectionism added an additional layer of complexity and opportunity with many relocating supply inside their own borders closer to markets.

Shortages in resources is becoming a common theme across many countries as organisations look to optimise and build resilience into their supply chain. As we emerge into our new normal, supply chains are presented with a wide range of choices in which trade-offs between investment in physical capital and digital technology will need to be evaluated.

Renewed focus on building relationships through transparency has been a key catalyst for the success of many throughout the pandemic. Supply chains which were originally multi-tiered and complex have now shifted to become a tight knit supply chain that is capable of responding to unexpected/fluctuating demand shocks.

The closure of international and domestic borders, particularly at airports, meant that organisations had to revert to other flexible modes of transport to deliver goods across the entire value chain. Ports were handed greater responsibility to not only control the inbound and outbound flows but also rethink how to minimise the negative externalities.

### Structural drivers of change

A focus on digitisation has been underway for many years now as the supply chain has sought to improve efficiency and reduce costs. The pandemic has highlighted the importance of digital technologies in also securing supply chain resilience.

Another key driver of change is the global transition to a cleaner and greener supply chain. In the maritime domain, increased international maritime environmental regulations for sulphur emissions, greenhouse gas emissions, and marine organisms and ship recycling will affect the industry. Ports are looking to minimise the environmental impacts of their operations, with land transport also under pressure to decarbonise.





# Technologies supporting efficient, resilience supply chains

Momentum is likely to build as many begin to see the value technology can play in various touchpoints of the supply chain. We are seeing adoption of digital technologies such as artificial intelligence (AI), blockchain, automation and the Internet of Things (IoT) in pursuit of tackling some of the challenges highlighted by the COVID-19 pandemic, with organisations seeking to decrease lead times, reduce cost and minimise waste in the supply chain. As a result, investments in physical supply chain infrastructure are likely to decelerate as investment towards technological solutions increases.

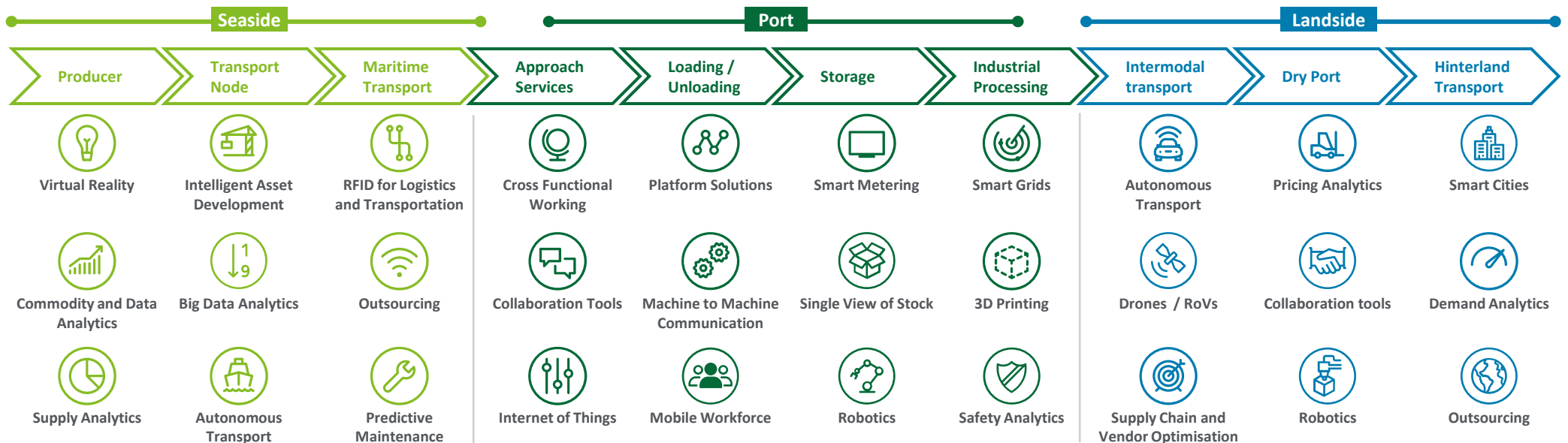
Characteristics that can make a supply chain “smart” are the use of IoT, AI, blockchain and robotics to improve processes. These four solutions can deliver value to stakeholders in the following ways:

- **Internet of Things (IoT)** – to connect key assets and data to enable the development of smart processes using a variety of software and hardware.
- **Artificial Intelligence (AI)** – uses machine learning to analyse big data, including historical data, images and voice recognition.
- **Blockchain** – an emerging tool in supply chains. A critical enabler for supply chain digitalisation, to transform the typical analogue nature of the industry.
- **Automation** – not a new concept to the industry; a good example is the Ports of Auckland implementing an automated container terminal.

The figure below also identifies where digital technology can enhance each step of the supply chain.

Collaboration from all parties will be pivotal to the realisation of a digitally integrated value chain

## Innovations across the value chain



allowing the wider ecosystem to withstand future shocks but also limit their carbon footprint. The rise of technology and adoption in many countries means investments must be made carefully considering the trade-offs to ensure the intended outcomes are achieved.

While New Zealand to date has kept pace with the advancement, it does not want to be left behind due to the benefits associated with digital technologies. For organisations to be successful with their digital supply chain strategy over the coming years, key areas for focus are likely to be:

- Smart warehousing and logistics that are safe & secure for all employees.
- Investment in the right technology advancements to enable holistic outcomes,
- Greater transparency across multi-tiered networks allowing for greater collaboration, and
- The right level of security to protect business data.

Deloitte has deep experience in helping businesses understand their challenges in relation to digitisation and we regularly help business around the globe deploy these solutions across the supply chain.





# ESG: Beyond relevance and risk to materiality and value

ESG; these three letters have commanded attention in the business community in recent years. ESG simply stands for Environmental, Social, and Governance considerations. These traditionally non-financial factors have increased in importance, due to changing expectations among consumers, investors, corporate boards, regulators, and employees.

In this article, we explore how ESG thinking has matured beyond discussion of relevance and risk, to materiality and value. We unpack what is meant by value, as ESG exposes opportunities for value preservation and generation.

In the logistics industry, there are a raft of material ESG considerations. Organisations that understand there is value to be found through ESG thinking will make well informed business decisions, creating resilient businesses. Decision makers can fulfil their duties with certainty – knowing they have considered everything material to their stakeholders and their organisation.

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# ESG: Beyond relevance and risk to materiality and value

The incorporation of Environment, Social and Governance – ESG – factors into strategic decision making is fast becoming best practice. Organisations are seeking to define ESG **materiality** to maximise **value** opportunities.

*These two concepts – materiality and value – are central to understanding the importance of ESG and its multiple avenues of application.*

ESG materiality and value hold strategic importance for the logistics industry. By defining which ESG factors are material to a particular business, we can then understand where risk resides and consequently build resilience and unlock opportunity.

## How to determine ESG materiality

There is a common misconception that ESG considerations are just “E” (Environmental) considerations. While the environment is in focus because of the pressing issues of climate change, there is an array of ESG issues. These range from modern slavery in the supply chain to climate risk exposure. When assessing any business acquisition, transaction, or project, it is crucial to have a good understanding of the **material** ESG issues. In other words, what ESG issues are most vital to your stakeholders?

ESG materiality assessment is critical to the establishment of any piece of ESG work, whether advising on a transaction, guiding a project, or advising on overall strategy. Usually, an experienced ESG professional is required to assess the external and at minimum guide the internal piece.

In the logistics industry, there are many ESG considerations. To the right we have identified some common considerations.

## What is materiality?

ESG materiality means the E,S or G factors that are the most significant to your organisation. They are ESG factors that are critical to the continuation of business-as-usual and are also factors that could be critical to growth. Materiality assessment requires thorough stakeholder engagement and an understanding of the external environment, to identify what is critical to the present and future state of the organisation. In the logistics sector, identification of those stakeholders, and an understanding of many externalities that can affect the complex supply chains from an ESG perspective are critical to determining materiality.



### Environmental considerations include:

- Greenhouse gas emissions
- Climate change
- Physical risks – *Locations of ports, freight routes and other supply chain disruptions affected by sea level rise,*
- Transition risks – *Regulatory, reputation, technology, and market risks*
- Energy efficiency in operations
- Pollution
- Biodiversity
- Waste management



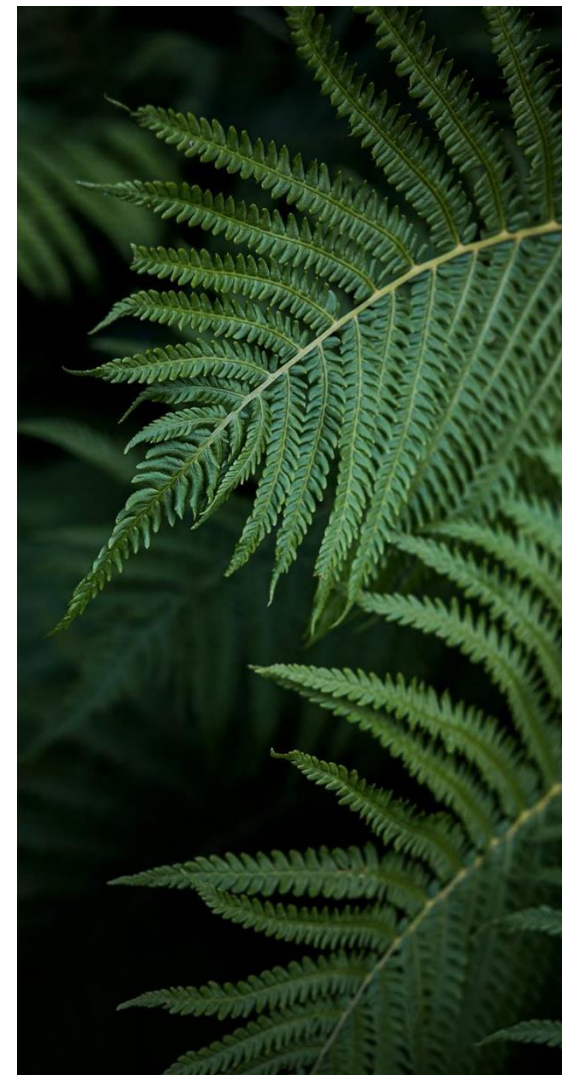
### Social considerations include:

- Labour standards and supply chain management
- Employee wellbeing
- Community involvement and social license to operate
- Health and safety
- Diversity and Inclusion
- Cyber security



### Governance considerations include:

- Remuneration structures
- Board composition, structure and independence
- Risk management frameworks
- Supply chain transparency
- Quality control





# ESG: Beyond relevance and risk to materiality and value

## Think about value

ESG is often thought about in terms of risk. While assessment of ESG issues certainly highlight risks, ESG also provides significant opportunity to unlock value. At Deloitte, we go beyond risk and think in terms of value for our clients; value preservation and value generation.

Our value assessment of ESG is aligned to that of many New Zealand Chief Financial Officers (CFOs). Last year, we surveyed CFOs on the drivers behind pursuing sustainability initiatives in their organisation (see below for additional information).

Our survey revealed that regulatory and reporting compliance reasons are not the primary driving factor of sustainability action. By contrast, organisations are driven by motivating factors such as maintaining or gaining competitive advantage, responding to consumer demands, or feeling it is the “right thing to do”. We describe this as “having a value lens”.

Deloitte firmly believes that the degree to which businesses view sustainability through a value lens will unlock performance enhancement opportunities. This is because ESG value-driven organisations are more likely to integrate sustainability (and ESG more broadly) into their strategy and business model, enhancing their long-term performance and resilience.

In the logistics sector, value preservation and value generation presents considerable opportunity.

The following pages provide examples of the potential for value preservation and generation, bringing the ESG framework to life and demonstrating how organisations are now placing ESG considerations at the heart of their business strategy.

ESG thinking is now at the forefront of business decision making.



## Deloitte CFO Survey: Deeper dive

The inaugural Deloitte CFO Sustainability Survey was designed to capture a snapshot of the CFO in regard to sustainability, to understand their perspectives on their role, their progress, barriers to action and more.

[Time to take the lead: Focusing CFO efforts on the journey to a sustainable future | Deloitte New Zealand](#)





# ESG: Beyond relevance and risk to materiality and value

## Value preservation opportunities

Value preservation activities are those that are essential to business-as-usual. Regulatory and reporting requirements play an important role in incentivising and accelerating the rate of change to a lower carbon world and mitigating environmental and social harm. We expect that as regulations and reporting requirements increase, a compliance lens – or value preservation lens - will play a larger role. We detail two preservation activities relevant to logistics below.

- **Governance** – enables strong direction and appropriate application of ESG strategy. Governance processes, board oversight of ESG issues, executive understanding of ESG risk in operations, and an understanding of policy headwinds are vital.
- **Reporting and disclosure** – ensures that data is gathered, baselines for improvement calibrated, and stakeholders informed.

Greenhouse Gas Emissions assessment, tracking, and reporting is one of the most important disclosure actions an organisation can instigate as a first step in their emissions reduction strategy. While this may prove complex in the logistics sector, we advise organisations to begin tracking their emissions profile as soon as possible.

Correct and timely disclosure ensures stakeholders are informed and, when done well, avoids greenwashing claims. With increasing expectations and requirements around disclosure, many organisations are now establishing roadmaps to ensure they are firmly across ESG-related issues, from emissions inventory, to supply chain ethics, through to climate risk exposure.

## Spotlight on shipping

The shipping industry is increasing its disclosure and response to a range of ESG issues. Shipping is no different to any other industry insofar as it needs to continually innovate, develop and report on ESG matters as principles evolve into standards, and investors increasingly demand transparent accountability. However, specific ways the shipping industry is responding to various ESG issues, include:

### Reporting: A value preservation activity

The shipping sector is captured by multiple reporting standards. These include the Sustainability Accounting Standards Board, or SASB, which has standards for the transportation sector, Global Reporting Initiative (GRI) and Integrated Reporting (IR). The International Maritime Organisation (IMO) also has set strategic objectives regarding the maritime carbon footprint: reduction of CO<sup>2</sup> emissions by 40% by the end of 2030 and reduction of total GHG emissions by 50% (both compared to 2008 levels). There are also the UN Sustainable Development Goals, and other local reporting standards and frameworks.

### Energy Transition: Both a value preservation and generation activity

Despite the inherent challenges of decarbonisation, shipping is innovating to emit less. While silver bullet solutions like electrification and hydrogen fuel cells remain elusive in the near term, other efficiency measures are already in play. Alfa Laval, a Swedish company, sees significant opportunities in providing sustainable solutions in the areas of water treatment, energy efficiency, emissions curbs, and broader pollution reduction. Klaveness Combination Carriers are an example of innovative vessel design; ships can operate as both bulk ships and product tankers.

### Sustainable Financing: A value generation activity

Investors are also creating pressure – and opportunity - for change. As with many other sectors, improved ESG performance can improve access to capital presented by growing ESG investor pools providing sustainable finance. As noted in a recent Deloitte [report](#) “According to Clarkson’s, ESG financing already accounts for a considerable part of the overall financing portfolio (in the order of around \$281 billion as of October 2021) of the leading financial institutions offering shipping finance. In addition, out of the 27 banking institutions which co-signed the [Poseidon Principles](#), 15 of them manage 56% of the total shipping portfolio whilst also being the leaders in shipping finance.”





# ESG: Beyond relevance and risk to materiality and value

## Value generation opportunities

### Capital raising – Can expand demand pools:

By understanding and communicating ESG attributes of a company correctly, different investor pools may be accessed.

As evidenced by the growth of ESG and impact investing, there is growing appetite from investors to explore ESG megatrends<sup>1</sup>.

Investors seeking to diversify their portfolios often look for best-in-class ESG performance across the sectors they invest in. It is worth your while to acknowledge the ESG investor. Not only do they provide access to alternative demand, but by applying ESG analysis in a capital raising process, your strategy can be sharpened and added-value can be unlocked. In an ideal world, organisations should consider their ESG attributes and strategy prior to a capital raising event.

### Sustainable Debt solutions – Can expand financing options:

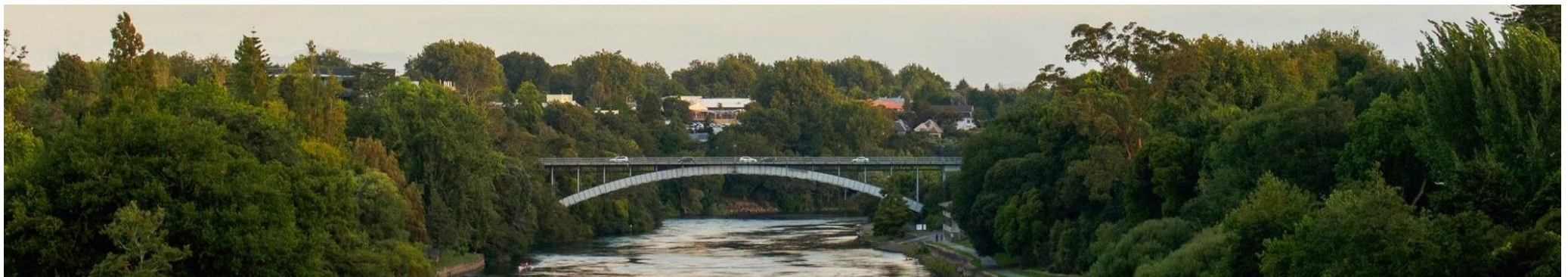
There is a range of sustainable financing options, or ESG financing options, currently little are explored in New Zealand relative to the rest of the world. Deloitte sees strong opportunity for the logistics sector to adopt these options. We detail a few of these debt instruments to the right.

As banks look to align their debt portfolios with their sustainable financing goals, more organisations will be approached to convert their loans to sustainability linked loans. We see value in early consideration and advice on sustainable debt options, to ensure organisations fully harness the opportunities presented by establishing strategic ESG targets and KPIs.

The true value of ESG for any organisation goes beyond the interest savings the sustainability-linked loans provide, to the performance and reputation gains to be had through achieving your ESG KPIs.

Debt Instrument	How it works
Sustainability-linked Loan (SLL)	These loans have one or more KPIs that the debt taker must meet at varying stages of the loan to enjoy interest rate benefits. It is possible to design the loan with a penalty mechanism for failing to meet the KPIs. The proceeds can be used for anything. Existing loans can be rolled over into SLLs.
Green Loan	A green loan is where the use of proceeds are directly tied to the green project. They may enjoy interest rate benefits.
Green Bond	Just like any bond instrument, however its proceeds are directly tied to a green project. They usually enjoy a coupon benefit, called “greenium”.
Social Bond	Just like any bond instrument, however its proceeds are directly tied to a project with socially positive outcomes. They usually enjoy a coupon benefit.
Sustainability-linked Bond	Like the sustainability-linked loans, the bond proceeds can be used for anything, however certain KPIs are established and if it fails to meet the KPI, a coupon step-up results.

<sup>1</sup> [Survey](#) shows an increase in ESG investments in funds.





# ESG: Beyond relevance and risk to materiality and value

## Other areas where ESG plays a role

In the table below, we detail some other specific ESG areas we are often involved with, which organisations in the logistics sector would likely consider. In each of these specific offerings, materiality assessments and value preservation/generation assessment are critical.

### Other ESG activities

Mergers & Acquisitions (M&A) – ESG embedded through the deal lifecycle.

ESG through the M&A lifecycle is becoming a norm. At Deloitte we have expanded our role in M&A. We now offer ESG support through the deal lifecycle including:

- Transaction preparation (including IPO readiness, Vendor Assist, Investigative Accountant roles)
- Transaction Due Diligence, (including link to value)
- Post-Transaction (including a 100 day plan, performance monitoring)

The decision to embed ESG within a deal is because of both a demand from investors and due to our role as trusted advisors understanding the intrinsic importance of ESG issues in the deal process.

Project assessment – Expansion

Individual projects can be assessed to understand the ESG impact of the project in relation to the core business. As industries grow, mature and scale, they each experience a series of ESG-related challenges, and as such assessment of these challenges can make-or-break a project. Many companies are looking to expand their scope of services to take advantage of some of these ESG or sustainability megatrends, however, careful assessment is required as there are many moving parts.

Strategy alignment – Set-up to succeed

Aligning the operating model with ESG ambition and goals creates synergies within an organisation that supports planning and investment decisions. It can often unveil investment opportunities and ensure that pursuits align with strategic decision making.

Operations Efficiencies – Easy wins

Embedding ESG decision making into the operating model can lead to operational efficiencies, for example waste reduction policy, directly impacting the bottom line.

## Final word

The case for ESG has moved on from questions of if it is relevant and how it serves as a framework for highlighting risks, to what ESG factors are material and where can value be found. As we have identified in this article, there are many opportunities for value preservation and value generation. ESG is an opportunity to think beyond the traditional and an invitation to think about the bigger picture. It is through proper consideration of ESG factors that truly thorough business decisions can be made, and robust resilient organisations, that contribute to a better world, can rise.





# Decarbonising Aviation: Cleared for take-off

**Decarbonisation has become a global imperative and a priority for governments, companies, and society at large**

Aviation is fundamental to the world economy and keeping people connected. While the pandemic may have dented demand for air passenger services, aviation plays a vital role in expanding horizons and broadening opportunities to work, live and learn for people all around the world. If even more people, communities and businesses are to enjoy these benefits, the aviation sector must grow responsibly and play its part in a net-zero future.

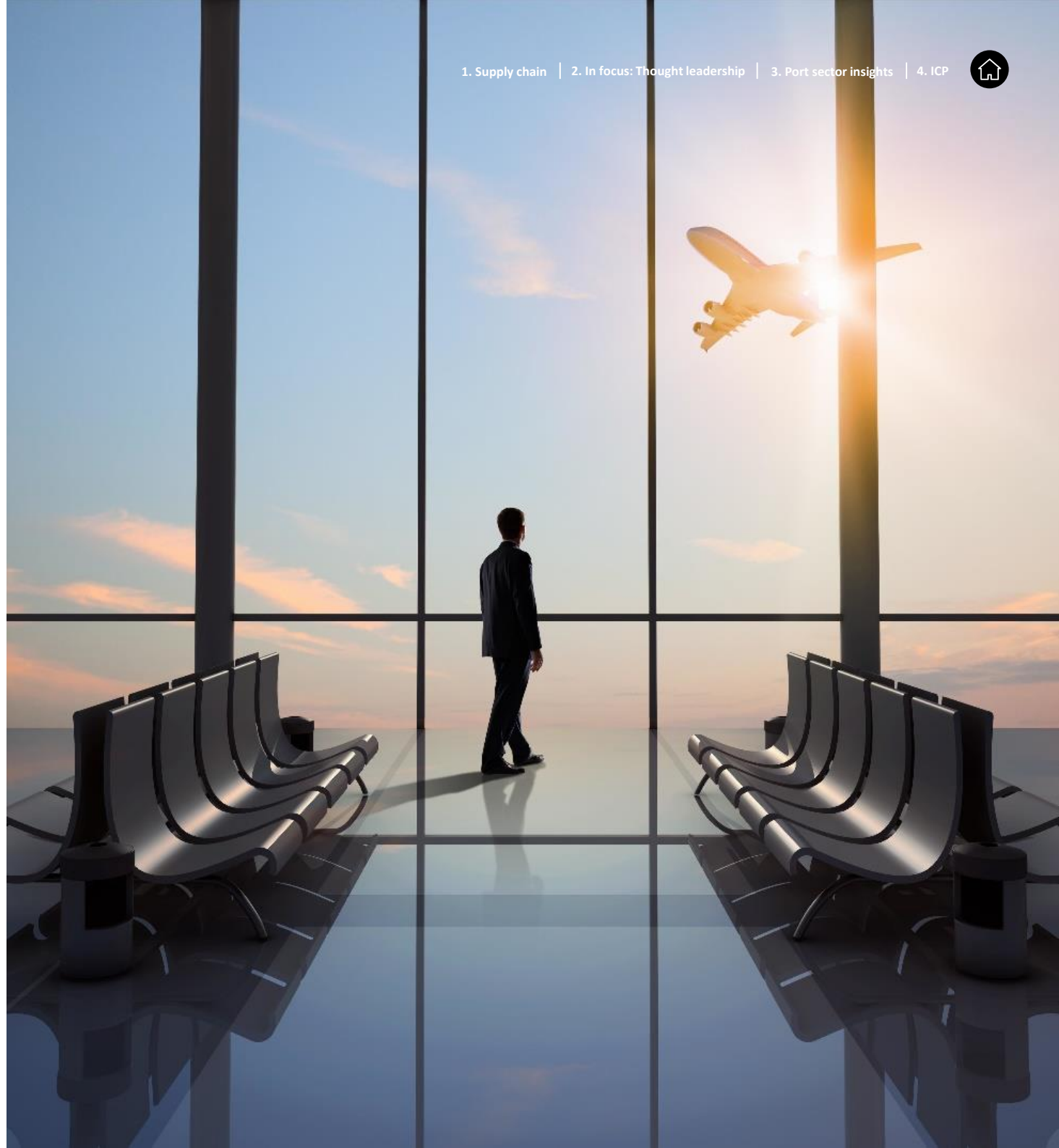
## **Decarbonisation readiness: Where are we today?**

Before the COVID-19 pandemic, aviation produced around one billion tonnes of carbon emissions in 2019, **accounting for 3% of total emissions released into the atmosphere globally**. And yet, aviation has been relatively neglected when it comes to decarbonisation. Action now is critical if society is to meet the Paris Agreement's target to limit global warming to 1.5°C.

In collaboration with Shell, Deloitte has developed a report sharing insights from leaders around the world on a pathway towards decarbonisation of aviation – often considered a sector that will decarbonise later than others. In this 'in focus' piece, we highlight key findings from this report.

*“While the pathway to decarbonize the sector is clear, it should be more ambitious and efforts should be front-loaded. Collaboration between ecosystem players in the sector, and more importantly across sectors, is essential to scale up demand and production of Sustainable Aviation Fuel (SAF).”*

Tarek Helmi, Partner, Deloitte Netherlands.





# Decarbonising Aviation: Cleared for take-off

Deloitte and Shell interviewed over 100 aviation executives and experts representing more than 60 organisations across the global aviation ecosystem to identify the key barriers to decarbonising aviation and practical solutions to accelerate the industry's transition towards net zero.

## Highlights from this research include:

- Aviation has often been considered a sector that will **decarbonise later than others**, because of the complexity involved and the view that aviation accounts for “**just 3%** of global emissions”. But there is a **need to act now**.
- The sector is facing several barriers to decarbonisation – these include reluctance of passengers to accept the cost of low-emission solutions, lack of regulatory support and the prohibitively high cost of sustainable aviation fuel.
- **Long-term customer demand**, enabled by recognition mechanisms and **differentiated propositions**, will play a fundamental role in providing the **funding and incentives** for airlines to invest in lowering their emissions.
- **Country and region-based policy incentives** relating to supply and demand will **accelerate the adoption of sustainable aviation fuel** and regulation at regional and global level.
- **Offsets can play an essential role** in funding the early stages of decarbonisation. But for this to happen, they must be made **more transparent and verifiable**. They need to be more **emotionally appealing** to passengers, and their impact should be clearer.
- **Choosing sustainable aviation fuel as the primary means** of decarbonisation will have a disproportionate impact on lowering emissions, because there is no need to redesign aircraft. As a result, **investments and R&D efforts can focus** mainly on scaling production and lowering cost.
- **Collaboration with other sectors** is essential to the successful deployment of sustainable aviation fuel. It can **drive down the cost of required technologies**, such as hydrogen production, direct air capture and biomass conversion, and ensure **effective use of scarce resources**.
- **The pathway to decarbonisation needs to be more ambitious** and investments need to start sooner to address societal expectations, reach sufficient sustainable aviation fuel volumes and bring down cost to the levels required for large-scale adoption within 15 years.
- **Individual initiatives** should be **integrated into comprehensive plans** representing all points along the value chain – from energy producers to end-customers. These plans should be **systematically deployed** in areas with favourable policies, market conditions, and access to sustainable aviation fuels.



To learn more,  
[download the Decarbonising Aviation: Cleared for Take-Off report.](#)





# Wellbeing: Not a matter of luck, but design

Good mental health is a state of wellbeing where individuals can realise their own potential, work productively, cope with the normal stresses of life and make a positive contribution to the community. It's just like physical health – we all have it. It is on a continuum, ranging from people thriving and going ok to people struggling and being unwell.

Positive mental wellbeing is not a matter of luck but a matter of design. In any workplace there are factors that protect wellbeing as well as factors that risk wellbeing.

In this article, we explore the topic of wellbeing in the workplace, alongside Doctor Hillary Bennett.

## Authors



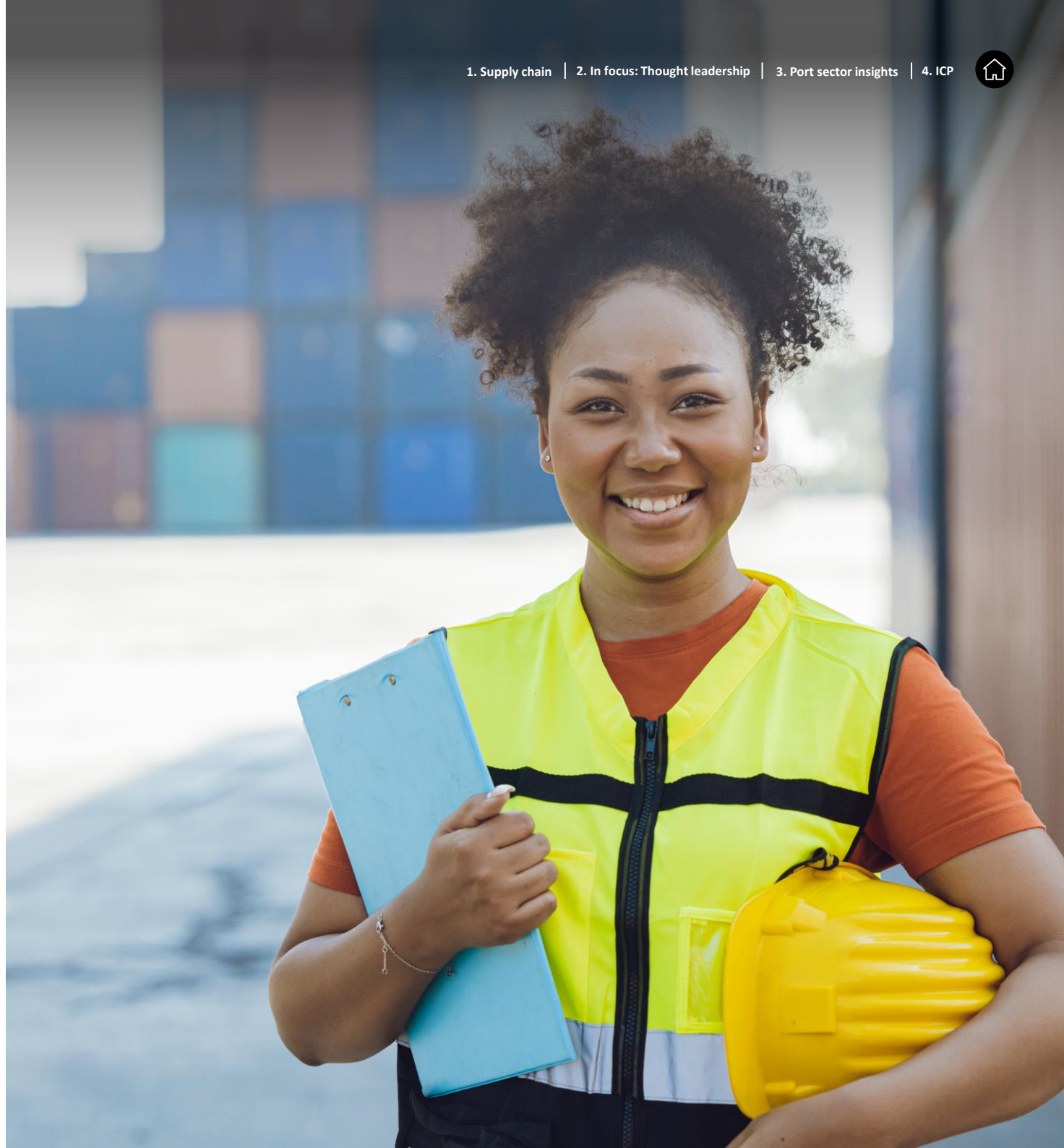
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# Wellbeing: Not a matter of luck, but design

## Duty to protect

The duty to protect workers lies with those who create the risks. Understanding and managing the risk of harm to mental wellbeing is critical for an organisation to meet its duty of care under the Health and Safety at Work Act 2015 (HSWA), which states that workers and other persons should be given the highest level of protection against harm to their health, safety, and welfare from work risk, by eliminating or minimising these risks, as is reasonably practicable. The HSWA defines health as both a person's physical and mental health.

It requires a deliberate effort to identify the psychosocial hazards that risk the wellbeing of everyone associated with the work. According to the ISO guidelines on psychological health and safety at work, psychosocial hazards relate to how work is organised, social factors at work and aspects of the work environment, equipment, and hazardous tasks. Psychosocial hazards are present in all jobs in all organisations.

These risks can cause mental harm, which is costly to both individuals and organisations. The harm can be acute or chronic, result from a single or repeated exposure to risk(s) factors, and range from mild psychological difficulties to severe psychological disorders (e.g. depression and anxiety). It is estimated that mental health problems cost New Zealand businesses at least \$1.65 billion per annum. The WorkSafe Segmentation and Insights Programme Research (2019) found that in the last 12 months, 20% of respondents experienced depression, 31% anxiety, and 60% stress. The New Zealand Workplace Barometer (2020) reported that 70% of respondents reported an absence from

work during the last 12 months due to 'physical or mental health'.

## Wellbeing by design

In addition to identifying and controlling risks to mental health and wellbeing, organisations can proactively build in the protective factors associated with 'good work'. It considers the physical work environment, work roles and tasks, and the physical, emotional, and psychological wellbeing of workers to improve health and wellbeing and has benefits for employees and employers. Good work contains protective factors that can:

- Keep workers from harm to their health, safety and welfare
- Improve worker health and wellbeing, and
- Improve business success through higher worker productivity

Examples of protective factors include but are not limited to manageable work demands, well-paced work, clear expectations about work duties, varied learning opportunities, positive respectful working relations, feeling safe to speak up and challenge, and appropriate monitoring of work.

In other words, good work is well designed, organised, and managed to proactively protect mental wellbeing, preventing physical and mental harm to the people doing the work, allowing people to thrive. Thriving is associated with good work and mental harm with 'toxic work'. Toxic work contains one or more factors that can significantly harm wellbeing.





# Wellbeing: Not a matter of luck, but design

## A strategic approach to wellbeing

Recent years have seen positive changes towards normalising mental health as a key part of workplace wellbeing. For most organisations, the question of ‘why’ mental health is important, at least from a legal perspective, is no longer the question.

For many organisations, COVID-19 has bought the conversation of wellbeing to the executive table. With increased, and changing, demands on workers, and the pressure associated with delivering essential services in a pandemic environment, many organisations are now wanting to know if they are doing everything they can. They understand their duty of care – the question organisations, big and small, are asking is “What needs to be done to demonstrate we care with a workplace that not only meets its legal obligations but also creates opportunities for people to thrive?” The answer is simple – success requires a clear wellbeing strategy that aims to protect workers from harm. The strategy must take a risk based approach to wellbeing, treating wellbeing in the same regard as other identified health and safety risks.

More often than not, this is where we find organisations struggle. Many lack a clear wellbeing strategy which results in them delivering a wellbeing programme with a scattergun approach. This leads to organisations often implementing initiatives that are not directly designed to mitigate actual wellbeing risks the organisation and its people face. As a result, wellbeing programmes are not able to directly address the wellbeing issues facing their workers.

## Recognised good practice

We often apply the Business Leaders’ Health and Safety Forum’s framework for managing mental health and wellbeing at work\*, which was developed alongside Dr. Hillary Bennett. This framework identifies four approaches that enable an organisation to meet its legal obligations, to protect people from harm as well as support people to thrive (not simply survive) at work.

The four approaches are structured to address the full range of the mental health continuum from both an ‘obligations / opportunities’ and ‘proactive / reactive’ perspective. The ‘Protect’ and ‘Support’ approaches enable an organisation to meet its obligations to prevent harm or help a person who is unwell. The ‘Foster’ and ‘Reclaim’ approaches provide opportunities for an organisation to proactively develop the mental health and capability of workers or reactively help workers who are struggling to restore their wellbeing.

Below are some questions to reflect on for your organisation:

- Do you have an approach to wellbeing that’s driven by a clear strategy?
- Are the risks to wellbeing in your organisation referred to as a risk or a set of risks?
- Have the risks that will significantly harm wellbeing been identified? How and who was involved?
- Have the different risks to wellbeing across different parts of the organisation been identified?
- Have the initiatives and programme of work you deliver for your wellbeing programme been designed to mitigate your identified risks?
- What are the challenges to assessing mental wellbeing risks in your organisation?

**Obligations** | **Opportunities**  
 Use these approaches to prevent harm | Use these approaches to help people thrive



●● **Protect/Foster:** Use **proactively** to build resilience  
 ●● **Reclaim/ Support:** Use **reactively** once harm has occurred to restore health and wellbeing

\* ([CEO Guide to Mental Health Wellbeing at Work](#), April 2021)



# Port sector insights

## Financial and operational trends





# Port ownership

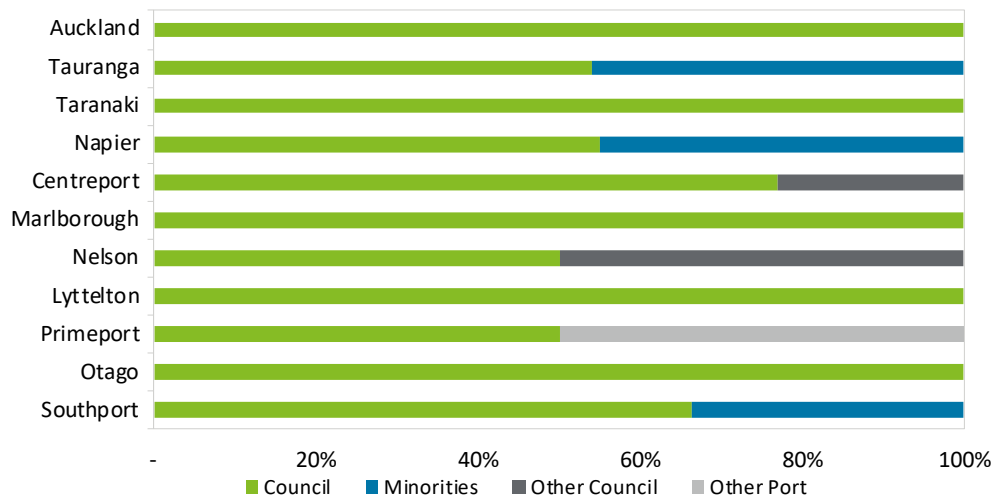
## Ownership of New Zealand ports

Within New Zealand, there is a high level of local government port ownership.

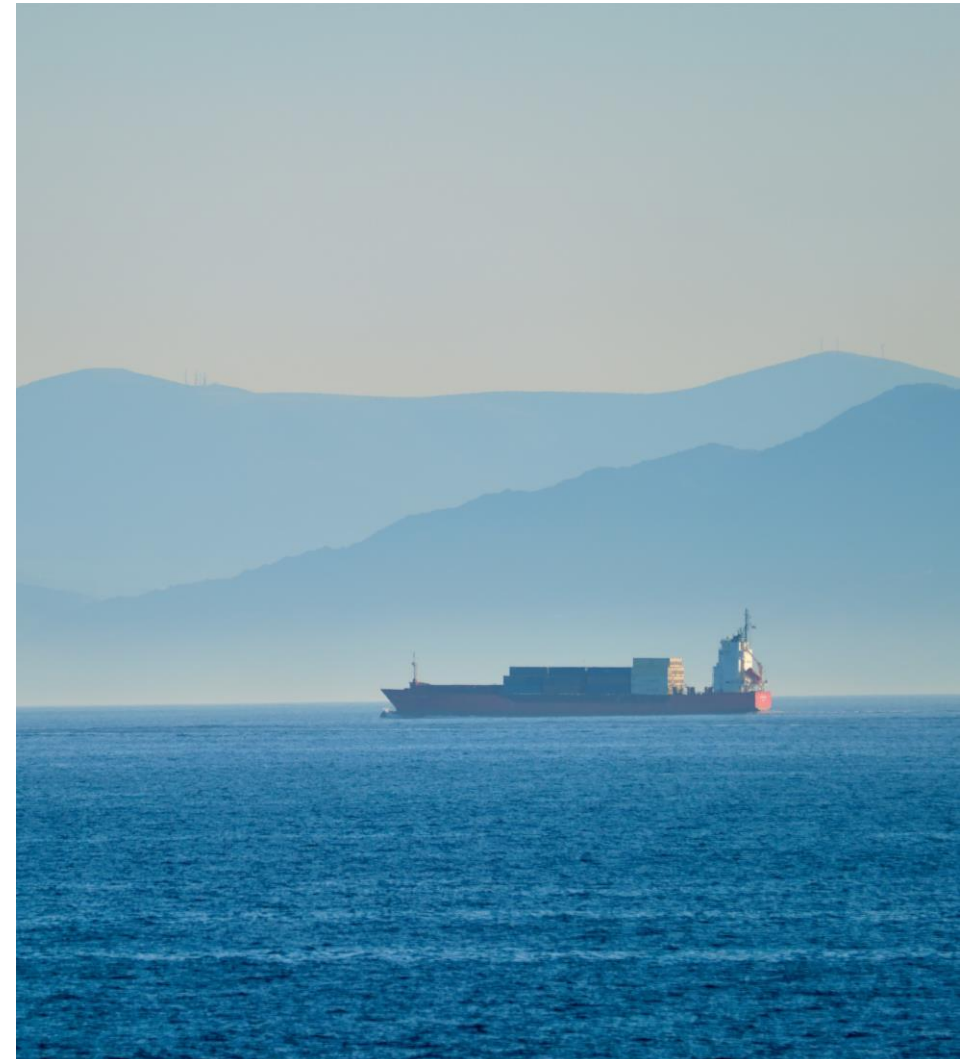
Of the 11 ports presented in the following chart, five are wholly owned by a single council and two ports are owned by two councils.

Three ports are listed with minority interests, with one 50% owned by another port.

### Ownership structure of New Zealand ports



Source: Companies Register





# TEU capacity of ships visiting New Zealand

Commentary and highlights are drawn from the Freight Information Gathering System (FIGS) release for the period to September 2021.

For several decades, container ships have been getting progressively larger. However, since the onset of the pandemic in late 2019, the composition of total TEUs by ship size has changed.

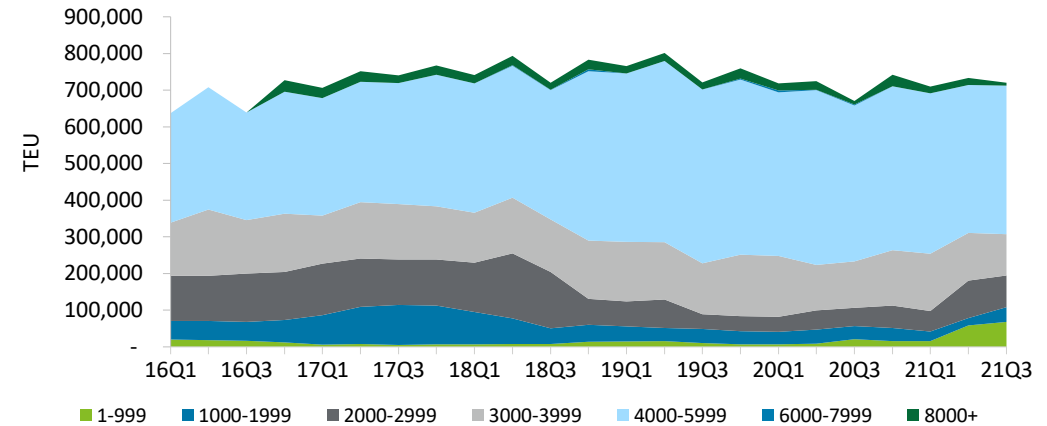
While aggregate TEU capacity has remained relatively constant when compared to prior years, with total TEU capacity at 720,000 in Q3 2021, there are fewer ships visiting greater than 3,000 TEU or more, and there has been an increase in ships that carry less than 3,000 TEU.

While over half of ships visiting New Zealand have between 4,000 – 5,999 TEU capacity, this has reduced from 64% in Q3 2020 to 56% in Q3 2021.

Since Q3 2020, the proportion of ships with 1 – 999 TEU capacity visiting New Zealand tripled from 3% to 9%. Prior to this, between 2017 to 2019, these ships made up between 1% - 2% of total TEUs. Ships that have between 2,000 – 2,999 TEU capacity have increased to 12% for Q3 2021, from 7% in Q3 2020.

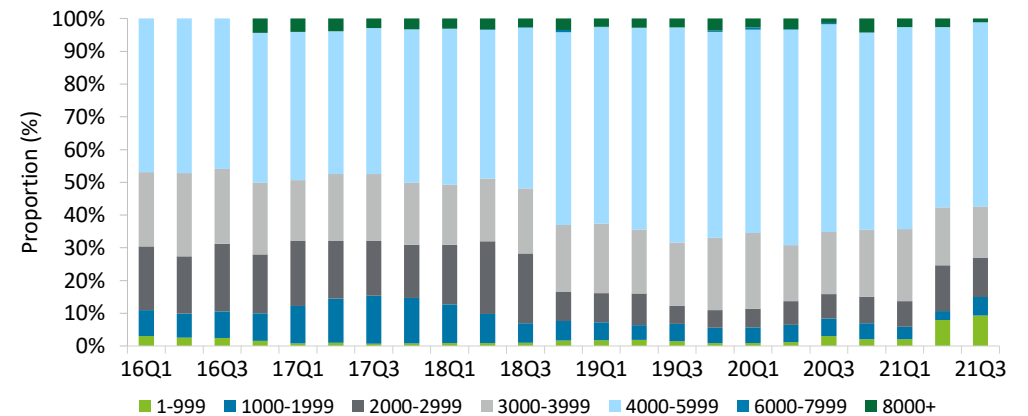


Total TEU capacity of ships visiting New Zealand



Source: FIGS, Deloitte analysis

Proportion of total TEUs by ship size



Source: FIGS, Deloitte analysis



# TEU capacity of ships visiting main ports

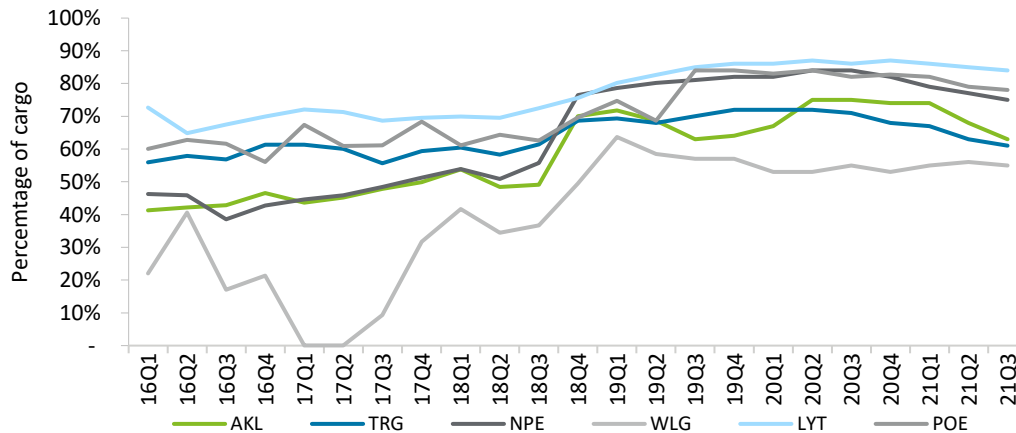
Commentary and highlights are drawn from the FIGS release for the period to September 2021.

Ships of 4,000 TEU or more handle a significant share of the import and export containers at the following ports: Ports of Auckland (AKL), Port of Tauranga (TRG), Napier Port (NPE), CentrePort (WLG), Lyttelton Port (LYT) and Port of Otago (POE).

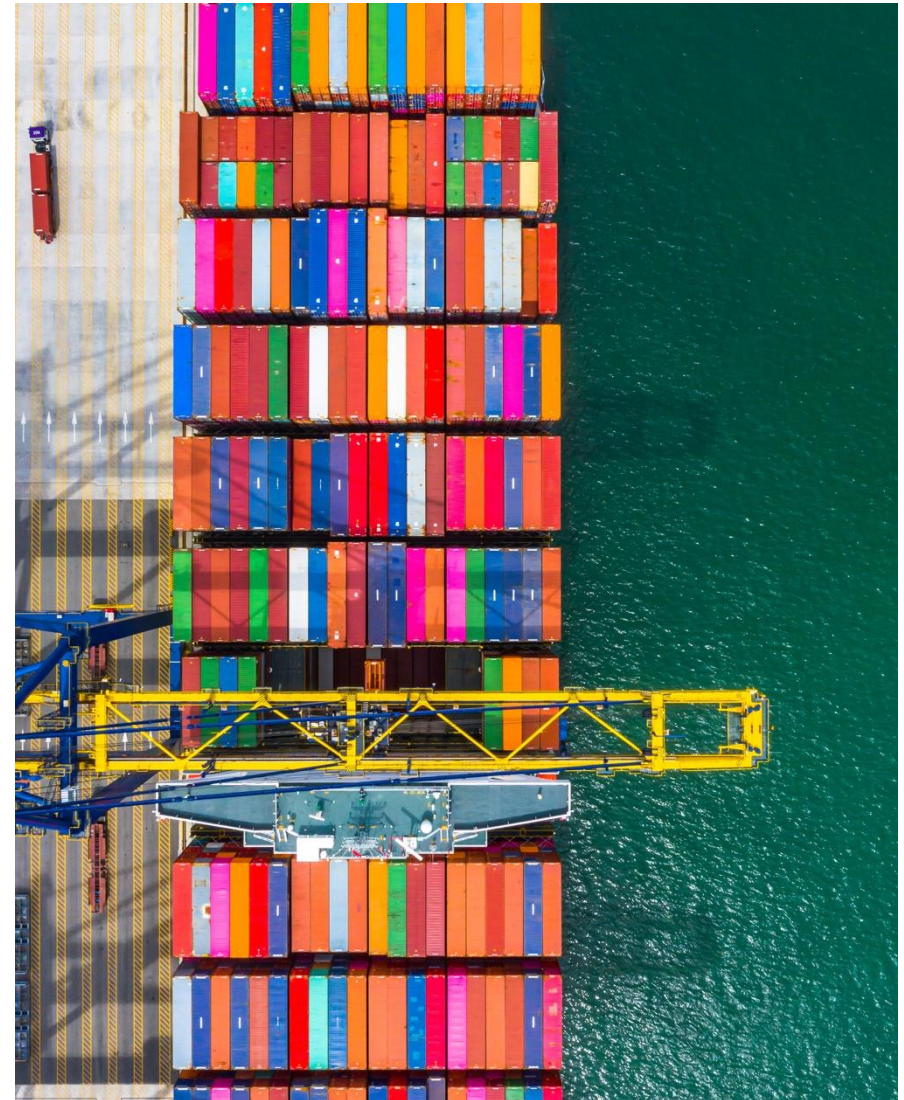
As shown in the graph below, the percentage of ships able to carry 4,000 TEU or more has decreased in the year to September 2021 across all ports. AKL, TRG and NPE experienced a reduction in the percentage of cargo carried on ships 4,000 TEU or more by 16%, 14% and 11% respectively.

LYT continues to have the highest percentage of 4,000 TEU or more ships of all the ports, with over 84% of its cargo falling into that category in Q3 2021. This is a slight decrease of 2% from Q3 2020, where LYT had 86% of its cargo on ships of 4,000 TEU or more.

Cargo on ships 4,000 TEU or more



Source: FIGS, Deloitte analysis





# Operations

## Container handling

TRG and AKL continue to be the dominant players in the market with a combined market share of 62% of all containers handled in 2021 (compared with 63% in 2020).

**TRG** – Since 2017, TRG has maintained its position as New Zealand’s largest port by container throughput. In 2017, the port became the first in New Zealand to handle more than 1 million TEU, and in 2021 the Port handled 1.20 million TEU, a decrease of 4.1% on 2020 volumes.

**AKL** – AKL remains New Zealand’s second largest port and handled 818k TEU in 2021, a decrease of 7.1% on 2020 volumes.

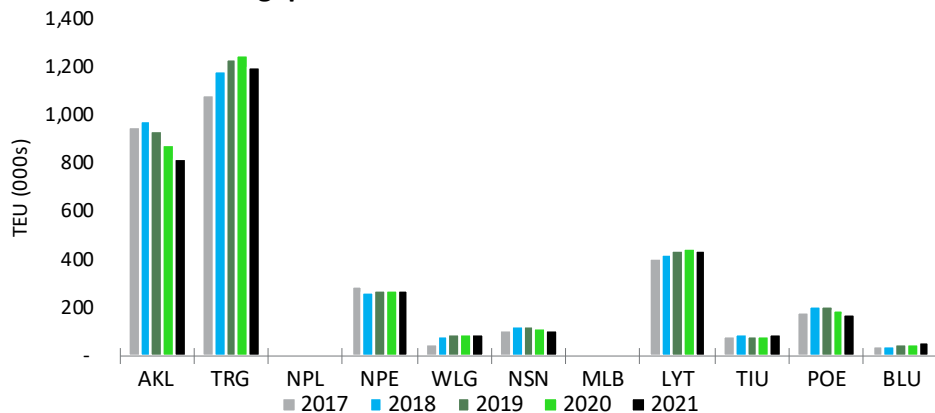
## Highest growth

Given the impacts of the COVID-19 pandemic during 2021, container growth has been more muted compared to prior years. However, significant growth was observed at:

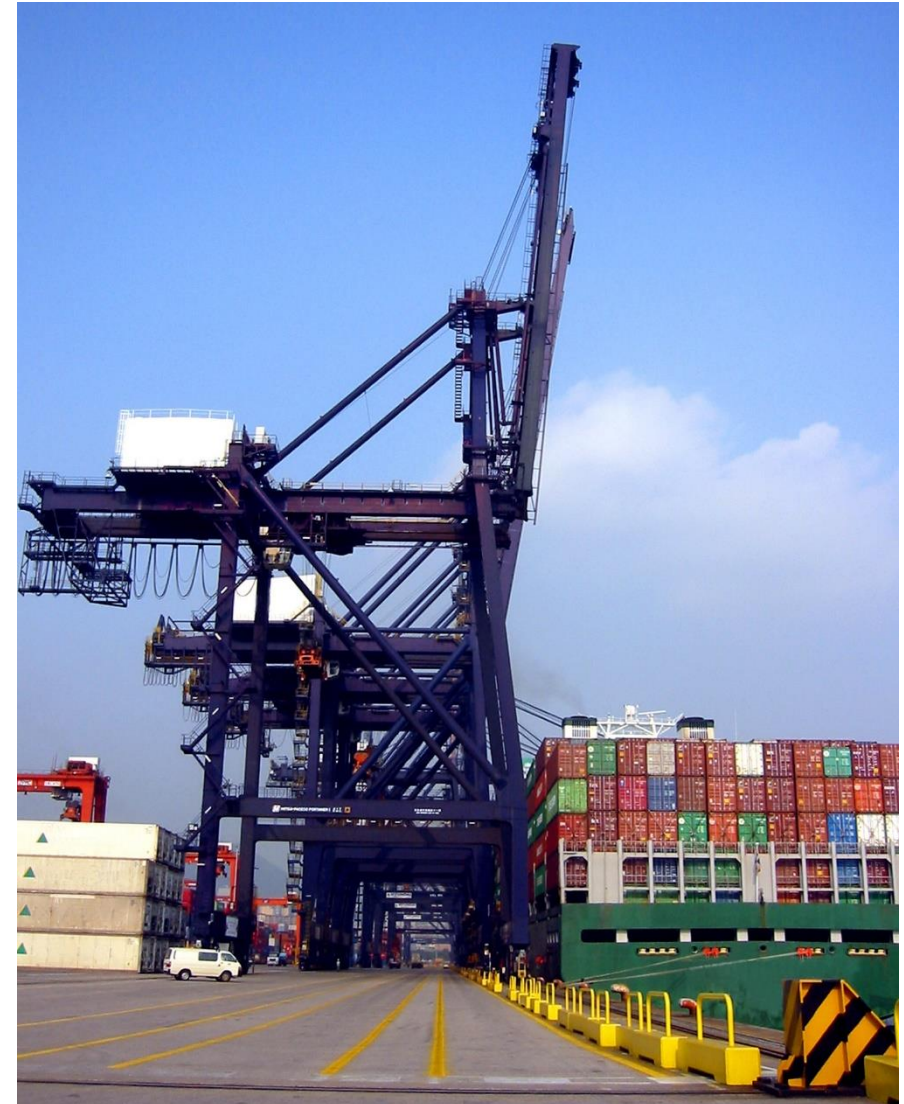
**South Port (BLU)** – Container volumes grew 13.3% from FY20 to FY21, rising from 48k TEU, continuing a trend of steady growth over recent years (with the exception of 2020).

**PrimePort Timaru (TIU)** – TIU also experienced an increase in container volumes from FY20 to FY21, with a 17.4% increase from 80k TEU to 94k TEU.

## NZ Container Throughput



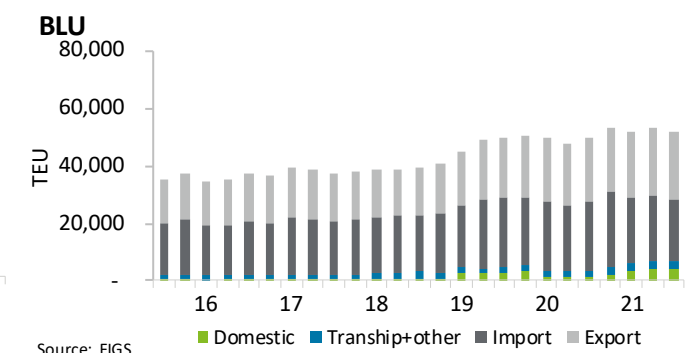
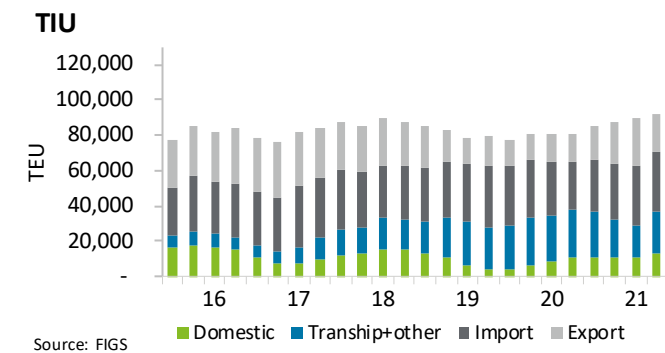
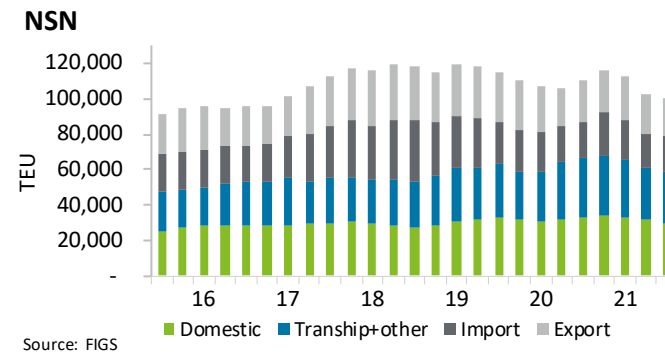
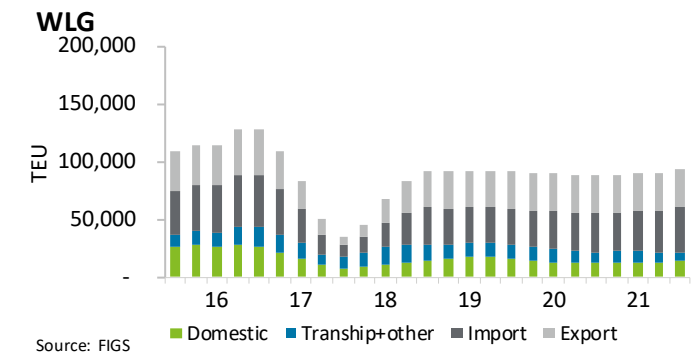
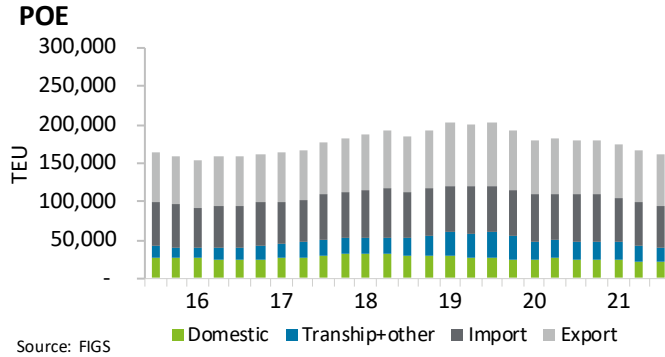
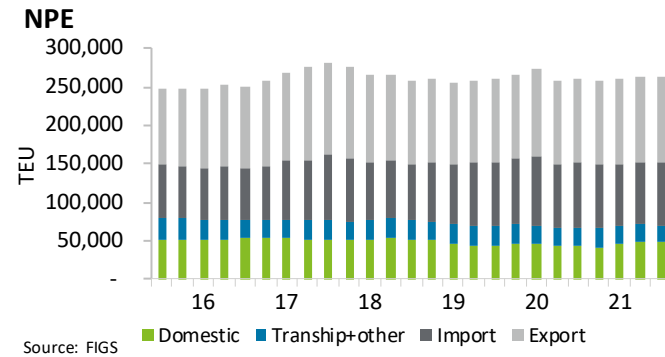
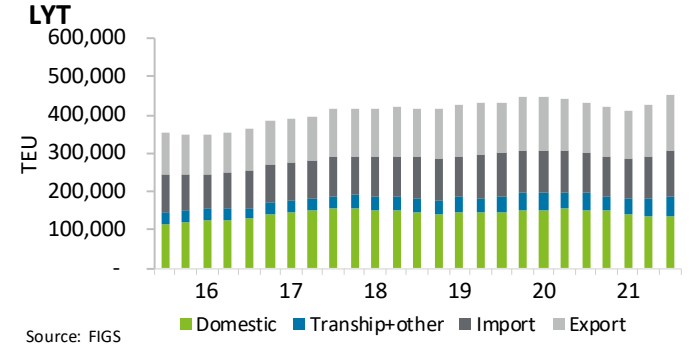
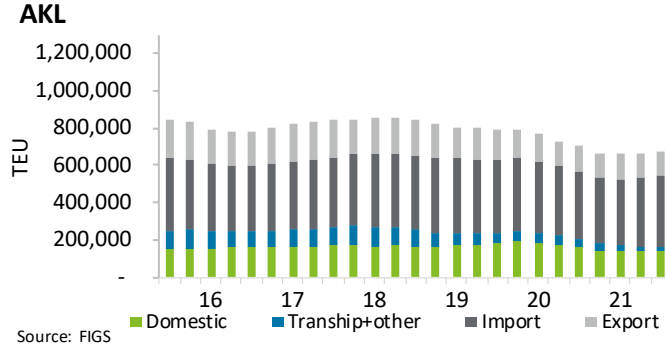
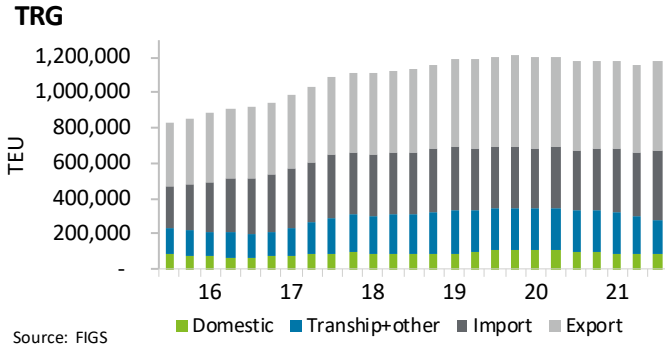
Source: Annual reports







# TEU breakdown (rolling 12 months to Q3 2021)





# TEU composition

## Commentary and highlights are drawn from the FIGS release for the period to September 2021.

Containerised import and export volumes have trended upwards in 2021. This is following a dip in container volumes experienced in 2020.

Import volumes have increased from 1,050,000 TEU in Q3 2020 to 1,131,000 TEU in Q3 2021. Similarly, export volumes have followed the same trend and have increased from 1,050,000 TEU in Q3 2020 to 1,068,000 TEU in Q3 2021.

Transshipment containerised volumes have continued to trend downwards since 2019. The volume has decreased 14% since Q3 2020.

Domestic TEU volumes (coastal shipping) have decreased 7% since Q3 2020. Coastal volumes are at 503,000 TEU for Q3 2021, a slight increase from 447,000 TEU in Q2 2021.

## Import volumes

AKL and TRG had the highest import volumes in the country and in the year ending September 2021. Each accounted for 33% and 34% respectively of total import volumes.

The proportion of imports that arrive in TRG have increased from approximately 24% of import volumes in 2014 to 34% in the year ending September 2021. The third largest container port, LYT, processed 10% of import

volumes in the year ending Q3 2021.

## Export volumes

TRG is the largest export port in New Zealand by TEU with approximately 48% of total export volumes. LYT is the second largest export port by TEU at approx. 14% of national volumes, closely followed by AKL with a 13% share.

## Domestic

AKL and LYT have the highest share of domestic volumes, at 29% and 27% respectively.

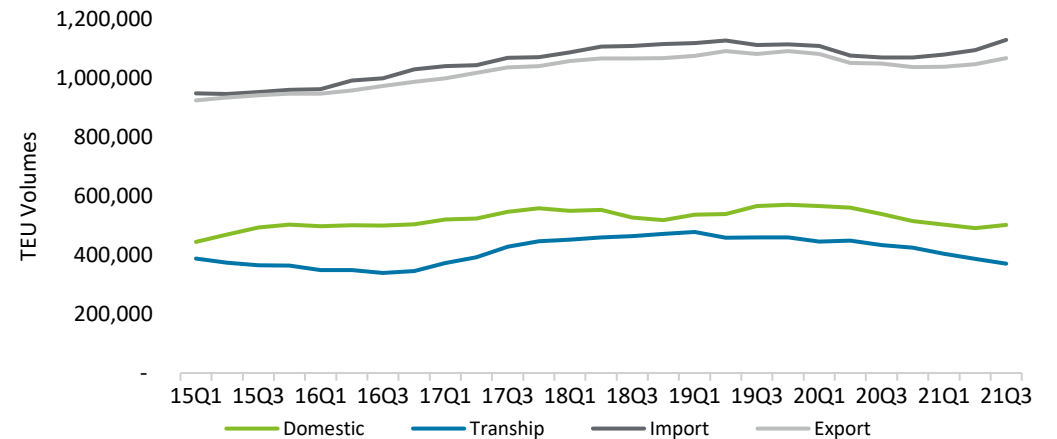
## Transshipment

TRG has the highest transshipment volumes among New Zealand ports with over 52% of total volume. LYT has the second highest proportion at 14%.

## Import - export mix

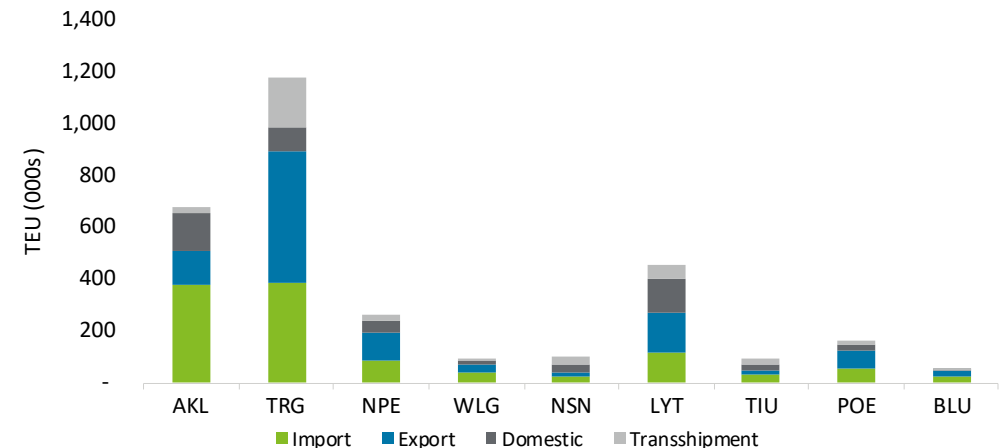
AKL is weighted towards imports, with TRG and NPE weighted towards exports. AKL container imports make up 55% of total container movements at the port, with container exports forming 20% of total container movements. TRG and NPE container imports are 33% and 31% respectively of total container movements. Container export movements for TRG and NPE are 43% and 42% respectively of total container movements.

TEU volumes



Source: FIGS, Deloitte analysis

TEU as at September 2021

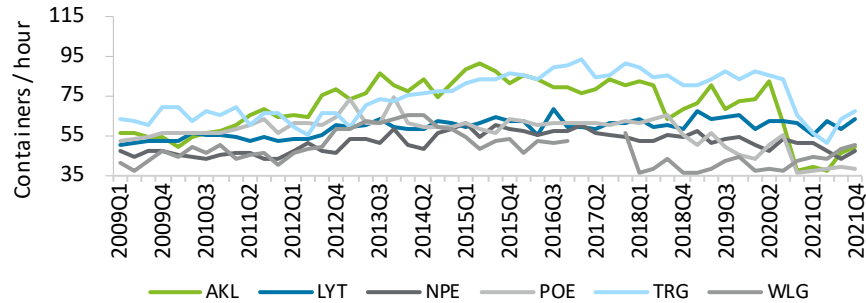


Source: FIGS, Deloitte analysis



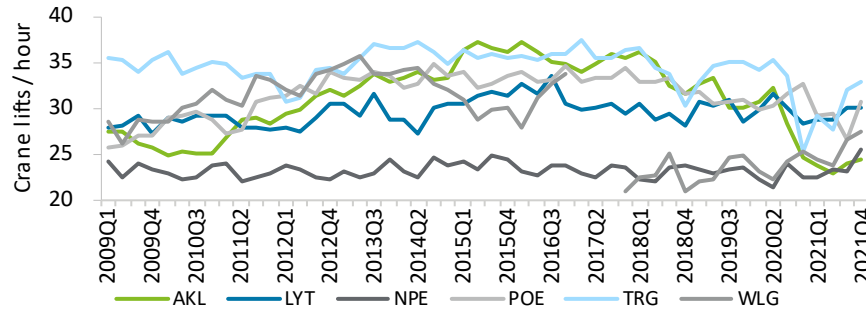
# Container terminal efficiency

NZ port ship rates



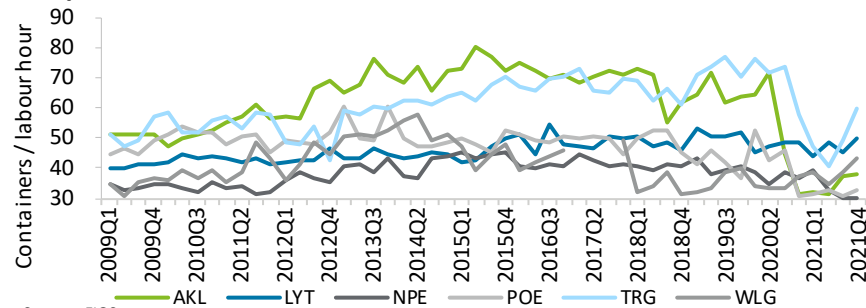
Source: FIGS

NZ port crane rate



Source: FIGS

NZ port vessel rates



Source: FIGS

NZ port ship rates - containers/hour

	2019				2020				2021			
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
<b>AKL</b>	71.6	80.5	68.4	72.1	72.7	82.0	60.9	37.5	38.6	37.2	45.7	49.1
<b>LYT</b>	67.0	63.6	63.8	64.7	57.8	61.9	61.7	61.6	54.9	62.0	57.7	63.0
<b>NPE</b>	57.5	51.5	53.5	54.2	50.0	46.9	53.5	50.6	51.4	47.3	42.6	46.6
<b>POE</b>	50.0	56.1	48.8	44.9	42.8	50.1	54.9	35.7	36.6	38.0	38.6	38.3
<b>TRG</b>	80.1	83.4	87.1	83.1	87.6	84.8	82.9	65.4	55.7	51.4	63.0	67.6
<b>WLG</b>	36.4	37.8	42.3	43.8	36.7	37.8	36.6	41.6	44.2	42.6	48.2	50.0

Source: FIGS

NZ port crane rates - crane lifts/hour

	2019				2020				2021			
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
<b>AKL</b>	32.6	33.4	30.0	30.0	30.8	32.3	28.4	24.6	23.8	22.8	24.0	24.4
<b>LYT</b>	30.8	30.2	30.9	28.5	29.9	31.5	30.1	28.4	28.8	28.8	30.1	30.1
<b>NPE</b>	23.2	22.9	23.3	23.5	22.1	21.4	23.9	22.5	22.5	23.2	23.0	25.5
<b>POE</b>	31.9	30.6	30.8	30.9	29.8	30.3	31.7	32.6	29.3	29.5	26.6	30.7
<b>TRG</b>	32.8	34.6	35.1	35.0	34.2	35.2	33.5	25.2	29.2	27.6	32.1	32.8
<b>WLG</b>	22.0	22.2	24.7	24.9	23.1	22.2	24.1	25.3	24.3	23.7	26.6	27.4

Source: FIGS

NZ port vessel rates - containers/labour hour

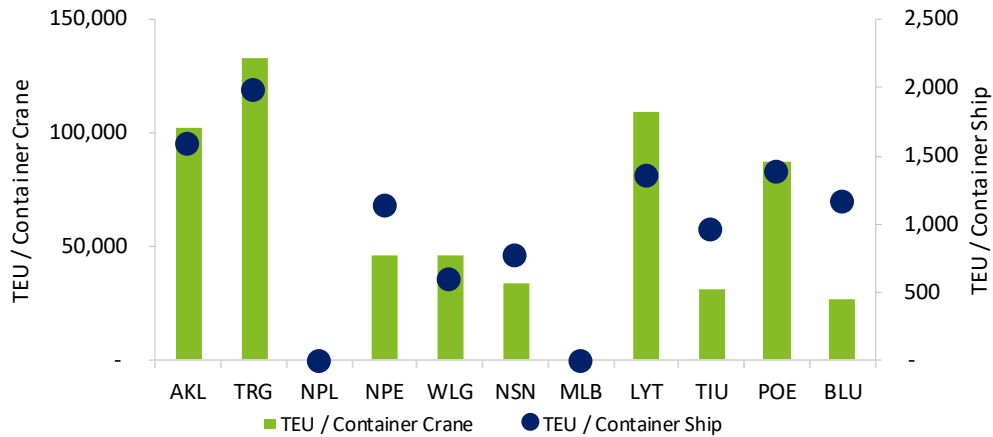
	2019				2020				2021			
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
<b>AKL</b>	64.5	72.0	62.0	63.8	64.3	71.7	44.6	31.2	32.2	31.3	37.6	38.3
<b>LYT</b>	53.3	50.4	50.5	51.7	45.6	47.2	48.4	48.7	44.2	48.7	45.3	49.9
<b>NPE</b>	43.2	38.3	39.5	40.9	38.8	34.7	38.6	36.5	39.5	32.9	30.0	29.9
<b>POE</b>	41.0	46.1	41.8	36.8	52.3	42.8	46.0	30.4	31.4	32.4	31.0	32.7
<b>TRG</b>	71.3	73.7	77.4	70.2	76.2	71.6	73.8	57.9	47.2	40.7	49.2	59.6
<b>WLG</b>	32.1	33.6	39.0	40.0	34.0	33.6	33.2	37.5	38.9	34.9	38.9	43.2

Source: FIGS



# Port utilisation

## Container Ship/Crane Utilisation



Source: Management information, Deloitte analysis

## Container ship utilisation

The three ports with the highest container ship utilisation were TRG, AKL and POE respectively.

TRG recorded the highest container crane utilisation, followed by LYT and AKL.

NPL and MLB do not operate container wharves.

## Bulk terminal utilisation

AKL had the highest bulk terminal utilisation (bulk tonnes / bulk terminal ha).

## Container terminal utilisation

LYT and AKL had the highest container terminal utilisation (TEU/terminal ha), keeping their respective #1 and #2 ranks from 2020.

TRG had the highest TEU throughput per container wharf metre, again holding their #1 position from 2020.

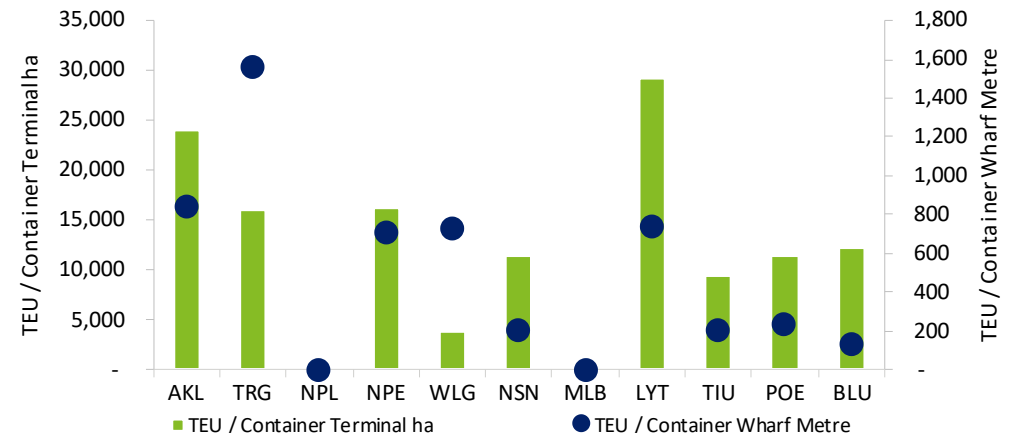
NPL (Port Taranaki) and MLB (Port Marlborough) do not operate container wharves.

## Bulk Terminal Utilisation



Source: Management information, Deloitte analysis

## Container Terminal Utilisation



Source: Management information, Deloitte analysis



# Financials

## Revenue

TRG reported the highest revenue in FY21 at \$338.3 million, an increase of 12.0% on FY20. Followed by AKL with \$226.3 million in reported revenue.

Overall revenue in FY21 increased from that reported in FY20 for most ports, with only four ports reporting decreases. Revenue growth and declines were attributed to a number of different drivers, however most experienced improved figures on 2020 as parts of the economy recovered from the initial impacts of the pandemic.

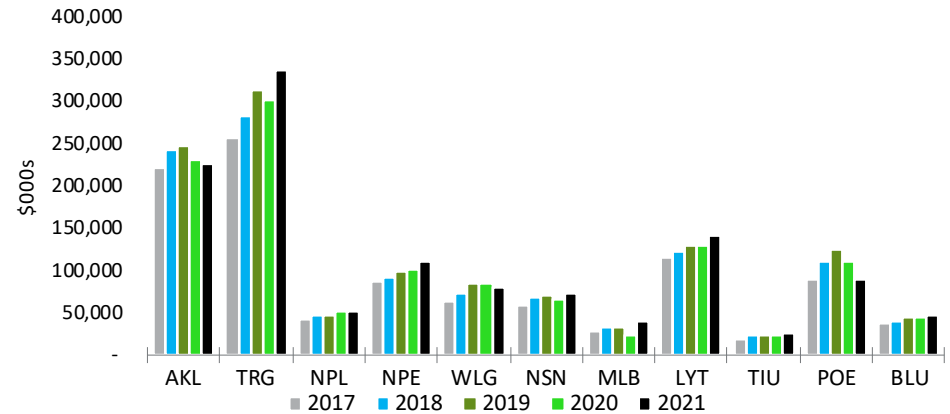
## Profitability

Nine of the 11 ports recorded increases in their NPAT, with NPL and WLG showing decreases. These decreases were attributed to a range of factors.

WLG – experienced the largest decrease in NPAT of any port (111.2%) attributable to a large reduction in EBITDA from 2020 after WLG received one-off insurance income of \$172.5m.

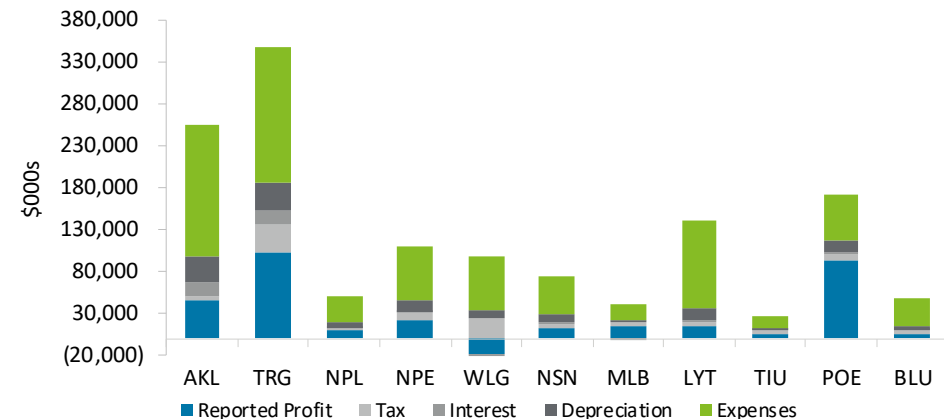
NPL – NPAT in the financial statements was recorded as a \$9 million gain, this was a 25% decrease from \$12m in 2020. This was attributable to a large increase in expenses.

## Revenue



Source: Annual Reports

## Profitability



Source: Annual Reports



# Financials

## Dividends

All 11 ports paid dividends to shareholders in 2021.

TRG paid the largest dividend, \$84.4 million. This dividend comprised the FY21 interim dividend (\$40.8 million), and FY20 final dividend (\$43.5 million).

WLG paid a dividend of \$20.0 million in FY21, the second highest when compared to other ports. However, WLG's total dividend included a special dividend of \$15 million.

## Capital expenditure

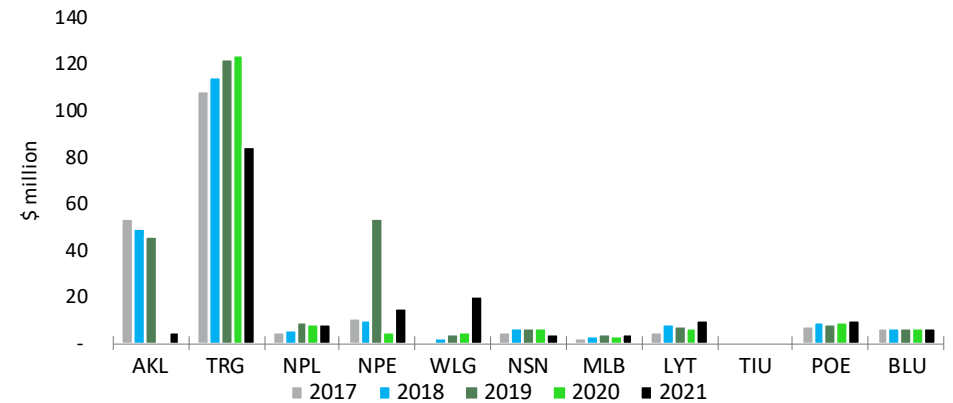
A number of ports engaged in significant capital investment to further develop port capacity and capability during FY21.

NPE invested \$104 million in capital projects during 2021. A key driver of this expenditure being the 350m-long wharf to allow NPE to handle more, and larger ships to improve operational performance. The wharf is now scheduled to be operational in the second half of the 2022 financial year. The final cost of this project is now estimated to range between \$173m and \$179m, lower than earlier estimates.

WLG had the second largest capital expenditure figure over the FY21 period, with a figure of \$56 million. Activities included the continued Thorndon Container Wharf reinstatement project, the Seaview Wharf renewal project, expansion of the Waingawa log yard as well as other improvements.

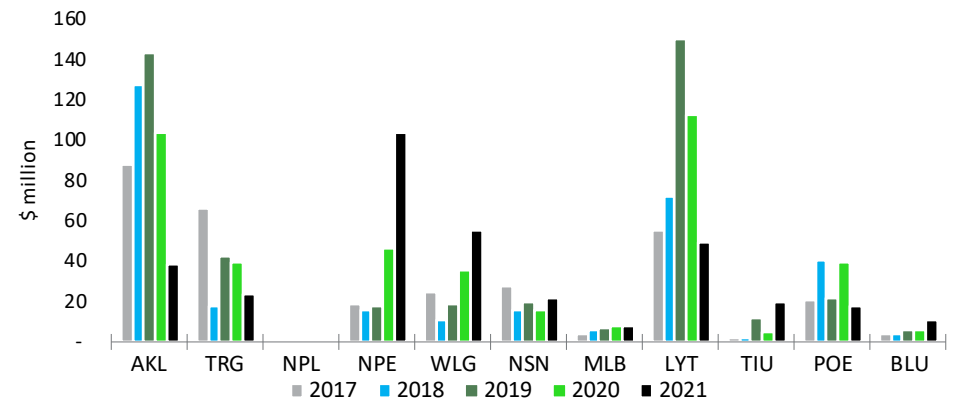
LYT had the third largest capital expenditure figure over the FY21 period, with a figure of \$49 million.

## Cash Dividends Paid



Source: Annual Reports

## Capital Expenditure Investing Activities



Source: Annual Reports



# Financials

## Debt covenants

The ratios below provide an indication of a port's capacity to borrow additional debt and to service existing debt.

Gearing is calculated as debt divided by debt plus equity.

Average gearing across all ports in FY21 was 21.6%, a slight increase from 19.5% in FY20.

Interest cover is calculated as EBIT divided by net interest expense.

WLG and MLB had a negative interest cover ratio for FY21.

Note: given the scale of the graph not all ports are included to show interest cover.

## Cash net debt

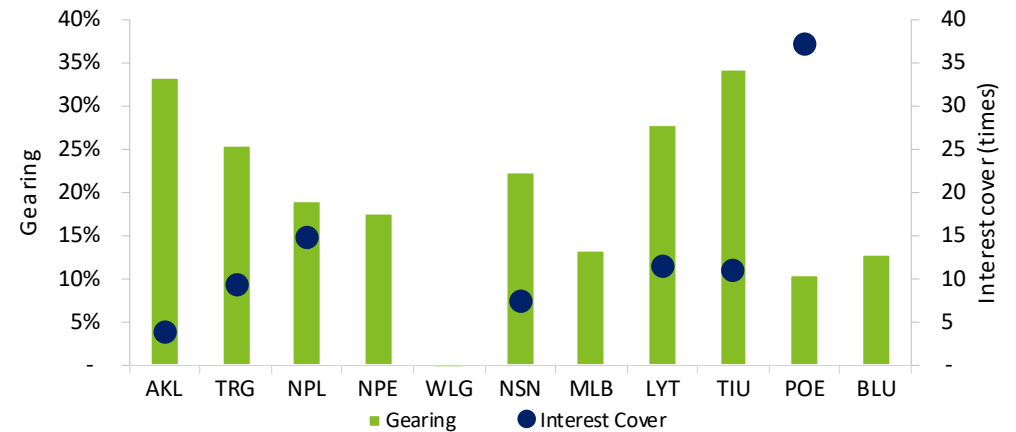
Cash net debt is calculated as interest bearing liabilities less cash and equivalents. Total net debt for all ports in FY21 was \$1.2 billion, an increase from \$1.1 billion in FY20.

Net debt for the two largest ports, TRG and AKL, decreased 0.6% and 1.6% respectively.

However, it was NPE and WLG who had the largest movement in dollar terms, with net debt increasing by \$84 million and \$65 million respectively.

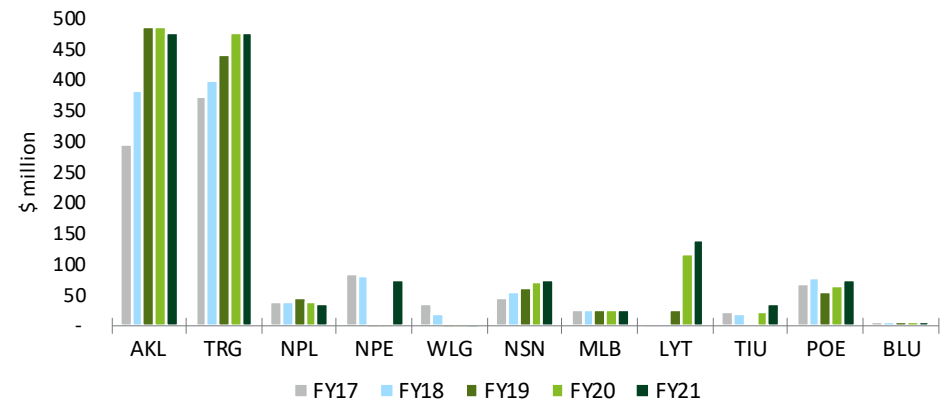
The largest reduction in net debt was reported by AKL, falling by \$7.8m. This was largely attributable to a fall in interest bearing liabilities by \$10.8 million in FY2021.

## Debt Covenants



Source: Annual Reports

## Cash Net Debt



Source: Annual Reports



# Port sector insights

## Comparator tables and analytics







# Comparator Tables

Port Facilities & Capacity Comparison											
FY21	AKL	TRG	NPL	NPE	WLG	NSN	MLB	LYT	TIU	POE	BLU
Port Harbour Type	Natural	Natural	Breakwater	Breakwater	Natural	Natural	Natural	Natural	Breakwater	Natural	Natural
Draught (m) (min)	12.5	14.5	12.5	12.4	11.1	10.3	13.5	13.3	11.6	14.0	7.0
Port Operating Land (ha)	77.0	190.3	65.3	49.3	75.0	26.0	10.0	103.4	40.0	34.5	58.0
Container Terminal Area (ha)	34.0	74.6	2.0	17.0	24.3	9.0	-	15.0	10.0	15.4	4.4
Total Wharf Length (km)	3.6	2.8	1.7	1.6	2.9	1.2	0.6	2.3	1.7	2.1	1.9
Container Wharf Length (km)	1.0	0.8	0.4	0.4	0.1	0.5	-	0.6	0.5	0.7	0.4
Quay Cranes	8	9	-	-	2	-	-	4	-	2	-
Mobile Cranes	-	-	2	6	-	3	-	-	3	-	2
Forklifts/Stackers	14	-	2	38	18	28	-	19	14	7	9
Straddles	62	53	-	-	-	1	-	27	-	15	-
Reefer Slots	945	3,426	192	1,123	315	900	-	996	650	1,850	300
Tugs	3	3	3	3	2	3	2	2	2	3	2
Pilot Launches	2	2	2	1	2	1	1	1	1	3	1
Rail Connection	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Bulk Tonnes Handled (millions)	6.7	11.9	5.1	4.0	2.9	1.9	0.8	3.6	1.8	1.9	2.7
NZ Cargo Volume Rank	2	1	3	4	6	8	11	5	10	9	7
Bulk Ship Calls (est)	330	687	265	343	303	649	48	515	342	277	285
TEU Throughput (000)	818.2	1,200.8	-	276.0	91.9	102.9	-	438.3	93.9	175.0	53.8
NZ Container Volume Rank	2	1	-	4	8	6	-	3	7	5	9
Container Ship Calls (est)	514	607	-	242	155	132	-	324	98	126	46
Bulk Tonnes / Bulk Terminal ha	154,884	102,852	80,569	122,159	58,209	112,094	82,988	40,706	60,900	96,914	50,373
TEU / Container Terminal ha	24,065	16,097	-	16,235	3,782	11,433	-	29,220	9,389	11,364	12,227
Bulk Tonnes / Total Wharf Metre	1,850	4,212	2,965	2,461	1,003	1,618	1,339	1,565	1,062	881	1,408
TEU / Container Wharf Metre	844	1,560	-	708	729	206	-	739	198	236	126
Bulk Tonnes / Bulk Ship	20,182	17,322	19,245	11,516	9,733	2,928	17,289	6,990	5,342	6,690	9,474
TEU / Container Ship	1,592	1,978	-	1,140	593	780	-	1,353	958	1,389	1,170
TEU / Container Crane	102,275	133,426	-	46,000	45,950	34,300	-	109,575	31,297	87,500	26,900
Ship Rate	81.7	68.9	-	50.6	41.0	-	-	62.0	35.6	41.3	-
Vessel Rate	72.3	60.2	-	37.3	36.0	-	-	48.8	-	35.1	-
Crane Rate	25.0	27.0	-	22.6	24.4	-	-	24.0	17.8	31.6	-
Rail utilisation - from export volumes											
% of TEU volumes transported to port on rail	-	21.0%	-	14.9%	40.0%	-	-	18.0%	1.1%	57.0%	10.0%
% of bulk volumes transported to port on rail	-	56.4%	0.7%	5.0%	29.0%	-	-	29.6%	-	-	-
Rail utilisation - from import volumes											
% of TEU volumes transported from port on rail	-	28.4%	-	2.0%	15.0%	-	-	12.0%	0.0%	15.0%	1.0%
% of bulk volumes transported from port on rail	-	14.2%	-	-	-	-	-	-	-	-	-

<sup>1</sup> AKL unable to split rail utilisation. 14.4% rail utilisation across import and export volumes.



# Comparator Tables

New Zealand Port Summary - NZ\$ million											
FY21	AKL	TRG	NPL	NPE	WLG	NSN	MLB	LYT	TIU	POE	BLU
<b>Income Statement</b>											
Revenue	226.3	338.3	50.8	109.5	80.2	73.5	40.2	142.2	26.3	90.0	47.3
Revenue - Port	212.8	306.4	50.8	107.1	61.9	63.6	11.2	138.6	23.6	60.4	47.3
Expenses	(158.1)	(161.1)	(30.9)	(65.7)	(66.1)	(44.9)	(17.0)	(103.4)	(13.2)	(56.2)	(28.5)
Gross Profit	68.2	177.1	19.9	43.8	14.1	28.6	23.2	38.9	13.1	33.9	18.8
Associate Earnings	-	13.5	-	-	-	-	-	-	-	-	-
One-Offs	29.1	(0.7)	-	1.1	(2.3)	-	-	(1.9)	-	82.7	0.0
EBITDA	97.3	189.9	19.9	44.9	11.8	28.6	23.2	37.0	13.1	116.6	18.8
Deprn&Amort	(30.6)	(36.3)	(6.2)	(13.1)	(7.9)	(9.3)	(3.7)	(14.1)	(2.4)	(12.4)	(4.1)
EBIT	66.7	153.6	13.7	31.8	3.9	19.3	19.5	22.9	10.7	104.2	14.7
Net Interest Expense	(17.0)	(16.6)	(0.9)	(0.0)	3.8	(2.6)	0.1	(2.0)	(1.0)	(2.8)	(0.0)
Taxation Expense	(4.2)	(34.6)	(3.6)	(8.6)	(25.5)	(3.7)	(3.7)	(5.0)	(3.2)	(6.9)	(4.0)
Reported Profit	45.6	102.4	9.2	23.2	(17.8)	13.0	16.0	16.0	6.5	94.5	10.7
Other Comprehensive Income	100.0	180.9	6.8	0.8	14.9	2.3	-	2.2	0.7	1.6	-
Comprehensive Income	145.5	283.3	16.0	24.0	(2.9)	15.3	16.0	18.1	7.1	96.1	10.7
<b>Cashflow Statement summary</b>											
Net Operating CF	56.4	99.7	15.6	34.8	13.5	21.2	12.9	37.1	10.0	21.7	15.8
<b>Balance Sheet</b>											
Port Fixed Assets	1,243.6	1,758.1	194.0	448.6	218.4	327.6	101.5	469.8	104.2	223.1	57.2
Total Assets	1,591.2	2,081.3	203.7	480.0	512.2	371.4	217.0	589.9	108.5	746.6	68.7
Net Debt	480.0	477.1	36.7	75.7	(184.6)	75.3	25.0	141.4	34.7	73.6	7.4
Total Equity	963.6	1,397.0	156.8	354.8	432.7	261.7	163.1	364.2	66.8	634.6	49.5
<b>Ratios</b>											
Share of NZ Revenue	18.5%	27.6%	4.2%	8.9%	6.5%	6.0%	3.3%	11.6%	2.1%	7.4%	3.9%
Gearing (D/D+E)	33.2%	25.5%	19.0%	17.6%	(74.4%)	22.3%	13.3%	28.0%	34.2%	10.4%	13.0%
EBIT Margin	29.5%	45.4%	27.0%	29.1%	4.9%	26.3%	48.6%	16.1%	40.7%	115.8%	31.1%
ROE	4.7%	7.3%	5.9%	6.5%	(4.1%)	5.0%	9.8%	4.4%	9.7%	14.9%	21.6%
ROA	2.9%	4.9%	4.5%	4.8%	(3.5%)	3.5%	7.4%	2.7%	6.0%	12.7%	15.6%



# Port performance

## Interactive data analytics

This year we are pleased to continue with our interactive data analytics tool, the 'Ports and Freight Yearbook Analytics Dashboard'.

This dashboard provides you with the ability to dynamically view and test the relationship between a number of financial and operational variables, using data covering a three-year period.

This year we have also introduced new interactive geographic, operational, and scale overview elements to the dashboard.

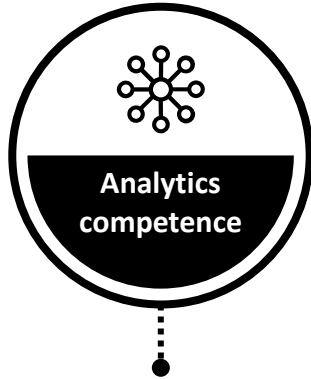
To access the dashboard, please visit our website:

[www2.deloitte.com/nz/ports-and-freight](http://www2.deloitte.com/nz/ports-and-freight)





# Our analytics capability



- Our **proven tools and methods** can be **efficiently adapted** to different system environments.
- Our experts are familiar with a range of general and advanced analytics methods, which are **combined in an integrated approach**.
- Our analytics experts with advanced data science expertise cover data extraction, cleansing as well as data model and dashboard customization.



- Our analytics led approach enables us to:
- Look beyond standard financial reports and deeper into operational data;
  - Quickly identify granular issues and opportunities; and
  - Highlight relevant operational focus areas through interactive drill-down analytical dashboards.

**In an engaging and collaborative manner** that obtains alignment across stakeholders and enables **better decisions, more often**.



- Through benchmarking customer, supplier and competitor data we can assist you on a wide range of analysis, including:
- Interactively drilling down into customer groups to identify material variability in profitability across a product group or division.
  - Comparing financial metrics against your competitors or other industry players to identify opportunities for value enhancement and quantify the 'gap'.
  - Drilling down into transaction level receivables, payables and inventory data to identify opportunities to improve working capital performance.



Our team is comprised of highly experienced financial advisors. We pride ourselves on our ability to use data to inform financial decisions.

We have an in-depth understanding of the drivers of financial value and have a proven record success of operationalising the insights gained through analytics into sustaining financial results.



## Key contacts



[Rob Campbell](#)  
 Director  
 Financial Advisory  
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 Auckland, New Zealand



# Port sector insights

## Port summaries





## Ports of Auckland – AKL

### Overview

AKL's key facilities comprise its container and multi-purpose cargo terminals on the Waitematā Harbour (adjacent to Auckland's CBD). AKL operates regional freight hubs in South Auckland and Waikato, including a container trucking operation from South Auckland, and has joint interests in a Manawātū freight hub, marine towage at Northport, and an online cargo management system. AKL is the first port of call for a number of international services, receiving full import containers and generating a strong flow of empty containers destined for export.

### Port development

- The port is making progress on their 30-year master plan and its associated investment programme. A new car handling facility was completed in 2020. The port also received resource consent to deepen Auckland's shipping channel. However, this consent is under appeal and work will not start until 2022 at the earliest. The port's automation programme has been reset, with the port aiming for completion in late June 2022.
- The port expects to take delivery of the world's first full-size, electric ship-handling tug by early 2022. The port is also working on building Auckland's first hydrogen production and refuelling facility.
- The port has also successfully made the transition to a new vehicle booking system – Containerchain.

### Trade

- Bulk tonnes handled of 6.67m tonnes, a 15.2% increase on FY20.
- TEU throughput of 818,238, a 7.1% decrease on FY20.
- Vehicles: 236,260 cars and light commercial vehicles unloaded and processed, a 9.2% increase on FY20.

### Financial performance

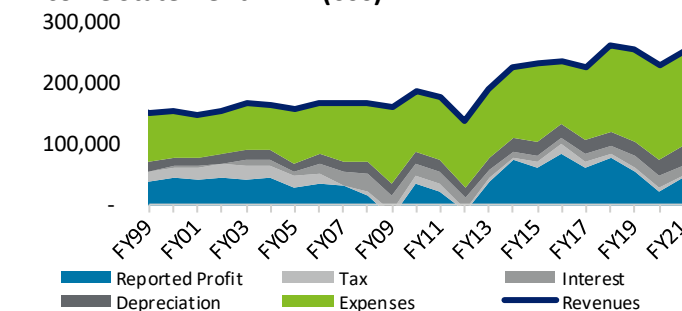
- Revenue: \$226.3 million, a 2.2% decrease on FY20.
- Operating expenses: \$158.1 million, a 1.1% increase on FY20.
- EBITDA: \$97.3 million, a 29.2% increase on FY20.
- NPAT: \$45.6 million, a 98.1% increase on FY20.

Ports of Auckland - AKL		
Income Statement (\$m)	FY21	FY20
Revenue	226.3	231.4
Revenue from Port Operations	212.8	219.6
Operating Expenses	(158.1)	(156.4)
<b>Gross Profit</b>	<b>68.2</b>	<b>75.0</b>
Associate / JV Earnings	-	-
One Offs / Other Items	29.1	0.3
<b>EBITDA</b>	<b>97.3</b>	<b>75.3</b>
Depreciation and Amortisation	(30.6)	(27.0)
<b>EBIT</b>	<b>66.7</b>	<b>48.3</b>
Net Interest Expense	(17.0)	(18.0)
Taxation	(4.2)	(7.3)
<b>NPAT</b>	<b>45.6</b>	<b>23.0</b>
Other Comprehensive Income	100.0	(11.2)
<b>Comprehensive Income</b>	<b>145.5</b>	<b>11.8</b>
Balance Sheet (\$m)	FY21	FY20
Current Assets	49.0	45.8
Fixed Assets	1,243.6	1,113.5
Intangibles	74.2	88.8
Deferred Tax Benefit	-	-
Investments	158.3	130.2
Other Assets	66.1	73.3
<b>Total Assets</b>	<b>1,591.2</b>	<b>1,451.5</b>
Current Liabilities	48.8	48.1
Debt	475.9	486.7
Other Non-Current Liabilities	102.8	95.5
Shareholders' Funds	963.6	821.2
<b>Total Liabilities / SHF</b>	<b>1,591.2</b>	<b>1,451.5</b>
Cash Flow Statement (\$m)	FY21	FY20
Operating Cash Received	251.6	280.8
Operating Cash Paid	(195.2)	(224.2)
<b>Net Operating Cash Flow</b>	<b>56.4</b>	<b>56.6</b>
Less: Asset Purchases	(42.2)	(108.1)
Less: Advances to Related Parties	(0.1)	(0.2)
Less: Dividends Paid	(4.9)	-
<b>Funding Surplus (Deficit)</b>	<b>9.3</b>	<b>(51.7)</b>
Insurance Proceeds	-	-
Proceeds of Asset Sales	0.5	54.0
Dividends from Associates	-	-
Increase in Net Debt	(9.8)	(2.3)
Equity Raised	-	-
<b>Funding Provided</b>	<b>(9.3)</b>	<b>51.7</b>

Source: Annual Report, Deloitte Analysis

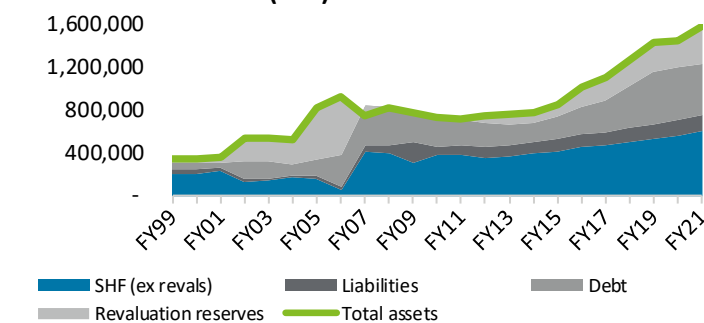


### Income Statement - AKL (000)



Source: Annual Reports

### Balance Sheet - AKL (000)



Source: Annual Reports



## Port of Tauranga - TRG

### Overview

TRG's key facilities include the Mount Maunganui bulk terminal, Tauranga container terminal, MetroPort and its South Auckland inland container port. The port has a high degree of vertical integration with interests in other ports, stevedoring, and freight transport.

### Port development

- TRG began development of the Ruakura Superhub inland port near Hamilton, which is a joint venture with Tainui Group Holdings. This facility will open in mid-2022.
- The port has applied for resource consent to extend the container berths to the south of the existing wharves. The \$68.5m project will create an estimated 368 jobs through the construction phase and more than 81 permanent jobs after completion.

### Trade

- Total trade increased 3.8% to 25.7 million tonnes (up from 24.8 million tonnes).
- Container volumes decreased 4.1% to 1,200,831 TEUs (down from 1,251,741 TEUs)
- Imports increased 4.0% to 9.4 million tonnes.
- Exports increased 3.6% to 16.3 million tonnes.
- Log export volumes bounced back from the 2020 lockdown, increasing 14.3% to 6.3 million tonnes. Sawm timber and wood panel exports decreased 12.4% in volume.
- Dairy product exports decreased 1.9% to just over 2.3 million tonnes, reflecting a later-than-usual season and a reduction in tranship volumes.
- Kiwifruit exports increased 10.1% in volume.
- Oil product imports increased 11.6% in volume, and cement imports increased 42.4% in volume, reflecting the strength in the local economy.
- Fertiliser imports decreased 16.9% in volume, grain volumes decreased 8.9% and protein and stock feed imports decreased 10.4%.
- Coal imports increased significantly as a result of lower hydro energy production and declining gas production.

### Financial performance

- Revenue: \$338.3 million, a 12% increase from FY20.
- Operating expenses: \$161.1 million, a 15.3% increase from FY20.
- EBITDA: \$189.9 million, a 15% increase from FY20.
- NPAT: \$102.4 million in FY21, a 15.4% increase from FY20.

### Port of Tauranga - TRG

Income Statement (\$m)	FY21	FY20
Revenue	338.3	302.0
Revenue from Port Operations	306.4	271.3
Operating Expenses	(161.1)	(139.8)
<b>Gross Profit</b>	<b>177.1</b>	<b>162.2</b>
Associate / JV Earnings	13.5	10.0
One Offs / Other Items	(0.7)	(7.0)
<b>EBITDA</b>	<b>189.9</b>	<b>165.2</b>
Depreciation and Amortisation	(36.3)	(29.6)
<b>EBIT</b>	<b>153.6</b>	<b>135.6</b>
Net Interest Expense	(16.6)	(18.5)
Taxation	(34.6)	(28.4)
<b>NPAT</b>	<b>102.4</b>	<b>88.7</b>
Other Comprehensive Income	180.9	31.7
<b>Comprehensive Income</b>	<b>283.3</b>	<b>120.4</b>

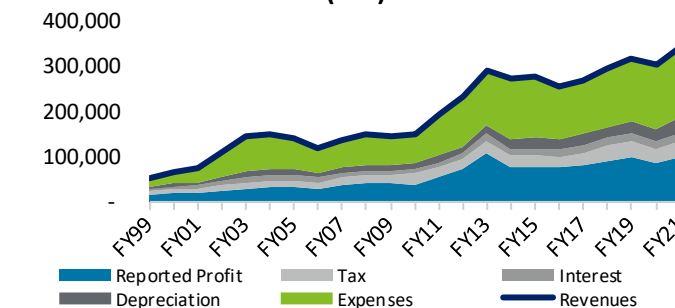
Balance Sheet (\$m)	FY21	FY20
Current Assets	74.2	61.3
Fixed Assets	1,758.1	1,584.9
Intangibles	64.8	44.0
Deferred Tax Benefit	-	-
Investments	167.7	158.6
Other Assets	16.6	-
<b>Total Assets</b>	<b>2,081.3</b>	<b>1,848.8</b>
Current Liabilities	323.7	301.5
Debt	215.0	229.5
Other Non-Current Liabilities	145.6	122.7
Shareholders' Funds	1,397.0	1,195.2
<b>Total Liabilities / SHF</b>	<b>2,081.3</b>	<b>1,848.8</b>

Cash Flow Statement (\$m)	FY21	FY20
Operating Cash Received	333.3	321.5
Operating Cash Paid	(233.6)	(204.4)
<b>Net Operating Cash Flow</b>	<b>99.7</b>	<b>117.1</b>
Less: Asset Purchases	(23.3)	(39.3)
Less: Dividends Paid	(84.4)	(124.5)
<b>Funding Surplus (Deficit)</b>	<b>(8.0)</b>	<b>(46.6)</b>
Insurance Proceeds	-	-
Proceeds of Asset Sales	0.7	0.1
Dividends from Associates	-	-
Dividends Equity Accounted Investments	9.6	10.1
Increase in Net Debt	(2.5)	36.4
Equity Raised	-	-
<b>Funding Provided</b>	<b>7.9</b>	<b>46.6</b>

Source: Annual Report, Deloitte Analysis

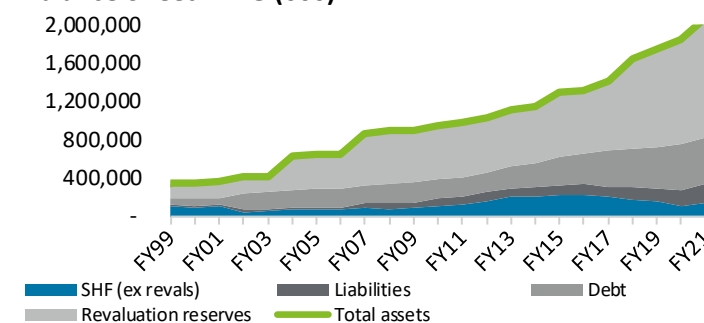


### Income Statement - TRG (000)



Source: Annual Reports

### Balance Sheet - TRG (000)



Source: Annual Reports



## Port Taranaki – NPL

### Overview

NPL is the only deep-water port on the west coast of New Zealand and services bulk liquids (serving the region’s oil and gas industry), dry bulk (logs, fertiliser, stock feed and cement) and general cargo.

### Port development

- The 2020-21 year was the first full year of operation of an on-site debarker at Port Taranaki. The debarker has attracted logs from further afield, helping to increase the port’s hinterland both north and south of Taranaki.
- The port removed several structures from the 1980s from the port, costing \$3.5m.
- The port completed the first two stages of a four-stage programme to upgrade and fully digitalise their Newton King Tanker Terminal operating system.
- The port has a large capital programme outlined for the next three years, which includes upgrading their fire water to the Tanker Terminal and investment in new dry bulk hoppers.

### Trade

- Trade volumes were down 6.7%, or 363,400 tonnes, on the previous year. The port noted this was a strong result given bulk liquids, which are Port Taranaki’s predominant trade, were down 19.9%, from 3.7m tonnes to 2.9m tonnes in FY21. Reduced bulk liquids trade also resulted in a slight reduction in vessel visits – from 273 to 265.
- The port’s log trade jumped 41.7%, or 334,000 JAS, to 1.1m JAS. It was the first time in the port’s history that log exports had passed the 1m JAS milestone in a single year.

### Financial performance

- Revenue: \$50.8 million, a 1.8% decrease from FY20.
- Operating expenses: \$30.9 million, a 10.2% increase from FY20.\*
- EBITDA: \$19.9 million, a 16% decrease from FY20.
- NPAT: \$9.2 million, a 25.1% decrease from FY20.

\*inclusive of maintenance dredging

### Port Taranaki - NPL

Income Statement (\$m)	FY21	FY20
Revenue	50.8	51.8
Revenue from Port Operations	50.8	51.8
Operating Expenses	(30.9)	(28.1)
<b>Gross Profit</b>	<b>19.9</b>	<b>23.7</b>
Associate / JV Earnings	-	-
One Offs / Other Items	-	-
<b>EBITDA</b>	<b>19.9</b>	<b>23.7</b>
Depreciation and Amortisation	(6.2)	(6.2)
<b>EBIT</b>	<b>13.7</b>	<b>17.5</b>
Net Interest Expense	(0.9)	(2.0)
Taxation	(3.6)	(3.3)
<b>NPAT</b>	<b>9.2</b>	<b>12.2</b>
Other Comprehensive Income	6.8	0.8
<b>Comprehensive Income</b>	<b>16.0</b>	<b>13.0</b>

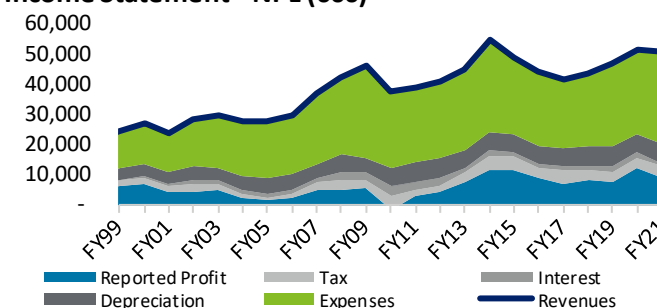
Balance Sheet (\$m)	FY21	FY20
Current Assets	8.0	8.3
Fixed Assets	194.0	188.6
Intangibles	0.6	0.6
Right of Use Assets	0.7	0.8
Investments	-	-
Other Assets	0.4	-
<b>Total Assets</b>	<b>203.7</b>	<b>198.2</b>
Current Liabilities	7.8	8.5
Debt	36.9	39.1
Other Non-Current Liabilities	2.2	1.7
Shareholders' Funds	156.8	148.8
<b>Total Liabilities / SHF</b>	<b>203.7</b>	<b>198.2</b>

Cash Flow Statement (\$m)	FY21	FY20
Operating Cash Received	58.4	59.2
Operating Cash Paid	(42.8)	(38.2)
<b>Net Operating Cash Flow</b>	<b>15.6</b>	<b>21.0</b>
Less: Asset Purchases	(5.9)	(5.8)
Less: Dividends Paid	(8.0)	(8.0)
<b>Funding Surplus (Deficit)</b>	<b>1.7</b>	<b>7.2</b>
Insurance Proceeds	-	-
Proceeds of Asset Sales	(0.1)	0.0
Dividends from Associates	-	-
Increase in Net Debt	(1.7)	(7.2)
Equity Raised	-	-
<b>Funding Provided</b>	<b>(1.7)</b>	<b>(7.2)</b>

Source: Annual Report, Deloitte Analysis

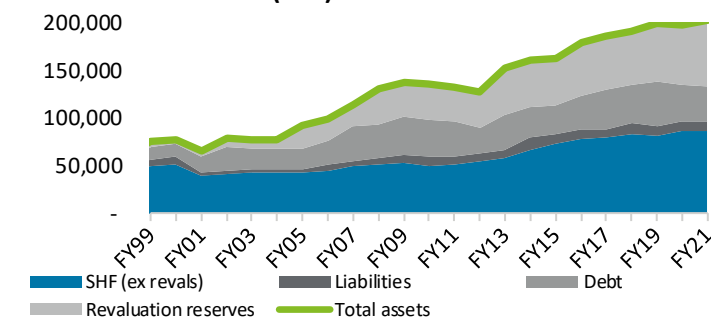


### Income Statement - NPL (000)



Source: Annual Reports

### Balance Sheet - NPL (000)



Source: Annual Reports





## Napier Port – NPE

### Overview

NPE is New Zealand’s fourth largest container terminal by total TEUs. The port’s productive hinterland and outreach initiatives drive its throughput with key trades including horticultural and agricultural produce and forestry. The port is a joint venture partner in the Manawatū Inland Port.

### Port development

- The port made significant progress on the development of its new 350-metre long wharf. The wharf project is expected to be operational in the second half of the port’s 2022 financial year, earlier than originally planned and at a lower cost than estimated. The new wharf will be able to accommodate much larger vessels, including 320m long x 50m beam container ships, as well as increasing berth availability across all wharves and associated productivity gains arising from expected increases in container exchange, crane rates and ship exchange capability.
- Other developments include investment in additional reefer capacity, an on-port log debarker and a new plant to enable mobile harbour cranes to load logs.
- NPE launched a new landside logistics service in February 2021, providing an increased range of rail and road cargo options for both export and import customers, moving cargo within region and out of region.

### Trade

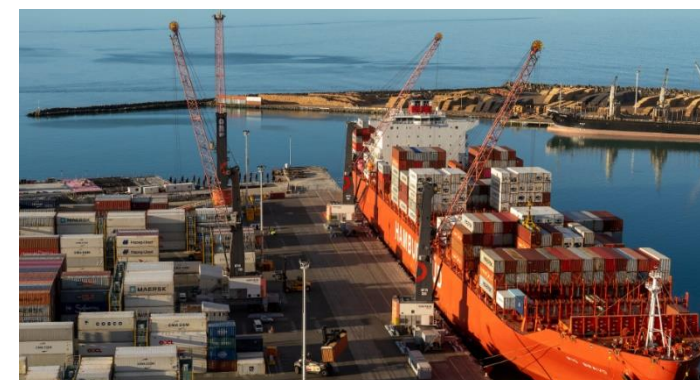
- Container services revenue increased by 4.8% to \$65.3 million from \$62.3 million due to a 2.9% increase in container volumes to 276k TEU and improved average revenue per TEU.
- Bulk cargo revenue rose 32.7% to \$41.5 million from \$31.3 million principally due to higher log volumes, which increased 27.6% to a record 3.02 million tonnes. Average revenue per tonne improved due to tariff increases, one off cost recoveries, and an improved cargo mix.

### Financial performance

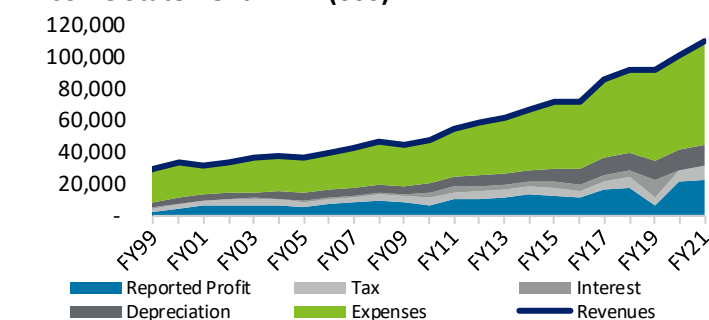
- Revenue: \$109.5 million, a 9.0% increase from FY20.
- Operating expenses: \$65.7 million, a 10.8% increase from FY20.
- EBITDA: \$44.9 million, a 6.6% increase from FY20.
- NPAT: \$23.2 million, a 5.2% increase from FY20.

Napier Port		
Income Statement (\$m)	FY21	FY20
Revenue	109.5	100.4
Revenue from Port Operations	107.1	98.2
Operating Expenses	(65.7)	(59.3)
<b>Gross Profit</b>	<b>43.8</b>	<b>41.2</b>
Associate / JV Earnings	-	(0.1)
One Offs / Other Items	1.1	0.8
IPO transaction and related costs	-	0.3
<b>EBITDA</b>	<b>44.9</b>	<b>42.2</b>
Depreciation and Amortisation	(13.1)	(13.0)
<b>EBIT</b>	<b>31.8</b>	<b>29.2</b>
Net Interest Expense	(0.0)	0.1
Taxation	(8.6)	(7.3)
<b>NPAT</b>	<b>23.2</b>	<b>22.0</b>
Other Comprehensive Income	0.8	(5.3)
<b>Comprehensive Income</b>	<b>24.0</b>	<b>16.7</b>
Balance Sheet (\$m)	FY21	FY20
Current Assets	19.3	23.6
Fixed Assets	448.6	351.2
Intangibles	1.1	1.4
Deferred Tax Benefit	-	-
Investments	10.4	9.2
Other Assets	0.5	-
<b>Total Assets</b>	<b>480.0</b>	<b>385.4</b>
Current Liabilities	29.4	21.4
Debt	77.1	-
Other Non-Current Liabilities	18.7	17.8
Shareholders' Funds	354.8	346.2
<b>Total Liabilities / SHF</b>	<b>480.0</b>	<b>385.4</b>
Cash Flow Statement (\$m)	FY21	FY20
Operating Cash Received	108.0	99.1
Operating Cash Paid	(73.2)	(69.7)
<b>Net Operating Cash Flow</b>	<b>34.8</b>	<b>29.3</b>
Less: Asset Purchases	(103.7)	(46.1)
Less: IPO proceeds transfer / others	(0.2)	(1.7)
Less: Dividends Paid	(15.6)	(5.0)
<b>Funding Surplus (Deficit)</b>	<b>(84.7)</b>	<b>(23.4)</b>
Insurance Proceeds	-	-
Proceeds of Asset Sales	0.1	0.1
Dividends from Associates	-	-
Increase in Net Debt	84.6	23.4
Equity Raised	-	-
<b>Funding Provided</b>	<b>84.7</b>	<b>23.4</b>

Source: Annual Report, Deloitte Analysis

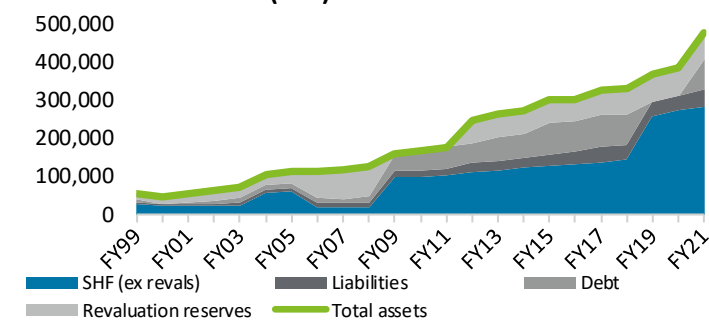


Income Statement - NPE (000)



Source: Annual Reports

Balance Sheet - NPE (000)



Source: Annual Reports



## CentrePort – WLG

### Overview

WLG services a diversified cargo base spanning containers, bulk trades (logs, petroleum, vehicles, cement and other bulk cargo), cruise, and interisland ferries.

### Port development

- The port made good progress on the \$38.6 million Thorndon Container Wharf reinstatement project, which will increase the operational length of the gantry cranes from 126 metres to 261 metres. The project is due for completion in early 2022.
- Ground-resilience improvements throughout the port continued while damaged and redundant structures were removed, creating thousands of square metres of additional operational space.
- The implementation of the port’s carbon emissions reduction strategy has seen the introduction of electric forklifts and light vehicles, and an ongoing LED lighting programme. These initiatives have been in partnership with New Zealand Green Investment Finance.
- Detailed planning is underway for a new multi-user ferry precinct at Kaiwharawhara.

### Trade

- 1.8 million JAS of logs exported was the highest in CentrePort’s history and a 21 percent increase on the previous year.
- Container throughput of 91,900 TEU, an increase of 1% from FY20.
- Vehicles was another area of growth, up 21 percent on FY20, with more than 24,000 units processed through the port.

### Financial performance

- Revenue: \$80.2 million, a 5.5% decrease from FY20.
- Operating expenses: \$66.1 million, a 16.9% decrease from FY20.
- EBITDA: \$11.8 million, a \$160.3 million decrease from FY20.
- NPAT: A \$17.8 million loss, a \$176.1 million decrease from FY20.

### CentrePort - WLG

Income Statement (\$m)	FY21	FY20
Revenue	80.2	84.9
Revenue from Port Operations	61.9	65.5
Operating Expenses	(66.1)	(79.5)
<b>Gross Profit</b>	<b>14.1</b>	<b>5.4</b>
Associate / JV Earnings	-	-
One Offs / Other Items	(2.3)	(0.6)
Earthquake Related Items	-	167.3
<b>EBITDA</b>	<b>11.8</b>	<b>172.1</b>
Depreciation and Amortisation	(7.9)	(8.0)
<b>EBIT</b>	<b>3.9</b>	<b>164.1</b>
Net Interest Expense	3.8	5.0
Taxation	(25.5)	(10.8)
<b>NPAT</b>	<b>(17.8)</b>	<b>158.3</b>
Other Comprehensive Income	14.9	(1.2)
<b>Comprehensive Income</b>	<b>(2.9)</b>	<b>157.1</b>

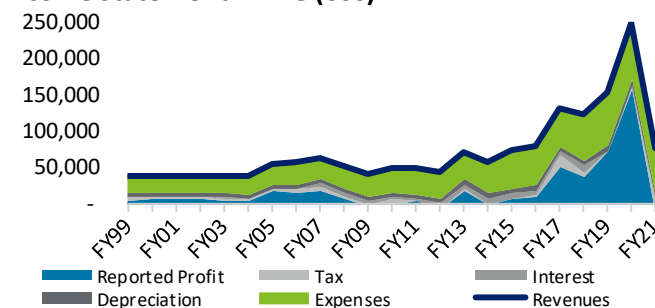
Balance Sheet (\$m)	FY21	FY20
Current Assets	225.2	288.8
Fixed Assets	218.4	152.5
Intangibles	3.2	3.4
Deferred Tax Benefit	-	-
Investments	55.5	59.9
Other Assets	9.9	1.7
<b>Total Assets</b>	<b>512.2</b>	<b>506.3</b>
Current Liabilities	16.7	17.3
Debt	7.5	-
Non-Current Liabilities	55.3	33.6
Shareholders' Funds	432.7	455.5
<b>Total Liabilities / SHF</b>	<b>512.2</b>	<b>506.3</b>

Cash Flow Statement	FY21	FY20
Operating Cash Received	86.9	103.1
Operating Cash Paid	(73.4)	(91.3)
<b>Net Operating Cash Flow</b>	<b>13.5</b>	<b>11.8</b>
Less: Earthquake Costs	-	-
Less: Asset Purchases	(63.5)	(35.6)
Less: Dividends Paid	(20.0)	(5.0)
Less: Investments	(0.2)	(19.7)
<b>Funding Surplus (Deficit)</b>	<b>(70.2)</b>	<b>(48.5)</b>
Insurance Proceeds	-	207.0
Proceeds of Asset Sales	4.9	-
Dividends from Associates	-	-
Decrease in Net Debt	65.3	(158.5)
Equity Raised	-	-
<b>Funding Provided</b>	<b>70.2</b>	<b>48.5</b>

Source: Annual Report, Deloitte Analysis

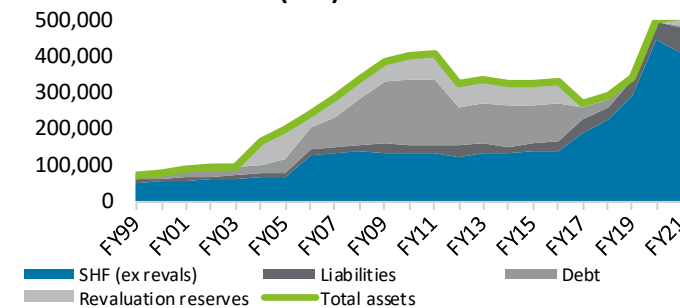


### Income Statement - WLG (000)



Source: Annual Reports

### Balance Sheet - WLG (000)



Source: Annual Reports



## Port Nelson – NSN

### Overview

NSN occupies a sheltered corner of New Zealand, secured by a productive hinterland, topographical isolation and the absence of a rail link. It owns a portfolio of properties within the port area, with ongoing demand for industrial development. The port is heavily focussed on export of the region’s primary production, with key trades being wine, fish, fruit and forestry. Reflecting limited import demand, most import containers are empty. While its key trades are international export, Nelson records a high level of transhipments.

### Port development

- The Main Wharf Upgrade was completed in July 2021, which saw the previous wooden structure replaced with a concrete berthing facility. The port also purchased a new Liebherr Crane, an investment of nearly \$9 million and the port’s first Reach Stacker.
- The port has focused on several cost-saving and cost deferment initiatives to mitigate lower revenue in FY20, including a deferral in wharf maintenance costs and a slowdown in capital investments. These costs will now be spread over future years.
- The port is scoping out the potential for a new Science & Technology Precinct commercial property development.

### Trade

- The port’s cargo volumes for 2020/21 were 3.25 million tonnes, down 3% on budget, and 1% on the previous year.
- Container throughput was 102,995 TEUs, down 13% on budget and 11% on last year.
- Log exports were up 8% on budget, reflecting strong demand and prices in China.

### Financial performance

- Revenue: \$73.5 million, a 10.1% increase from FY20.
- Operating expenses: \$44.9 million, a 2.0% decrease from FY20.
- EBITDA: \$28.6 million, a 36.9% increase from FY20.
- NPAT: \$13.0 million, a 59.8% increase from FY20.

### Port Nelson - NSN

Income Statement (\$m)	FY21	FY20
Revenue	73.5	66.7
Revenue from Port Operations	63.6	61.0
Operating Expenses	(44.9)	(45.8)
<b>Gross Profit</b>	<b>28.6</b>	<b>20.9</b>
Associate / JV Earnings	-	-
One Offs / Other Items	-	-
<b>EBITDA</b>	<b>28.6</b>	<b>20.9</b>
Depreciation and Amortisation	(9.3)	(8.0)
<b>EBIT</b>	<b>19.3</b>	<b>12.9</b>
Net Interest Expense	(2.6)	(2.7)
Taxation	(3.7)	(2.0)
<b>NPAT</b>	<b>13.0</b>	<b>8.2</b>
Other Comprehensive Income	2.3	56.6
<b>Comprehensive Income</b>	<b>15.3</b>	<b>64.8</b>

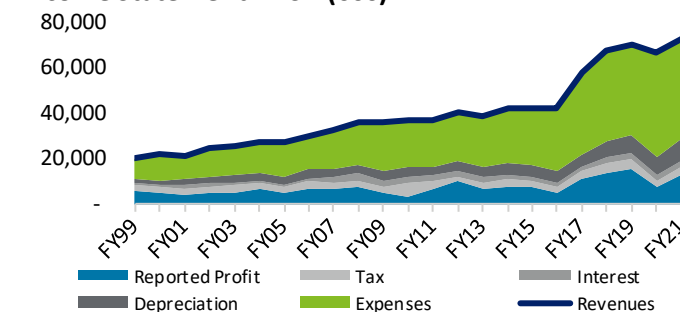
Balance Sheet (\$m)	FY21	FY20
Current Assets	11.2	12.2
Fixed Assets	327.6	316.7
Intangibles	2.9	2.5
Deferred Tax Benefit	-	-
Investments	29.4	25.5
Other Assets	0.3	-
<b>Total Assets</b>	<b>371.4</b>	<b>356.8</b>
Current Liabilities	11.9	10.8
Debt	75.7	70.5
Other Non-Current Liabilities	22.2	25.1
Shareholders' Funds	261.7	250.4
<b>Total Liabilities / SHF</b>	<b>371.4</b>	<b>356.8</b>

Cash Flow Statement (\$m)	FY21	FY20
Operating Cash Received	70.3	65.4
Operating Cash Paid	(49.1)	(52.1)
<b>Net Operating Cash Flow</b>	<b>21.2</b>	<b>13.4</b>
Less: Asset Purchases	(22.0)	(16.1)
Less: Dividends Paid	(4.0)	(6.3)
Less: Payment of Lease Liabilities	(0)	(0)
<b>Funding Surplus (Deficit)</b>	<b>(5.1)</b>	<b>(9.1)</b>
Proceeds of Asset Sales	0.1	0.2
Dividends from Associates	-	-
Increase in Net Debt	5.0	8.9
Equity Raised	-	-
<b>Funding Provided</b>	<b>5.1</b>	<b>9.1</b>

Source: Annual Reports, Deloitte Analysis

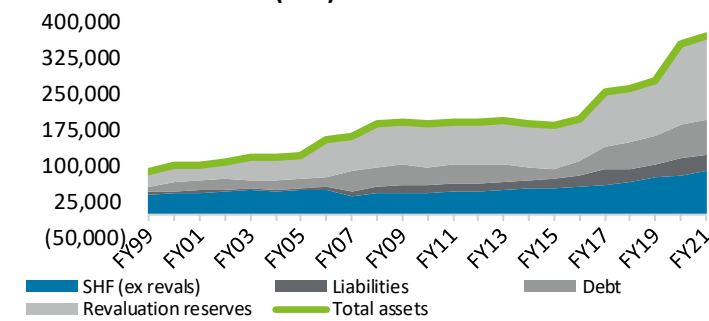


### Income Statement - NSN (000)



Source: Annual Reports

### Balance Sheet - NSN (000)



Source: Annual Reports



## Port Marlborough – MLB

### Overview

MLB has a diverse array of activities, spanning property, an interisland ferry terminal, general wharves, a deep-water bulk terminal, marinas and aquaculture. Notably, MLB does not have a container terminal. The port’s primary trade is log exports.

### Port development

- The first physical works for the Waitohi Picton Ferry Redevelopment, which is a response to new, larger ferries, will begin in 2022.
- The port currently has 250 berths under construction in the new Waikawa North West Marina, which is set for completion during 2022.

### Trade

- Log volumes increased from 555,182 in FY20 to 769,800 JAS in FY21.
- No cruise ships visited the port in FY21.
- Total ship visits increased slightly from 3,126 in FY20 to 3,233 in FY21, with Cook Strait ferry commercial volumes increasing to record levels.
- Total non-ferry cargo increased from 617,997 in FY20 to 829,876 in FY21.

### Financial performance

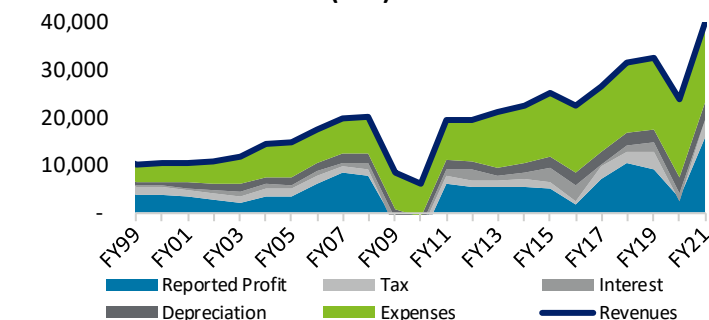
- Revenue: \$40.2 million, a 67.9% increase from FY20.
- Operating expenses: \$17 million, a 3.2% increase from FY20.
- EBITDA: \$23.2 million, a 210.1% increase from FY20.
- NPAT: \$16 million, a 393.3% increase from FY20.

Marlborough - MLB		
Income Statement (\$m)	FY21	FY20
Revenue	40.2	23.9
Revenue from Port Operations	11.2	11.3
Operating Expenses	(17.0)	(16.4)
<b>Gross Profit</b>	<b>23.2</b>	<b>7.5</b>
Associate / JV Earnings	-	-
One Offs / Other Items	-	-
<b>EBITDA</b>	<b>23.2</b>	<b>7.5</b>
Depreciation and Amortisation	(3.7)	(3.4)
<b>EBIT</b>	<b>19.5</b>	<b>4.0</b>
Net Interest Expense	0.1	(1.4)
Taxation	(3.7)	0.6
<b>NPAT</b>	<b>16.0</b>	<b>3.2</b>
Other Comprehensive Income	-	-
<b>Comprehensive Income</b>	<b>16.0</b>	<b>3.2</b>
Balance Sheet (\$m)	FY21	FY20
Current Assets	9.5	8.3
Fixed Assets	101.5	103.1
Intangibles	0.3	0.4
Deferred Tax Benefit	-	-
Investments	105.6	91.4
Other Assets	0.0	-
<b>Total Assets</b>	<b>217.0</b>	<b>203.2</b>
Current Liabilities	4.0	5.4
Debt	31.0	29.0
Other Non-Current Liabilities	18.9	18.0
Shareholders' Funds	163.1	150.8
<b>Total Liabilities / SHF</b>	<b>217.0</b>	<b>203.2</b>
Cash Flow Statement (\$m)	FY21	FY20
Operating Cash Received	32.5	29.6
Operating Cash Paid	(19.6)	(18.7)
<b>Net Operating Cash Flow</b>	<b>12.9</b>	<b>10.9</b>
Less: Asset Purchases	(7.8)	(7.9)
Less: Dividends Paid	(3.6)	(3.4)
<b>Funding Surplus (Deficit)</b>	<b>1.5</b>	<b>(0.5)</b>
Insurance Proceeds	-	-
Proceeds of Asset Sales	0.0	0.0
Dividends from Associates	-	-
Increase in Net Debt	(1.5)	0.6
Payments for lease	-	(0)
Equity Raised	-	-
<b>Funding Provided</b>	<b>(1.5)</b>	<b>0.5</b>

Source: Annual Report, Deloitte Analysis

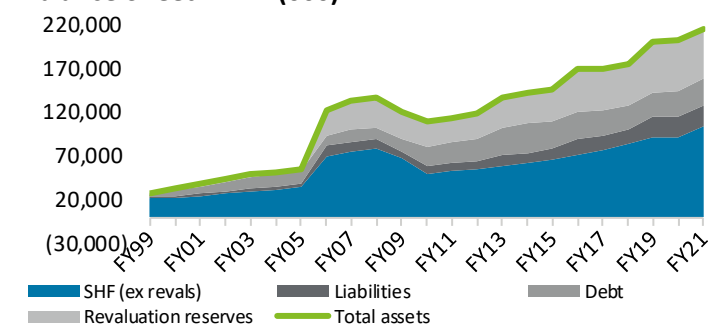


Income Statement - MLB (000)



Source: Annual Reports

Balance Sheet - MLB (000)



Source: Annual Reports



## Lyttelton Port Company – LYT

### Overview

LYT is positioned as the South Island gateway port, facilitating bulk trades, vehicle imports, and containerised trade. Lyttelton Port has a container storage and repair facility, CityDepot, which is a few kilometres away in Woolston. CityDepot is the South Island's largest container facility. Lyttelton Port's other inland port MidlandPort, at Rolleston, provides a rail connection to the 14 shipping lines and nine shipping services that access the port.

### Port development

- Lyttelton Port is proceeding with an \$85 million development of reclamation area in Te Awaparahi Bay into a container terminal to be completed in the next three years. This development will see capacity expand by around 100,000 TEUs.
- Other works have included the completion of a purpose-built cruise berth, relocation of the backroad at Lyttelton Port, completion of an additional rail siding and track extension on their existing line and developing new areas for import vehicle storage.
- As a result of the growth in transhipments, the port rapidly developed capacity for more than 300 reefer containers on port in March 2021. The port has built four new reefer towers which have allowed for an increased quantity of temperature-sensitive goods to be passed through the port.

### Trade

- Log exports increased by 47% from 393,563 JAS in FY20 to 500,129 JAS in FY21.
- 45,614 vehicles arrived at the port during the year, a 17% increase on FY20.
- 1.051 million tonnes of bulk fuel were imported via the port, a 3% increase from FY20.
- 438,343 TEUs were handled by the port in FY21, a decrease of 1.7%.
- 0.9% decrease in value of exports and 3.9% increase in value of imports was experienced by the port in FY21 from FY20.

### Financial performance

- Revenue from port operations: \$138.6 million, a 11.8% increase from FY20.
- Operating expenses: \$103.4 million, a 0.6% decrease from FY20.
- EBITDA: \$37 million, an increase from the \$166.3 million loss in FY20.
- NPAT: \$16.0 million, an increase from \$152.8 million loss in FY20.

### Lyttelton Port Company - LYT

Income Statement (\$m)	FY21	FY20
Revenue	142.2	128.3
Revenue from Port Operations	138.6	124.0
Operating Expenses	(103.4)	(104.0)
<b>Gross Profit</b>	<b>38.9</b>	<b>24.2</b>
Associate / JV Earnings	-	-
One Offs / Other Items	(1.9)	(190.5)
<b>EBITDA</b>	<b>37.0</b>	<b>(166.3)</b>
Depreciation and Amortisation	(14.1)	(16.2)
<b>EBIT</b>	<b>22.9</b>	<b>(182.5)</b>
Net Interest Expense	(2.0)	(1.4)
Taxation	(5.0)	31.2
<b>NPAT</b>	<b>16.0</b>	<b>(152.8)</b>
Other Comprehensive Income	2.2	(1.3)
<b>Comprehensive Income</b>	<b>18.1</b>	<b>(154.1)</b>

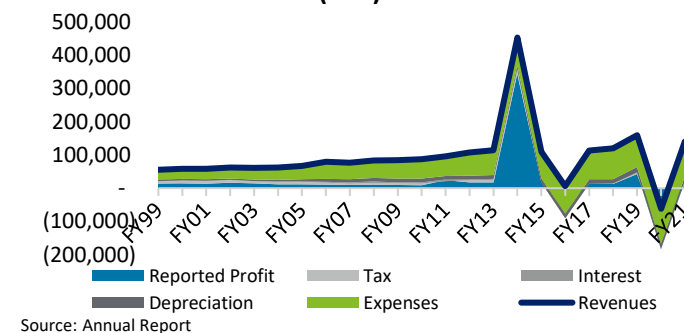
Balance Sheet (\$m)	FY21	FY20
Current Assets	39.9	31.9
Fixed Assets	469.8	442.0
Intangibles	4.0	4.8
Prepayments	0.1	1.8
Investments	-	-
Deferred Tax Asset	32.2	31.9
Other non-current assets	44	44
<b>Total Assets</b>	<b>589.9</b>	<b>555.9</b>
Current Liabilities	31.4	29.0
Loans and Borrowings	150.0	124.0
Other Non-Current Liabilities	44.3	46.9
Shareholders' Funds	364.2	356.1
<b>Total Liabilities / SHF</b>	<b>589.9</b>	<b>555.9</b>

Cash Flow Statement (\$m)	FY21	FY20
Operating Cash Received	141.1	131.6
Operating Cash Paid	(104.0)	(104.4)
<b>Net Operating Cash Flow</b>	<b>37.1</b>	<b>27.2</b>
Less: Asset Purchases	(49.1)	(112.8)
Less: Dividends Paid	(10.0)	(6.8)
Less: Capitalised interest	(1)	(1)
<b>Funding Surplus (Deficit)</b>	<b>(22.9)</b>	<b>(93.7)</b>
Insurance Proceeds	-	-
Proceeds of Asset Sales	0.4	0.3
Proceeds from borrowings	26.0	89.0
Dividends from Associates	-	-
Increase in Net Debt	(3.5)	4.4
Equity Raised	-	-
<b>Funding Provided</b>	<b>22.9</b>	<b>93.7</b>

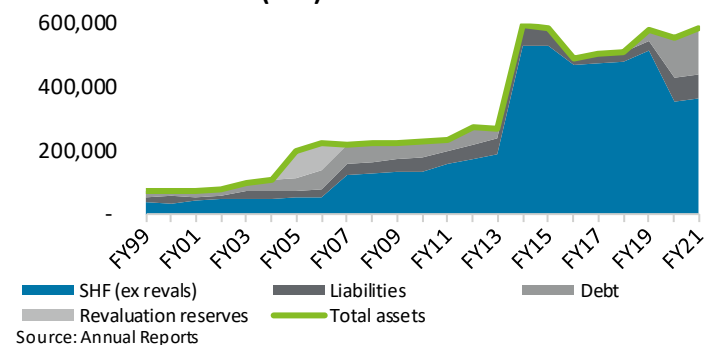
Source: Annual Report, Deloitte Analysis



### Income Statement - LYT (000)



### Balance Sheet - LYT (000)





## PrimePort Timaru – TIU

### Overview

TIU is owned 50:50 by Timaru District Holdings Limited (TDHL) and Port of Tauranga Limited (POTL). POTL acquired its stake for \$21.6 million in 2013 to implement a hub and spoke model. The sale included a 35-year lease of the container terminal to Timaru Container Terminal Limited (TCTL). The port services a range of regional primary industries including dairy, meat, fish and forestry exports, as well as imports of fertiliser, stock feed, petroleum and cement. The port's transition to a feeder and hub model continued in FY21, with Maersk's Southern Star service replaced with the Sirius feeder service during the year.

### Port development

- The port completed a \$5.2 million rebuild of its No. 1 Wharf in July 2021. A \$9 million upgrade of the Evans Bay log yard was almost completed in June 2021, which has involved sealing 4.5 hectares with asphalt, stormwater upgrades, and installing six light towers.
- The port has applied for resource consent to build a new wharf at Evans Bay.
- The Port also took ownership of a new tug.

### Trade

- Ship visits experienced a 5.0% decrease from FY20.
- Bulk trade volumes reached 1.83 million tonnes, a 17.6% increase from FY20.
- 93,891 TEU were handled by the port, an 16% increase from FY20.

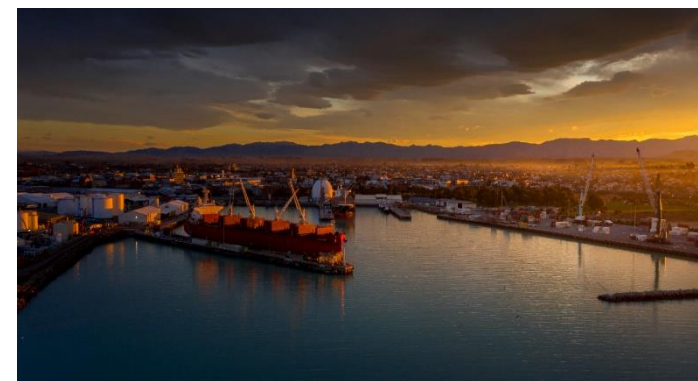
### Financial performance

- Revenue: \$26.3 million, an 8.7% increase from FY20.
- Operating Expenses: \$13.2 million, a 1.6% increase from FY20.
- EBITDA: \$13.1 million, a 16.9% increase from FY20.
- NPAT: \$6.5 million, a 15.4% increase from FY20.

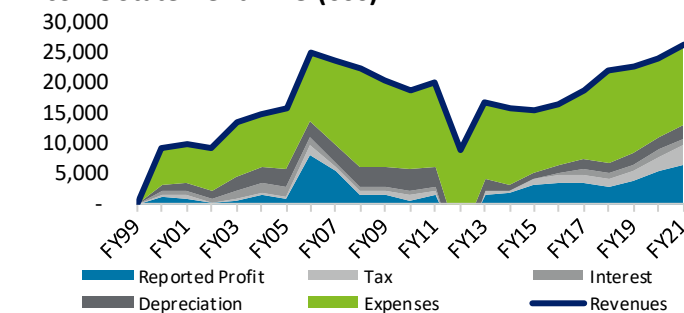
### PrimePort Timaru - TIU

Income Statement (\$m)	FY21	FY20
Revenue	26.3	24.2
Revenue from Port Operations	23.6	21.7
Operating Expenses	(13.2)	(13.0)
<b>Gross Profit</b>	<b>13.1</b>	<b>11.2</b>
Associate / JV Earnings	-	-
One Offs / Other Items	-	-
<b>EBITDA</b>	<b>13.1</b>	<b>11.2</b>
Depreciation and Amortisation	(2.4)	(2.2)
<b>EBIT</b>	<b>10.7</b>	<b>9.0</b>
Net Interest Expense	(1.0)	(1.0)
Taxation	(3.2)	(2.4)
<b>NPAT</b>	<b>6.5</b>	<b>5.6</b>
Other Comprehensive Income	0.7	(0.5)
<b>Comprehensive Income</b>	<b>7.1</b>	<b>5.1</b>
Balance Sheet (\$m)	FY21	FY20
Current Assets	4.1	5.0
Fixed Assets	104.2	85.7
Intangibles	-	0.0
Deferred Tax Benefit	0.1	1.0
Investments	-	-
Other Assets	0.1	0.1
<b>Total Assets</b>	<b>108.5</b>	<b>91.9</b>
Current Liabilities	5.5	3.9
Debt	35.4	25.0
Other Non-Current Liabilities	0.8	1.7
Shareholders' Funds	66.8	61.3
<b>Total Liabilities / SHF</b>	<b>108.5</b>	<b>91.9</b>
Cash Flow Statement (\$m)	FY21	FY20
Operating Cash Received	26.8	23.7
Operating Cash Paid	(16.8)	(16.5)
<b>Net Operating Cash Flow</b>	<b>10.0</b>	<b>7.2</b>
Less: Asset Purchases	(19.6)	(4.5)
Less: Dividends Paid	(1.7)	(1.7)
<b>Funding Surplus (Deficit)</b>	<b>(11.2)</b>	<b>1.1</b>
Insurance Proceeds	-	-
Proceeds of Asset Sales	-	2.0
Loans Raised	11.7	2.5
Dividends from Associates	-	-
Increase in Net Debt	(0.5)	(5.5)
Equity Raised	-	-
<b>Funding Provided</b>	<b>11.2</b>	<b>(1.1)</b>

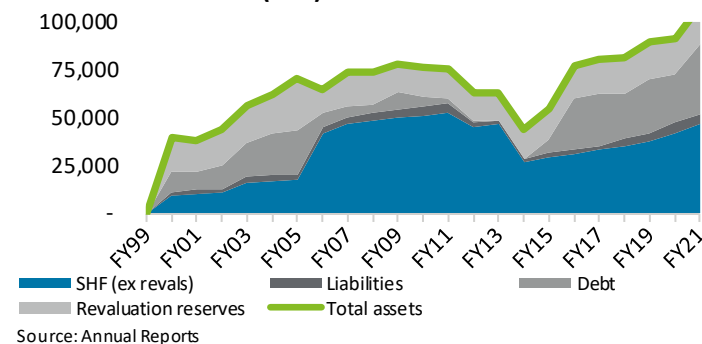
Source: Annual Report, Deloitte Analysis



### Income Statement - TIU (000)



### Balance Sheet - TIU (000)





## Port Otago – POE

### Overview

POE operates two ports; Port Chalmers, which primarily handles containers, logs, cruise vessels and warehousing storage of dairy and timber products; and Dunedin Bulk Port, which handles bulk cargos and cold storage. The region's catchment enables primary products for export from much of Otago and Southland through to market, particularly dairy, meat, fish, apples and processed timber. POE has a significant \$500 million industrial and commercial property portfolio spanning Auckland, Hamilton and Dunedin.

### Port development

- Deepening of the 8.5 metre chart datum channel from Port Chalmers to Dunedin has been completed with widening work advancing.
- POE continues to work on design, build and lease opportunities in Auckland, Hamilton and Dunedin.
- The port is examining opportunities to reduce greenhouse gas emissions, first identifying where they can have the most impact – which is the port's diesel-fuelled port and marine plant – and is working towards strategic equipment replacements over time. They are also making many smaller changes across the business, such as the introduction of LED lighting and have moved the light vehicle fleet to electric.

### Trade

- Container throughput was down 9% on FY20, as global shipping volatility led to last minute schedule changes and disrupted container availability.
- Bulk cargo: 1.85 tonnes in FY21, an increase on 1.47 million tonnes in FY20.
- Log Exports: 1.2 million tonnes in FY21 up on 0.89 million tonnes in FY20.
- Cruise was absent for the year. Not a single cruise ship entered the Otago Harbour during FY21, down from 112 vessels in FY20.

### Financial performance

- Revenue: \$90 million, a 18.1% decrease from FY20.
- Operating expenses: \$56.2 million, a 14.9% decrease from FY20.
- EBITDA: \$116.6 million, a 62.5% increase from FY20.
- NPAT: \$94.5 million, an 87.2% increase from FY20.

### Port Otago - POE

Income Statement (\$m)	FY21	FY20
Revenue	90.0	110.0
Revenue from Port Operations	60.4	70.5
Operating Expenses	(56.2)	(66.0)
<b>Gross Profit</b>	<b>33.9</b>	<b>43.9</b>
Associate / JV Earnings	-	-
One Offs / Other Items	82.7	27.8
<b>EBITDA</b>	<b>116.6</b>	<b>71.8</b>
Depreciation and Amortisation	(12.4)	(11.3)
<b>EBIT</b>	<b>104.2</b>	<b>60.5</b>
Net Interest Expense	(2.8)	(2.4)
Taxation	(6.9)	(7.5)
<b>NPAT</b>	<b>94.5</b>	<b>50.5</b>
Other Comprehensive Income	1.6	(0.5)
<b>Comprehensive Income</b>	<b>96.1</b>	<b>50.0</b>

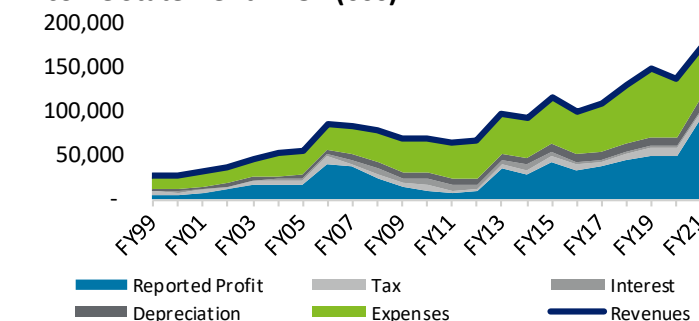
Balance Sheet	FY21	FY20
Current Assets	37.8	44.4
Fixed Assets	223.1	227.6
Intangibles	5.4	5.3
Deferred Tax Benefit	-	-
Investments	479.3	378.5
Other Assets	1.0	-
<b>Total Assets</b>	<b>746.6</b>	<b>655.8</b>
Current Liabilities	12.1	15.9
Debt	79.1	72.3
Other Non-Current Liabilities	20.8	18.9
Shareholders' Funds	634.6	548.6
<b>Total Liabilities / SHF</b>	<b>746.6</b>	<b>655.8</b>

Cash Flow Statement	FY21	FY20
Operating Cash Received	90.8	108.4
Operating Cash Paid	69.1	80.3
<b>Net Operating Cash Flow</b>	<b>21.7</b>	<b>28.2</b>
Less: Asset Purchases	18.3	40.3
Less: Dividends Paid	10.1	9.5
<b>Funding Surplus (Deficit)</b>	<b>(6.7)</b>	<b>(21.7)</b>
Insurance Proceeds	-	-
Proceeds of Asset Sales	0.1	5.4
Dividends from Associates	-	-
Increase in Net Debt	6.6	16.2
Equity Raised	-	-
<b>Funding Provided</b>	<b>6.7</b>	<b>21.7</b>

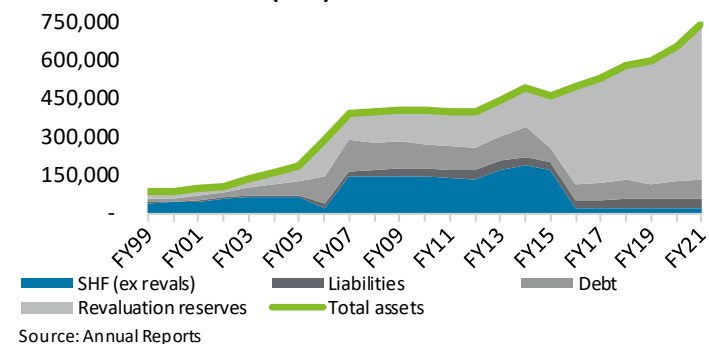
Source: Annual Report, Deloitte Analysis



### Income Statement - POE (000)



### Balance Sheet - POE (000)





## South Port – BLU

### Overview

BLU is New Zealand’s southernmost commercial port. Operating from a 40ha man-made island in Bluff Harbour serving a productive hinterland yielding forestry, fish and meat exports. BLU services imports of oil, fertiliser and stock feed, as well as NZAS’s aluminium smelter (imports of alumina and exports of aluminium). BLU is listed on the NZX and is majority owned by the Southland Regional Council.

### Port development

- The port recently received its new \$10 million, 65-tonne bollard pull Azimuth Tractor Drive Tug, the 'Rakiwai'.
- The port has commenced a consent process to deepen the channel, swinging basin and berth pockets from 9.7 metres to 10.7 metres. Provided the consent can be processed in the coming 12 months, the project will commence in early 2023 and is estimated to cost between \$15 to \$20 million.
- The development of an \$11 million accessway, pipeline corridor and discharge platform for the Town Wharf Fuel Berth is underway and due to be completed in early 2022, and work is also underway to expand the container terminal.

### Trade

- Total cargo of 3.45 million tonnes in FY21, a 5.5% increase from FY20.
- Log exports increased 54% from 473,000 tonnes in FY20 to 730,000 tonnes in FY21.
- Despite a reduction in vessel calls, total container volumes increased by 13.3% on FY20 to 53,750 TEU.

### Financial performance

- Operating revenue: \$47.3 million, a 6.1% increase from FY20.
- Operating expenses: \$28.5 million, a 6.2% decrease from FY20.
- EBITDA: \$18.8, million a 35.1% increase from FY20.
- NPAT: \$10.7 million, a 96.7% increase from FY20.

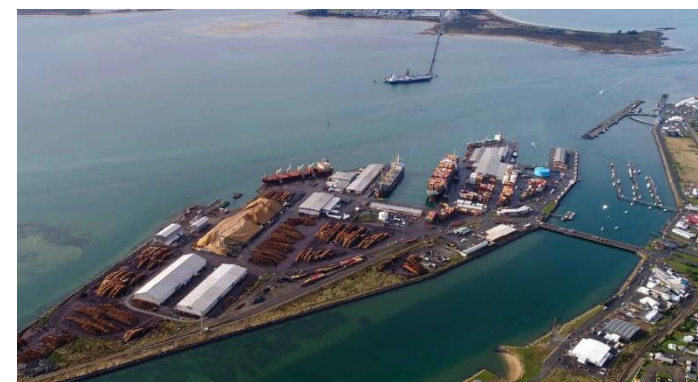
### Southport - BLU

Income Statement (\$m)	FY21	FY20
Revenue	47.3	44.6
Revenue from Port Operations	47.3	44.6
Operating Expenses	(28.5)	(26.9)
<b>Gross Profit</b>	<b>18.8</b>	<b>17.7</b>
Associate / JV Earnings	-	-
One Offs / Other Items	0.0	0.0
<b>EBITDA</b>	<b>18.8</b>	<b>17.7</b>
Depreciation and Amortisation	(4.1)	(3.8)
<b>EBIT</b>	<b>14.7</b>	<b>13.9</b>
Net Interest Expense	(0.0)	(0.6)
Taxation	(4.0)	(4.1)
<b>NPAT</b>	<b>10.7</b>	<b>9.3</b>
Other Comprehensive Income	-	-
<b>Comprehensive Income</b>	<b>10.7</b>	<b>9.3</b>

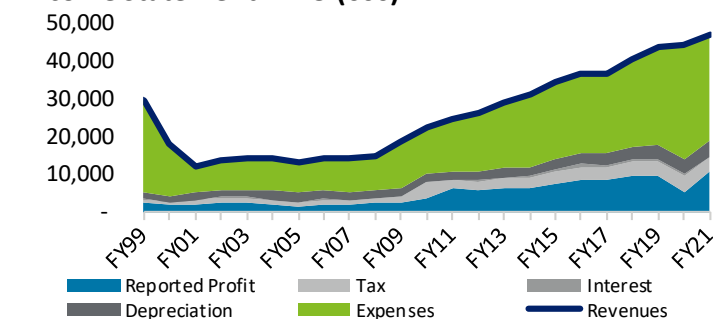
Balance Sheet (\$m)	FY21	FY20
Current Assets	10.7	7.7
Fixed Assets	57.2	51.2
Intangibles	-	-
Deferred Tax Benefit	0.5	0.2
Investments	-	-
Other Assets	0.3	0.4
<b>Total Assets</b>	<b>68.7</b>	<b>59.4</b>
Current Liabilities	9.6	7.8
Debt	9.0	5.0
Other Non-Current Liabilities	0.5	0.9
Shareholders' Funds	49.5	45.6
<b>Total Liabilities / SHF</b>	<b>68.7</b>	<b>59.4</b>

Cash Flow Statement (\$m)	FY21	FY20
Operating Cash Received	47.6	43.4
Operating Cash Paid	(31.7)	(31.1)
<b>Net Operating Cash Flow</b>	<b>15.8</b>	<b>12.3</b>
Less: Asset Purchases	(11.1)	(5.2)
Less: Dividends Paid	(6.8)	(6.8)
<b>Funding Surplus (Deficit)</b>	<b>(2.1)</b>	<b>0.3</b>
Insurance Proceeds	-	-
Proceeds of Asset Sales	0.1	0.1
Dividends from Associates	-	-
Increase in Net Debt	2.1	(0.3)
Equity Raised	-	-
<b>Funding Provided</b>	<b>2.1</b>	<b>(0.3)</b>

Source: Annual Report, Deloitte Analysis

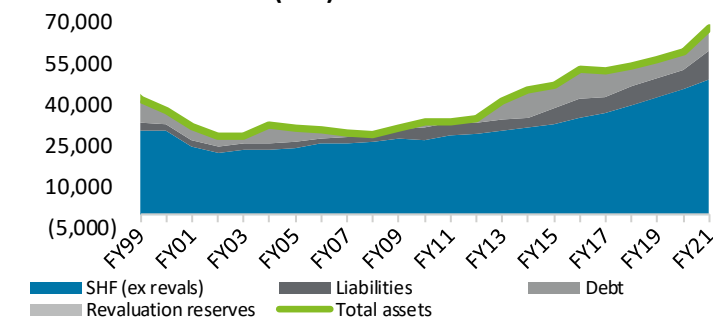


### Income Statement - BLU (000)



Source: Annual Reports

### Balance Sheet - BLU (000)



Source: Annual Reports





## Eastland Port – EST

### Overview

Located in the heart of Gisborne city, EST is New Zealand's second largest log exporter and is the most easterly commercial shipping port in New Zealand.

### Port development

- The port is currently working on a multi-million dollar construction plan for a twin berth development, which will enable a 200-metre ship and a 185-metre ship to berth alongside at once. This will allow for greater log handling and eventually containerisation through coastal shipping. Resource consent has been granted for stage one of this project, which will involve rebuilding Wharf 7 and the slipway.
- The port is currently strengthening the Waikahua seawall, which protects the southern log yard.
- The port is working with Gisborne District Council and the local community to develop a master plan for the inner harbour precinct.

### Trade

- 2.999 million tonnes of cargo exported through Eastland Port of which 2.985 million tonnes were logs. This was a slight increase on FY20's export volumes. Other commodities exported included kiwifruit and squash.

### Financial performance

- Operating Revenue: \$42.9 million, a 9.5% decrease from FY20.
- Operating Expenses: \$16.6 million, a 3.8% increase from FY20.
- EBITDA: \$26.3 million, a 16.5% decrease from FY20.

Eastland Port - EST		
Income Statement (\$m)	FY21	FY20
Revenue	42.9	47.4
Revenue from Port Operations	42.9	47.4
Operating Expenses	(16.6)	(16.0)
<b>Gross Profit</b>	<b>26.3</b>	<b>31.5</b>
Associate / JV Earnings	-	-
One Offs / Other Items	-	-
<b>EBITDA</b>	<b>26.3</b>	<b>31.5</b>
Depreciation and Amortisation	(6.2)	(6.2)
<b>EBIT</b>	<b>20.1</b>	<b>25.3</b>

Balance Sheet (\$m)	FY21	FY20
Assets	303.4	220.8
Liabilities	44.5	29.9
Borrowings	99.1	92.4
Segment Capital Expenditure	17.3	22.1

Source: Annual Report, Deloitte Analysis

Port Facilities & Capacity Comparison	FY21
Port Harbour Type	Natural
Draught (m) (min)	10.2m
Port Operating Land (ha)	13.0
Container Terminal Area (ha)	-
Total Wharf Length (km)	0.4
Tugs	2.0
Pilot Launches	1.0
Bulk Tonnes Handled (millions)	2.9
NZ Cargo Volume Rank	
Bulk Ship Calls (est)	124.0
Bulk tonnes/ bulk terminal ha	223,076.9
Bulk Tonnes / Total Wharf Metre	7,967.0
Bulk Tonnes / Bulk Ship	23,387.1

Source: Management Information, Deloitte Analysis





## Northport – NTH

### Overview

NTH is co-owned by NZX-listed company Marsden Maritime Holdings (MMH), formerly Northland Port Corporation, and TRG in a 50:50 joint-venture. Northport also owns an interest in North Tugz which is a 50:50 joint-venture with AKL. The MMH group also owns 185ha of contiguous industrial zoned land adjacent to the port, and the Marsden Cove Marina.

### Port development

- In June 2021, the government announced that it would fund construction of a new 19km rail link between the port and the North Auckland Line.
- The port is investing \$8 million in further container handling capacity, including two new reach stackers and a simulator to train staff.
- The port has outlined its 'Vision for Growth' plan, which includes proposals for a significantly expanded harbour frontage and a dry dock. The port is currently developing relevant studies to support a future resource consent application.

### Trade

- Bulk cargo throughput at Northport grew by 18.3% over FY21 to 3,546,744 tonnes.
- Log exports were 2,836,602 tonnes, up from 2,250,002 tonnes in FY20, accounted for 80% of volume, up from 75% of volume in 2020.
- Annual container volumes were up slightly on FY20 with 13,451 TEU handled.

### Financial performance

- Revenue: \$44.6 million, a 12.1% increase from FY20.
- NPAT: \$17.5 million, an 8.7% increase from FY20.
- NPAT margin percentage was 39.2% in FY21.

### Northport - NTH

Income Statement (\$m)	FY21	FY20
Revenue	44.6	39.8
<b>NPAT</b>	<b>17.5</b>	<b>16.1</b>
Other Comprehensive Income	18.8	(1.0)
<b>Comprehensive Income</b>	<b>36.3</b>	<b>15.0</b>

Balance Sheet (\$m)	FY21	FY20
Assets	204.6	190.8
Liabilities	46.0	51.8
Net Assets	158.6	139.0

Source: Annual Report, Deloitte Analysis

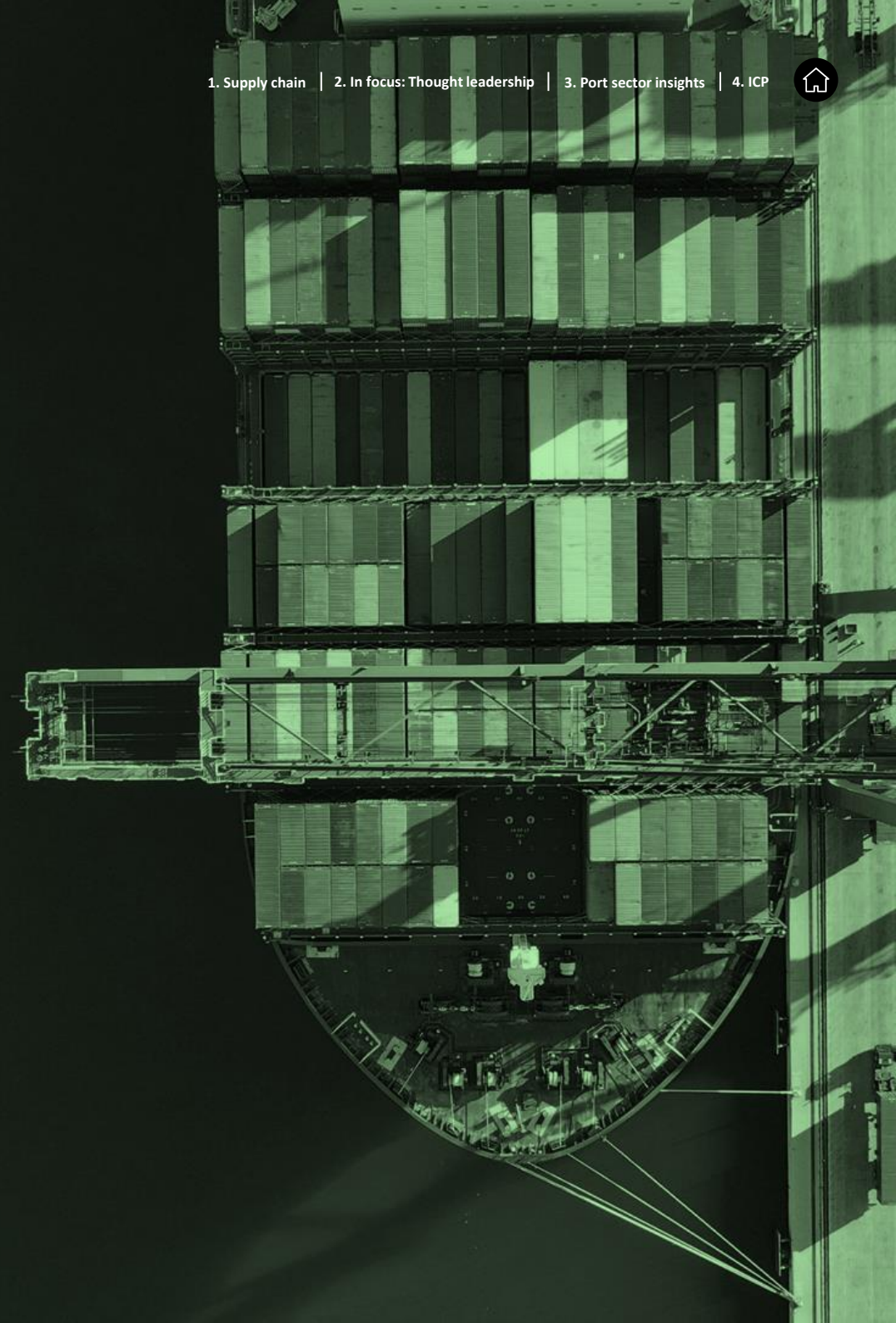
Port Facilities & Capacity	FY21
Port Harbour Type	Natural
Draught (m) (min)	14.5
Port Operating Land (ha)	48
Container Terminal Area (ha)	10
Total Wharf Length (km)	0.57
Container Wharf Length (km)	0.30
Mobile Cranes	2
Forklifts/Stackers	5
Reefer Slots	120
Tugs	4
Pilot Launches	1
Rail Connection	No
Bulk Tonnes Handled (millions)	3.55
Bulk Ship Calls (est)	257
TEU Throughput (000)	13.5
Container Ship Calls (est)	31

Source: Management Information, Deloitte Analysis





# Deloitte's Infrastructure and Capital Projects offering





# Our Integrated Infrastructure Offering

**We help infrastructure owners, investors, and operators by bringing the full breadth of our capability and applying it across the asset lifecycle.**

Utilising the breadth of expertise within Deloitte, we can configure and mobilise a team with the skillsets to meet your specific needs.

We can leverage our experience across the asset lifecycle – in public, private and PPP environments – to help organisations deliver and manage complex investments and assets more effectively. Our extensive range of services in management consulting, corporate finance, risk, tax and audit, enables our Infrastructure and Capital Projects (ICP) team to support clients in the planning, financing, procurement, delivery, operation and transaction of infrastructure assets and other capital projects.



## Strategy and planning

We provide advice, tools and analytical skills to assist clients in developing their investment and delivery strategies.



## Finance and procurement

Our specialists can advise on developing more cost-efficient project financing plans and help clients establish and manage the procurement process.



## Project organisation, execution and construction

We assist clients in executing high-profile programmes with greater confidence.



## Operations and maintenance

We advise on optimising the performance and value of assets in operation.



## Asset recycling and concession maturity

We provide transition advisory support for investors in infrastructure assets.



## Asset decommissioning

We provide recommendations on when and how to discontinue investing in an asset.





# Our Integrated Infrastructure Offering

Our Infrastructure and Capital Projects (ICP) offering is grouped around five core pillars, with each focusing on a different aspect of our clients' infrastructure challenges.

Our ICP team draws its expertise from across our national practice and service lines. It is part of Deloitte Asia Pacific and the Global ICP network, providing seamless access to skills across the world, enabling us to apply global knowledge to our local projects.



We take a lifecycle approach to improve capability and performance across the Infrastructure and Capital Projects lifecycle





# Contact us

We have an established track record in the ports and logistics sectors, offering real value by combining specialist skills with deep sector knowledge



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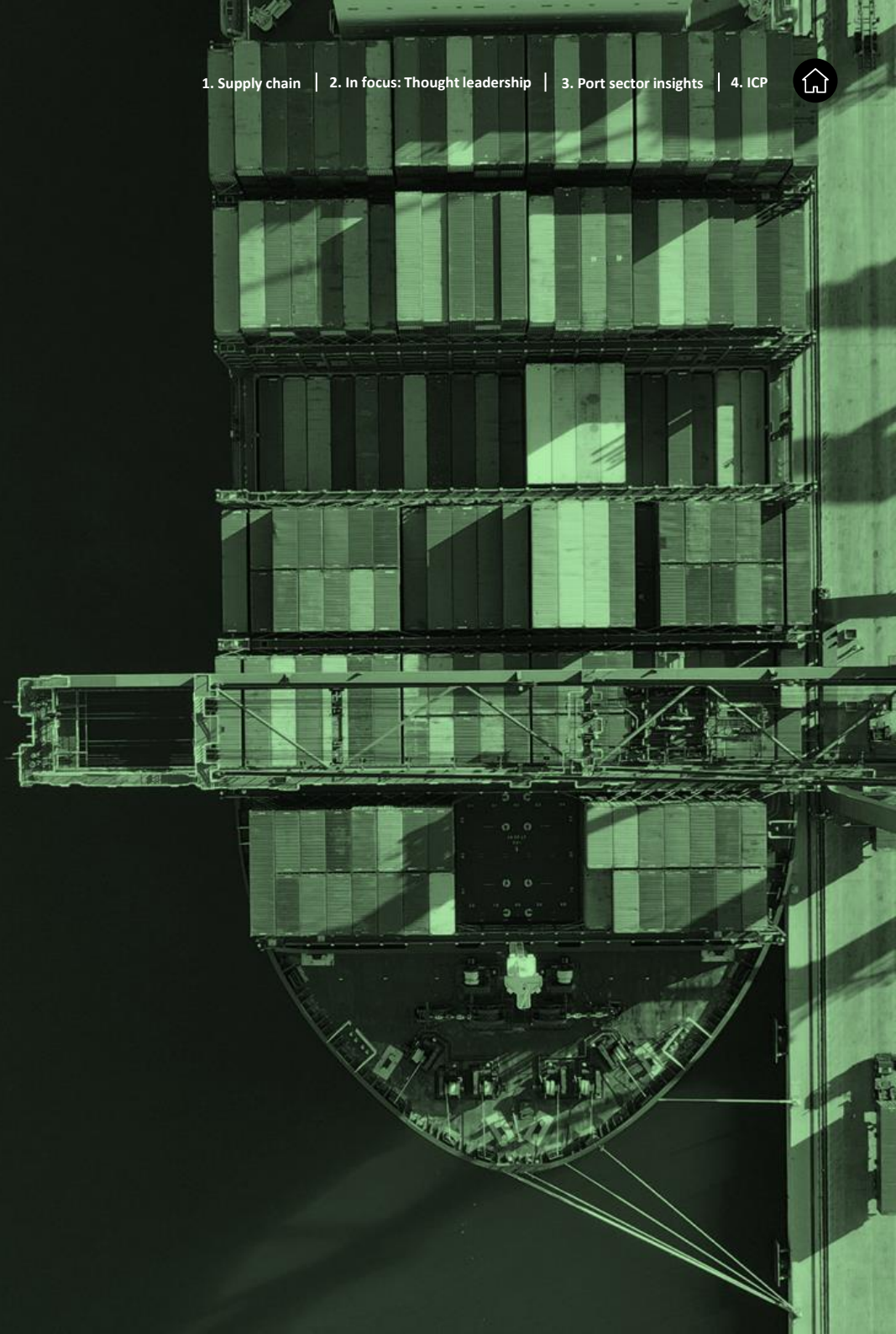
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# Glossary





# Glossary

Glossary	
AE	Advanced economies
AI	Artificial Intelligence
CFO	Chief Financial Officer
CPI	Consumer Price Index
EBIT	Earnings Before Interest and Tax
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation
EDA	Emerging and Developing Asia
EDE	Emerging and developing Europe
EDME	Emerging market and developing economies
EIA	Energy Information Administration
ESG	Environmental, Social and Governance Considerations
FEU	Forty-foot Equivalent Unit
FIGS	Freight Information Gathering System
FTE	Full-time equivalent
GDP	Gross Domestic Product
GLP	Global Liner Performance
GRI	Global Reporting Initiative
GST	Goods and Services Tax
HSWA	Health and Safety at Work Act 2015
ICP	Infrastructure & Capital Projects
IMF	International Monetary Fund

Glossary	
IMF	International Monetary Fund
IMO	International Maritime Organisation
IR	Integrated Reporting
IoT	Internet of Things
LAC	Latin America and the Caribbean
M&A	Mergers and Acquisitions
MAIC	Maintaining International Air Connectivity
MECA	Middle East and Central Asia
MoT	Ministry of Transport
NFDS	National Freight Demand Study
NPAT	Net Profit after Tax
NZ	New Zealand
OCR	Official Cash Rate
PMO	Project Management Office
PPP	Public Private Partnership
QSBO	Quarterly Survey of Business Opinion
RBNZ	Reserve Bank of New Zealand
R&D	Research and Development
RORO	Roll-on Roll-off
SAF	Sustainable Aviation Fuel
SASB	Sustainability Accounting Standards Board
SLL	Sustainability-linked loan

Glossary	
SSA	Sub-Saharan Africa
TEAP	Transport Emissions Action Plan
TEU	Twenty-foot Equivalent Unit
UN	United Nations
US	United States of America
WEO	World Economic Outlook

Ports	
AKL	Ports of Auckland
BLU	South Port (Bluff)
EST	Eastland Port
LYT	Lyttelton Port Company (Christchurch)
MLB	Port Marlborough
NPE	Napier Port
NPL	Port Taranaki
NSN	Port Nelson
NTH	Northport
POE	Port Otago
TIU	PrimePort Timaru
TRG	Port of Tauranga
WLG	CentrePort (Wellington)





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