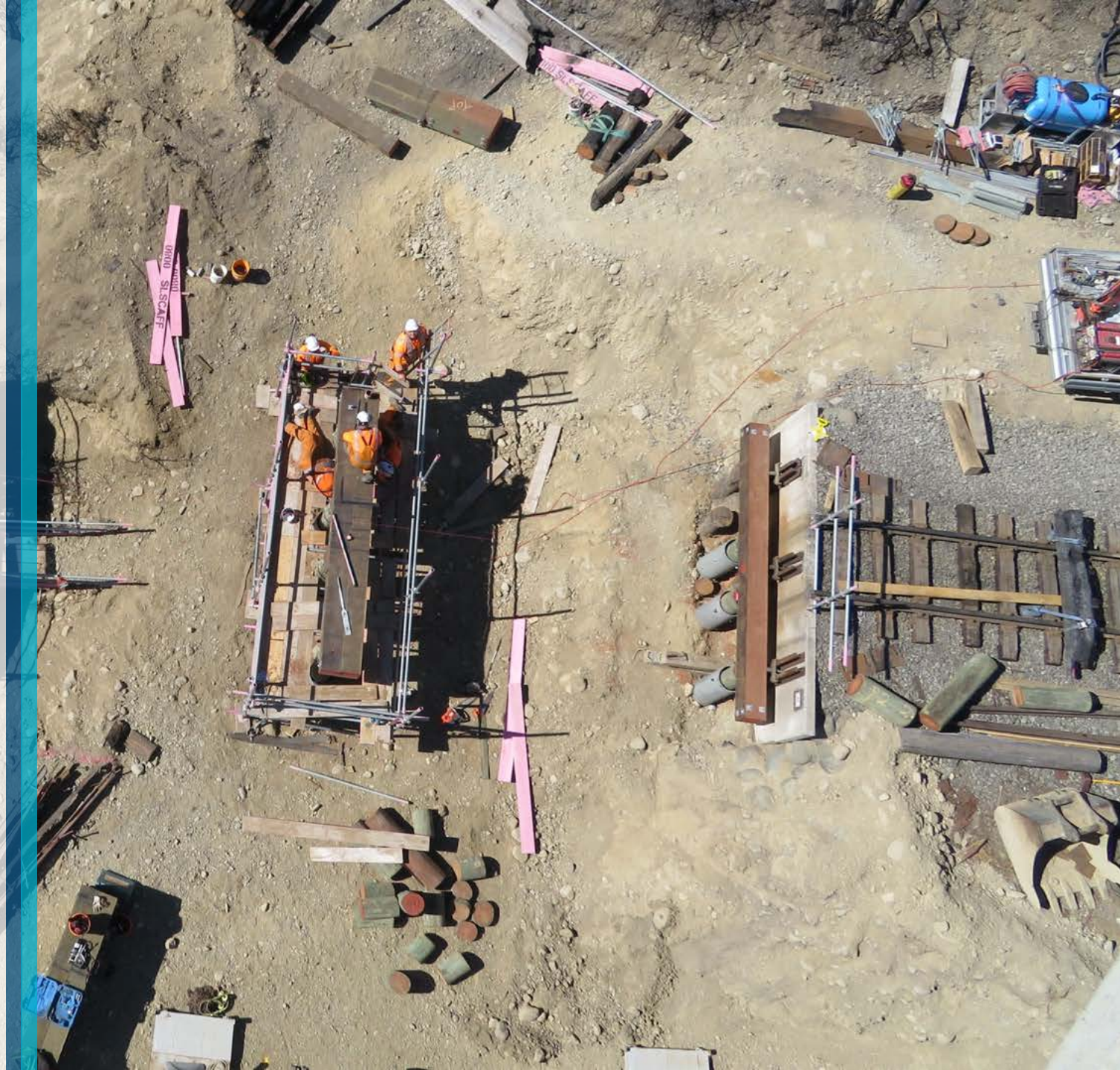




CONSTRUCTION INDUSTRY SURVEY

— 2020 —

A partnership between Teletrac Navman and
Civil Contractors New Zealand



FOREWORD

This is the fourth Construction Industry Survey, a research partnership between Civil Contractors New Zealand (CCNZ) and Teletrac Navman.

Our research helps to build a picture of New Zealand's civil construction industry and the experiences of those within the industry. The results shed light on the state of the civil construction industry and its outlook for the future, as well as stimulating discussion on industry views amongst private and public organisations, local and central government.

In previous years, the survey has resulted in a successful procurement reset, an industry careers promotion, and improved avenues for highlighting issues and improvements.

Specifically, the 2020 survey aimed to explore

The industry response to sector issues and its outlook for the future.

The impact of the Covid-19 pandemic on businesses and the workforce.

The future of sustainable procurement and supporting technologies.



Peter Silcock
CEO,
Civil Contractors New Zealand



James French
Construction Industry Specialist,
Teletrac Navman

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INDUSTRY SNAPSHOT

Civil contractors play a vital role in the development of New Zealand.

The people within this sector build and maintain our nation's civil infrastructure which includes roading and transport, energy, water, communications and public infrastructure. They also provide services to residential and commercial construction sectors.

A modern economy must have quality infrastructure to compete in world markets and to deliver high living standards for its people.

Transport, water and subdivision projects

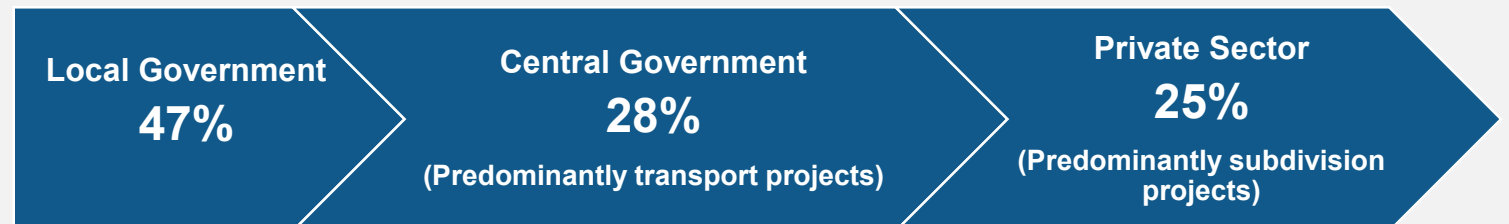
dominated new infrastructure activity in 2019, contributing 83% of the projects and 93% of the total value.*

Estimated **60,000**
people employed in civil
construction industry



\$7.6 billion*
the value of national
infrastructure activity in 2018

Project initiators from 2019 – 2024*

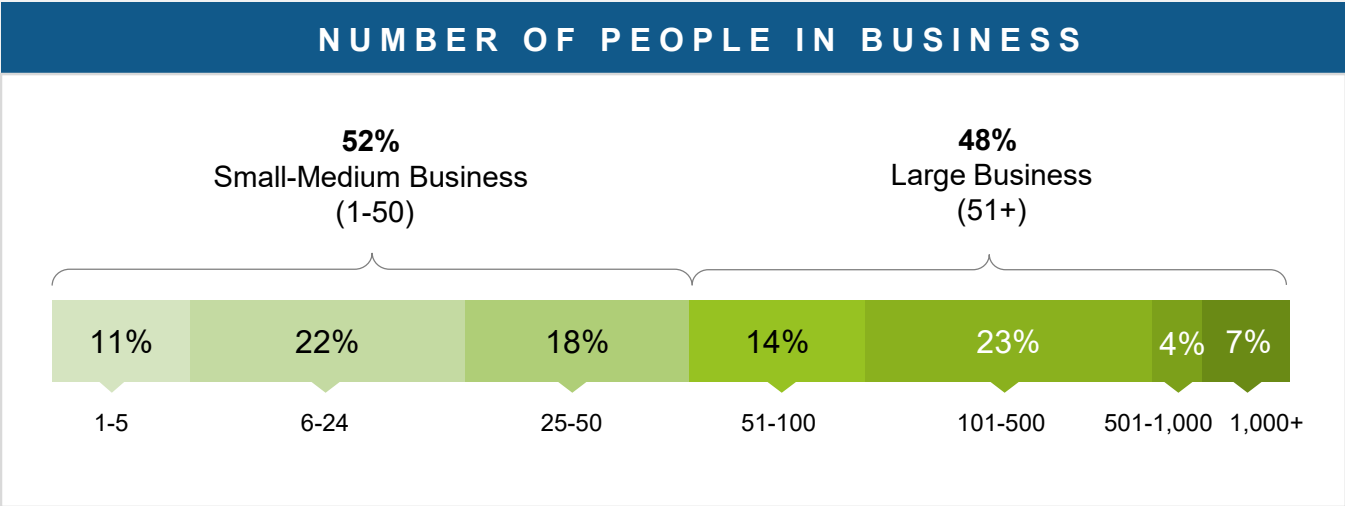
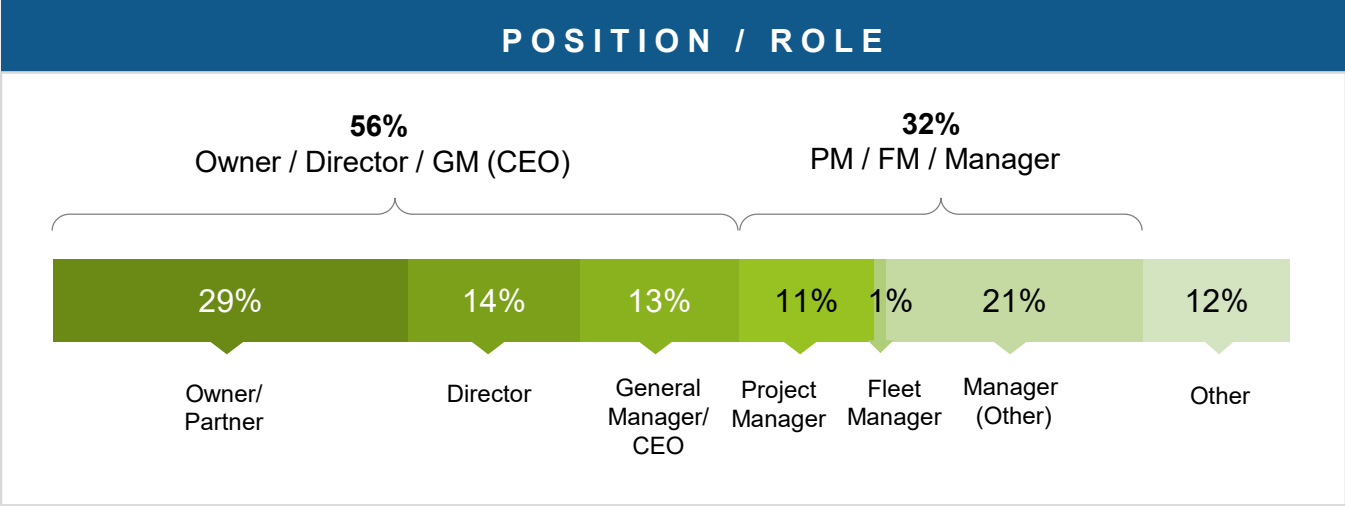
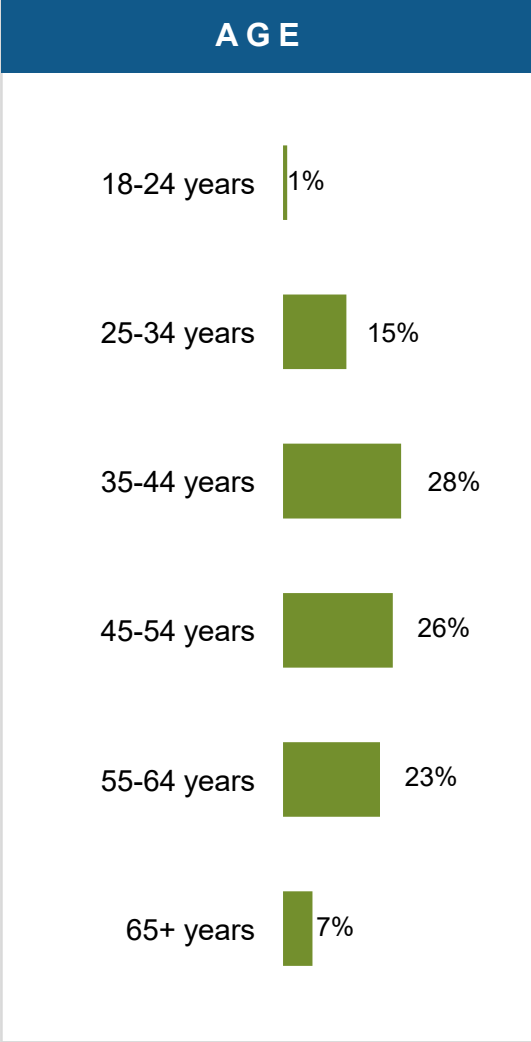


DEMOGRAPHICS AND METHODOLOGY

188 adults
from the civil construction
industry took the online survey
from **8 – 28 June 2020**



The survey was produced by research firm Colmar Brunton. Margin of error for the total sample is + or - 7.1 percent at a 95 percent confidence level.



KEY FINDINGS

Industry Outlook / Confidence

59%

are confident in their **business'** ability to withstand change and overcome challenges

29%

are confident in the outlook for the **construction industry**

19%

are confident in the **New Zealand economy**

Top three projects types currently delivering most work are...

48% Roading

25% Three Waters (fresh, storm & waste)

20% Residential

Business Sustainability & Covid-19 Impacts*



22% were forced to lay off staff*

19% had contracts cancelled or deferred*

47% expect turnover to shrink over the next 12 months (June 2020 – April 2021)*

37% were affected by travel/transport restrictions*

84% took a wage subsidy*

Workforce

Requirement for staff over next year

32% increase

46% stay the same

21% decrease

25% choose **skills shortage** as the main industry challenge

69% would hire **today** if the right skills were available

54% would pay for some reallocation costs for more skilled workers

Sustainability & Technology

Clients indicated to **37% of contractors** that sustainability practices will impact their procurement decision making



77% use technology to measure adherence to workplace health and safety

77% are taking action to be more environmentally sustainable

Key Industry Issues



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CIVIL CONTRACTORS
NEW ZEALAND

In 2020, there is greater emphasis on the importance for local and central Government to provide the industry with a clearer pipeline for upcoming work. With 75 percent of work initiated by public bodies, their clarity and certainty around future work heavily impacts on the industry.



Expected events
/ issues with
most positive
impact in the
next 3 years



TOP 5 EVENTS / ISSUES

2020



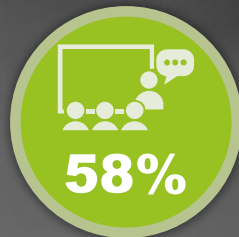
Development of a clearer pipeline of Government and local Government work



Large projects proposed under the NZ Upgrade Programme



Regional projects proposed under the Shovel Ready Projects programme



Government's increased procurement emphasis on training and development of people and other social outcomes



The introduction of the Construction Industry Accord in April 2019

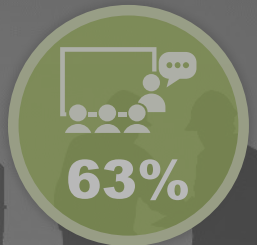
2019



Development of a clearer pipeline of Government and local Government work



Investment in water infrastructure to meet new fresh water and waste water regulatory standards (proposed)



Government's increased procurement emphasis on training and development of people and other social outcomes



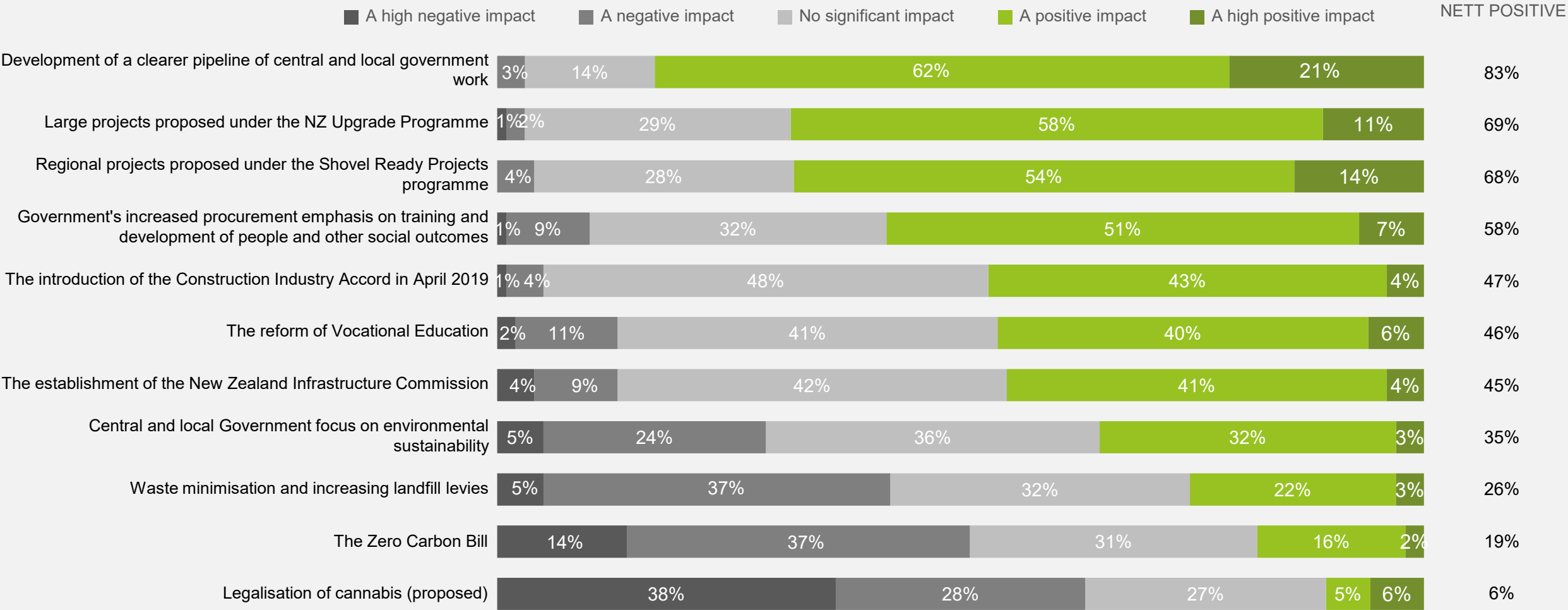
Introduction of the 'Construction & Infrastructure Skill Shortage List' by immigration NZ in December 2018



Central and local Government focus on environmental sustainability

Heavy reliance on the announcement of national and regional infrastructure projects has been propelled by the recent Covid-19 outbreak, in particular the Shovel Ready Projects programme, which contractors hope will fill urgent short-term gaps in the pipeline of work.

EXPECTED IMPACT IN THE NEXT 3 YEARS





Industry Outlook / Confidence



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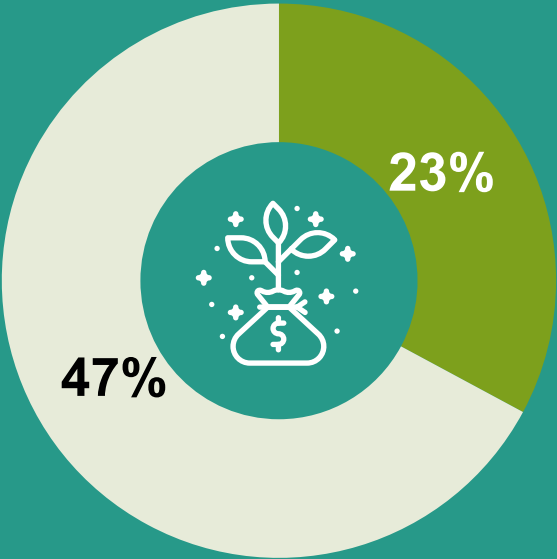


CIVIL CONTRACTORS
NEW ZEALAND

The impact of Covid-19 is significantly affecting growth. Only 23 percent predict growth in 2020, compared with 52 percent in 2019. Whilst half of Auckland's businesses expect turnover to stay about the same, 60 percent of South Island businesses are anticipating that their turnover will shrink.

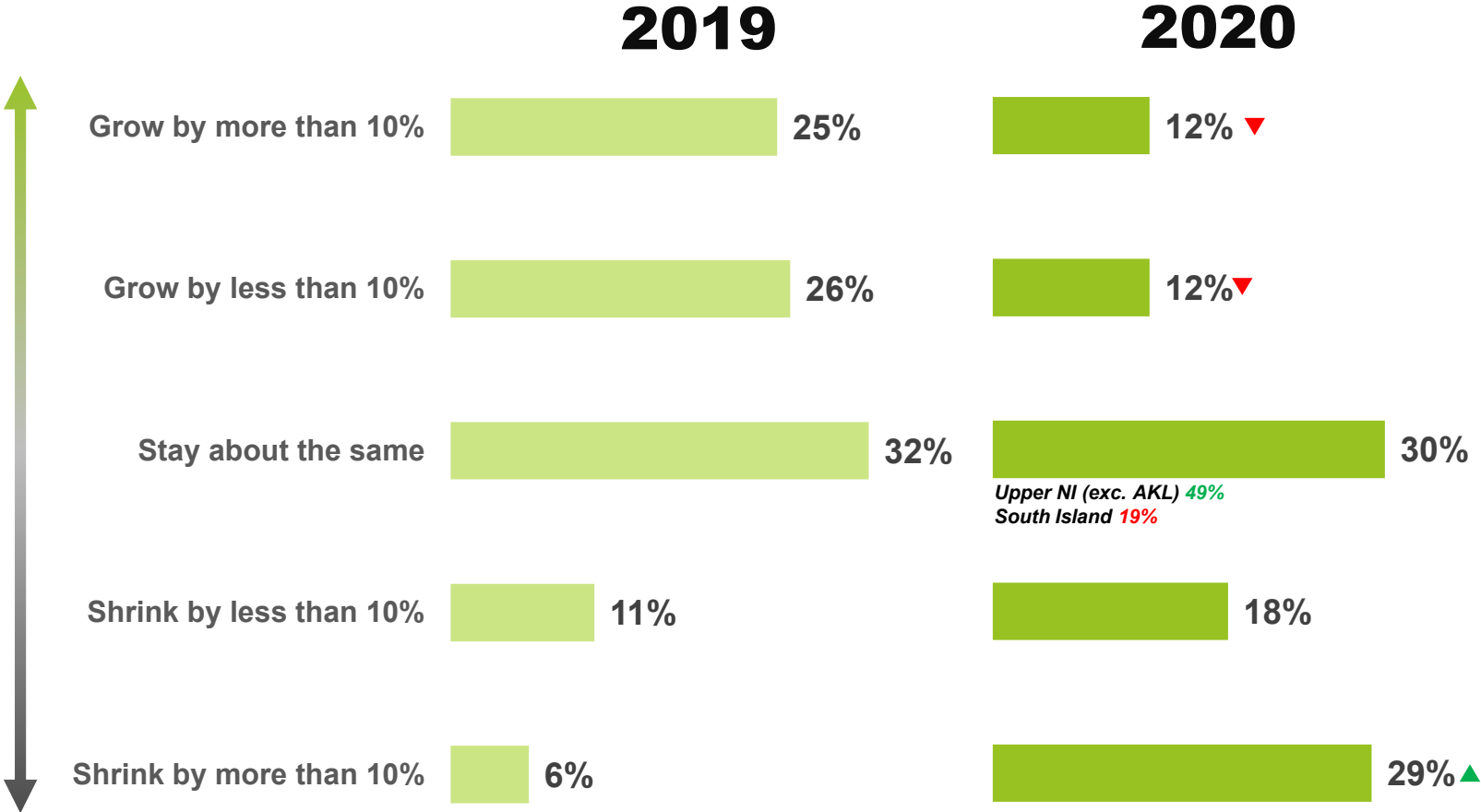
EXPECTED TURNOVER CHANGE IN THE NEXT 12 MONTHS

Expect turnover
growth in the
next 12 months



Expect turnover
loss in the next
12 months

South Island 60%



Significantly higher / lower than Total
▲▼ Significantly higher / lower than 2019

Roading is coming through strongly as the area with the most work on in 2020, as commercial building projects drop off. The Government's New Zealand Upgrade Programme has allocated \$5.3 billion towards roading. Residential and three waters continue to be strong areas for work.

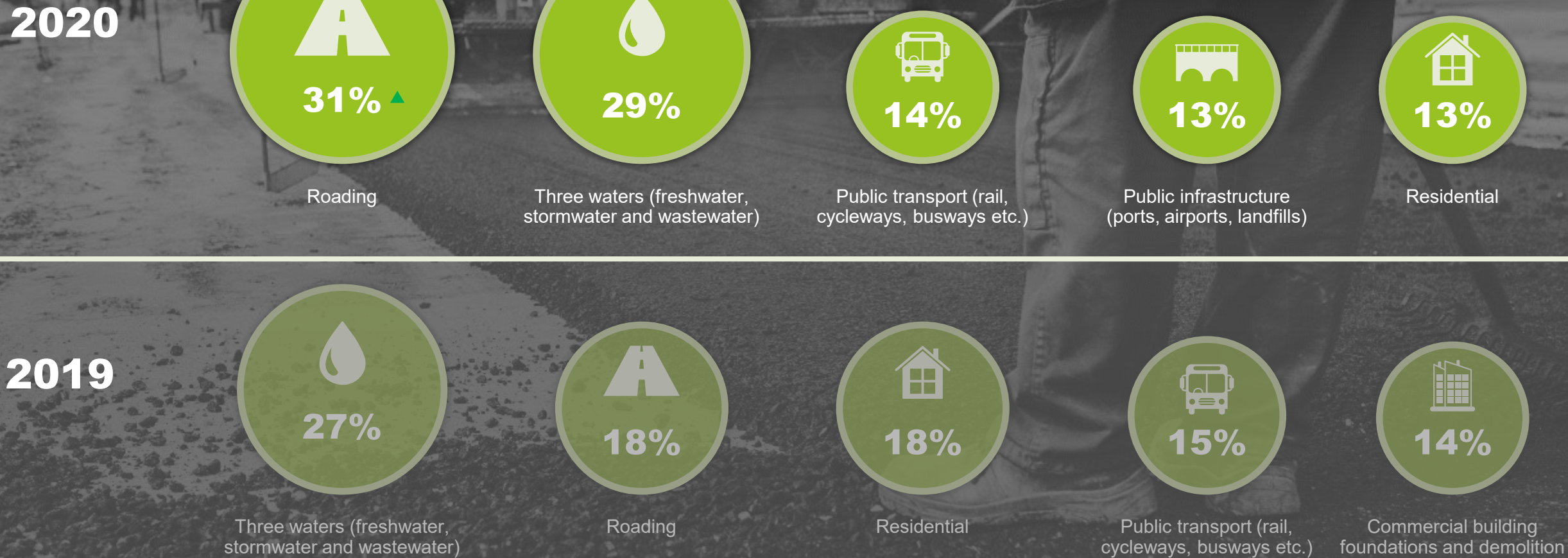
KEY PROJECTS TYPES CURRENTLY GETTING MOST WORK FROM





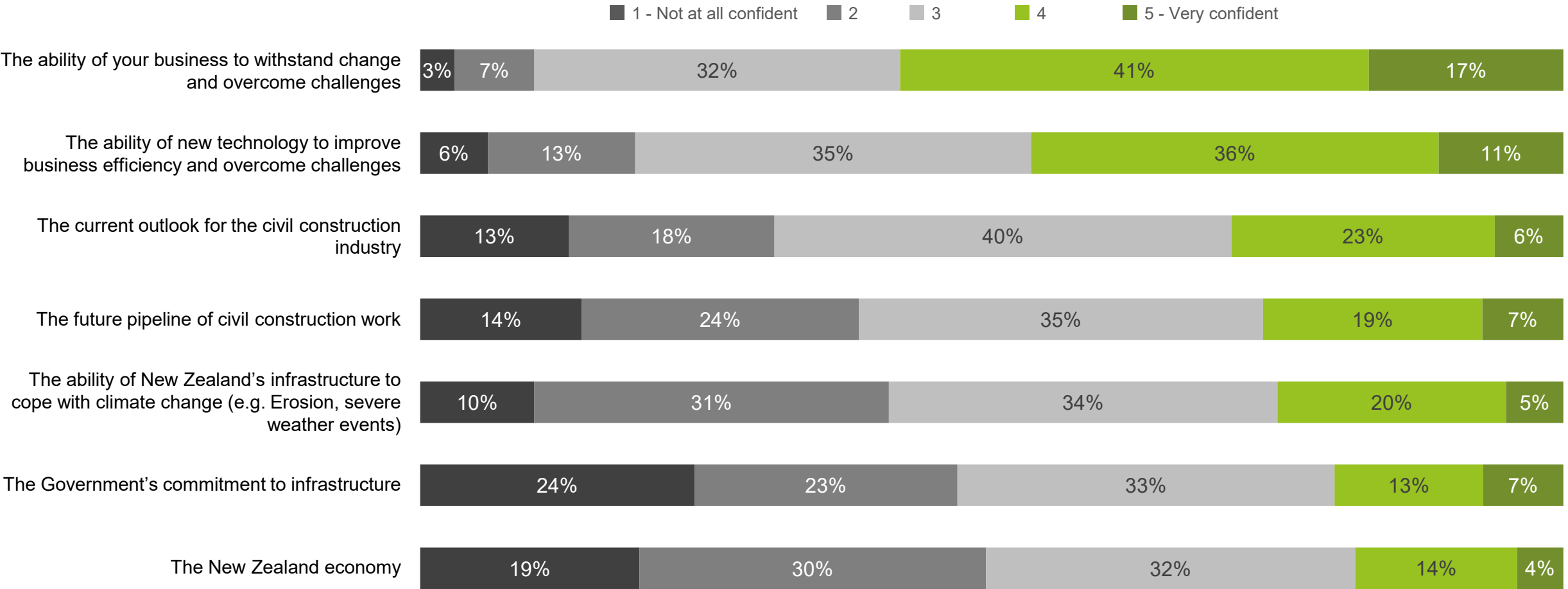
Businesses are responding to changes by planning to significantly increase their capabilities in roading projects, whereas commercial building projects have become less of a focus within the industry and have been replaced by public infrastructure.

KEY PROJECT TYPES FOR INCREASED CAPABILITY IN NEXT 12 MONTHS



59 percent of businesses are feeling confident in their ability to withstand change and overcome challenges. However, overall confidence is lower: contractors are less certain in the industry outlook and the economy as a whole.

BUSINESS CONFIDENCE & OUTLOOK



There are three key themes driving confidence in the current outlook for the industry – Government investment, increase in the pipeline of work and the sector’s resilience in economic downturns.



What’s driving industry confidence?



Confident in civil construction industry outlook

Government investment for recovery

“I am relatively confident that in tight times and high unemployment that the government will spend money on infrastructure to soak up unemployment.” – South Island

“Investment in core infrastructure is key to the recovery of the country.” – Auckland

“Civil construction will receive funding boosts (election year policies on both sides) and will have more labour available as other industries shed staff.” – Lower North Island

Pipeline of work increasing

“In Southland we are very busy and positive, however our Central Lakes region has changed due to lack of tourism.” – South Island

“The medium term outlook is for a strong pipeline of work published by Government. Longer term however I am concerned how sustainable this will be and whether we will go into a boom/bust cycle (again).” – Auckland

“There is plenty of work around and not enough skilled people to carry it out.” – Lower North Island

A strong industry

“Civil construction industry is robust. The last to dry up in a recession and the first to get going. Dirt = \$\$\$.” – Upper North Island (exc. Auckland)

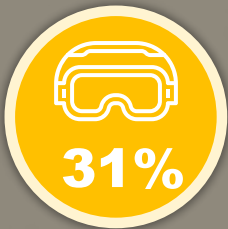
“Work will pick up and be more competitive with the experience coming back from overseas. And the government funded projects will help get the industry moving in the right direction.” – Upper North Island exc. Auckland

“The work on the books over the next few years is good.” – Lower North Island

Many are facing a slowdown of work or running out of work, with no projects on the immediate horizon heavy competition, and slow processes causing delays in work coming to market.



What’s causing a lack of confidence?



Not confident in civil construction industry outlook

Lack of faith in the Government

“Government and Council inefficiencies and red tape.”
– South Island

“Very few projects to keep pipeline flowing. Coming out of Covid-19, Ministers involved in the construction industry have been very quiet to date on what they see as a road map to keep the nation moving forward.”
– Auckland

Work slow to materialise

“No visibility of pipeline greater than 3 months. Government investment not visible, will be a huge gap for 3-12 months as we sit and wait. Local Councils sitting on hands waiting for government funding too - all too slow!!” -South Island

“Delays caused by approvals consents and two many contractors bidding for work.”
-South Island

“Lack of definitive project pipeline from the government. To much talk not much action.”
– Lower North Island

Uncertain times causing pessimism

“Its very complex environment which increases the level of uncertainty. A lot of factors can influence the outlook. Very hard to predict at the moment.”
-South Island

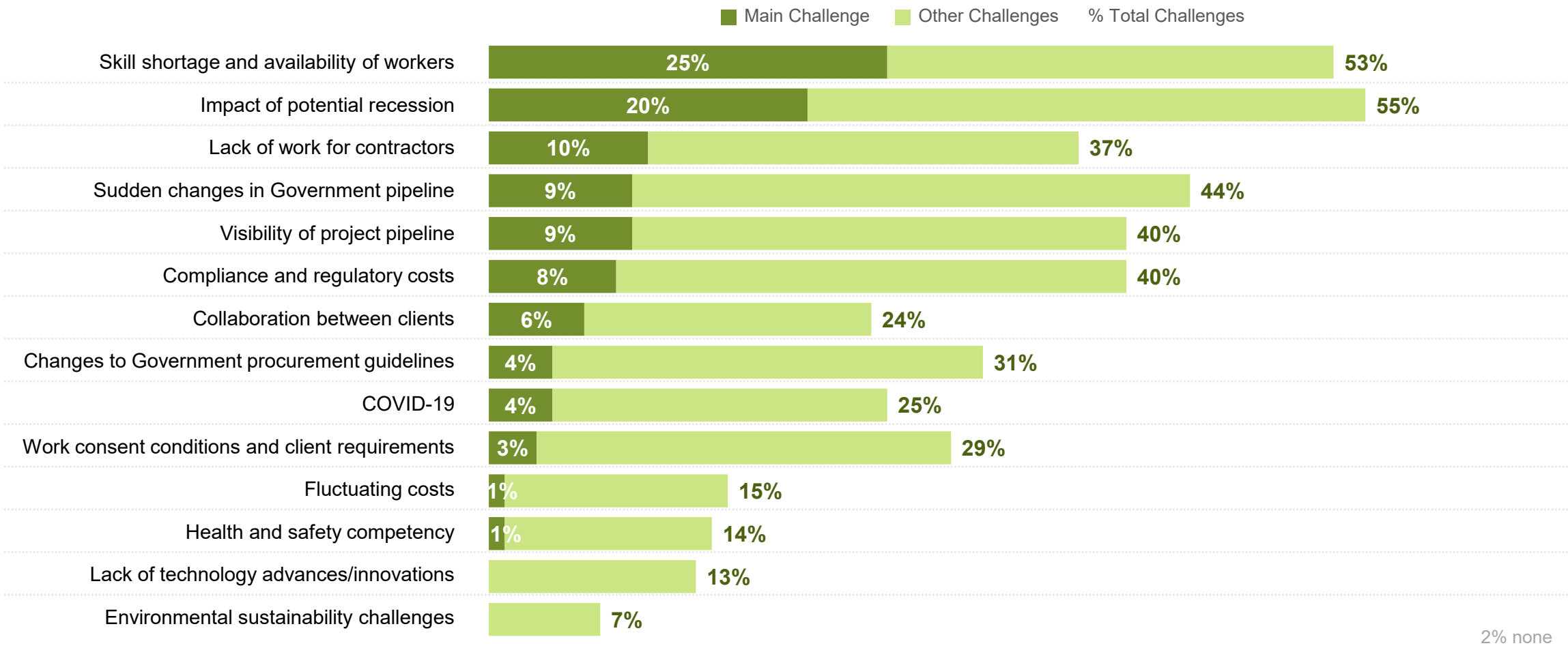
“The pipeline is gone.”
-Auckland

“Many facing uncertain future. We have a road maintenance contract but would really struggle without it.”
– Upper North Island (exc. Auckland)

“Work is stopping.”
– Lower North Island

A quarter agree that the main challenge facing the industry’s future growth is the skill shortage and availability of workers. Followed by the wider economic impacts of Covid-19.

CONSTRUCTION INDUSTRY CHALLENGES TO FUTURE GROWTH



2% none

SOLUTIONS TO INDUSTRY CHALLENGES

“

Skill shortage and availability of workers

“Promote the trade earlier in schools and highlight the benefits of working in the construction industry.” - Auckland

“Bring back the 3 month trial period.”
- South Island

“Industry partnerships where the government supplies training to support industry needs with employment outcomes or sponsorship through business.” - South Island

Economic downturn

“Rather than a big spend in the short to medium term, work towards a longer term sustainable pipeline of work that avoids boom/bust cycles.”
- Auckland

“Some strategic planning by government to give certainty of future work going forward.” - Auckland

“Fast track consents, plan changes in the residential land development sector.”
- South Island

Lack of work for contractors

“Ease on permits, introduce new NZ made materials, look after our own before looking elsewhere.” - South Island

“Speed up planning processes, increase ECI (contract the contractors during the design phases) and alliance contracts. Empower agencies to list, decide on and start in the regions with shovel ready projects.” - South Island

Sudden changes in Government pipeline

“Cohesive infrastructure plan and direction for each region of the country.” - Lower North Island

“The Government needs to be honest about where, when and how they intend to spend the money.” - Upper North Island (exc. AKL)

“The Government needs to make a clear plan and stick to it. But it also needs to explain the plan to everyone, so we are all aware of it.” - South Island

Visibility of project pipeline

“Providing a clear, cross-party vision for infrastructure with a funded programme - smoothed across time and regions.” - Lower North Island

“Increase funding to the regions to create a structured pipeline.”
- South Island

“Clear programme of works for recovery post COVID.”
- South Island

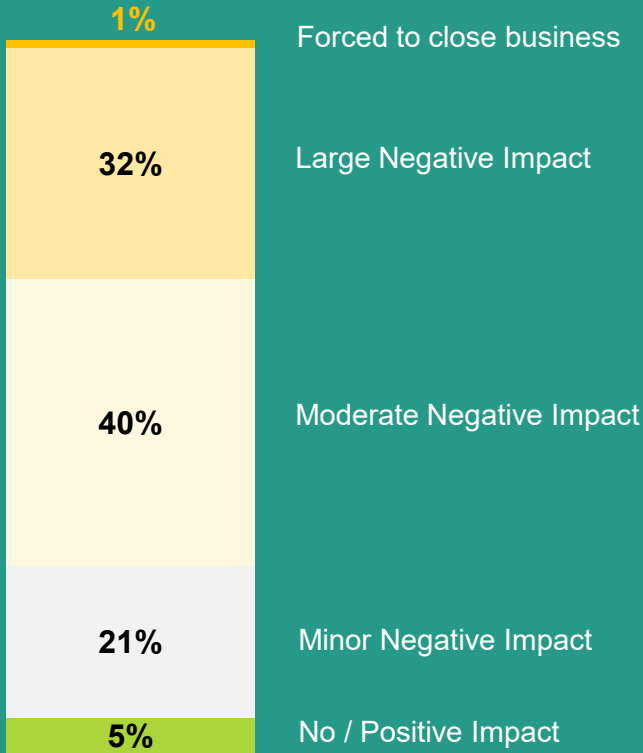
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Business Sustainability & Covid-19 Impacts

The pipeline uncertainty, with both council and private sector pulling back on spending, is that no one can see six to 12 months ahead. Projects starting construction today had planners, designers and architects at work last year. Contractors began allocating resources, scaling up or down based on predictions of work. Therefore it will take a long time for Government spending to reach the ‘shovel ready’ stage.

COVID-19 IMPACT ON BUSINESSES

94% of businesses have been negatively impacted by Covid-19...



Biggest impacts of Covid-19



Uncertainty of work pipeline



Cashflow



Loss of profit



Contracts cancelled or deferred



Business productivity impacts



Added costs of compliance

The majority of businesses took up the wage subsidy to help offset the financial impacts caused by Covid-19. Larger businesses looked more to reducing travel costs, whereas smaller businesses looked more to loans schemes.

MEASURES TAKEN TO OFFSET COVID-19 ISSUES

Government Wage Subsidy

27th March 2020

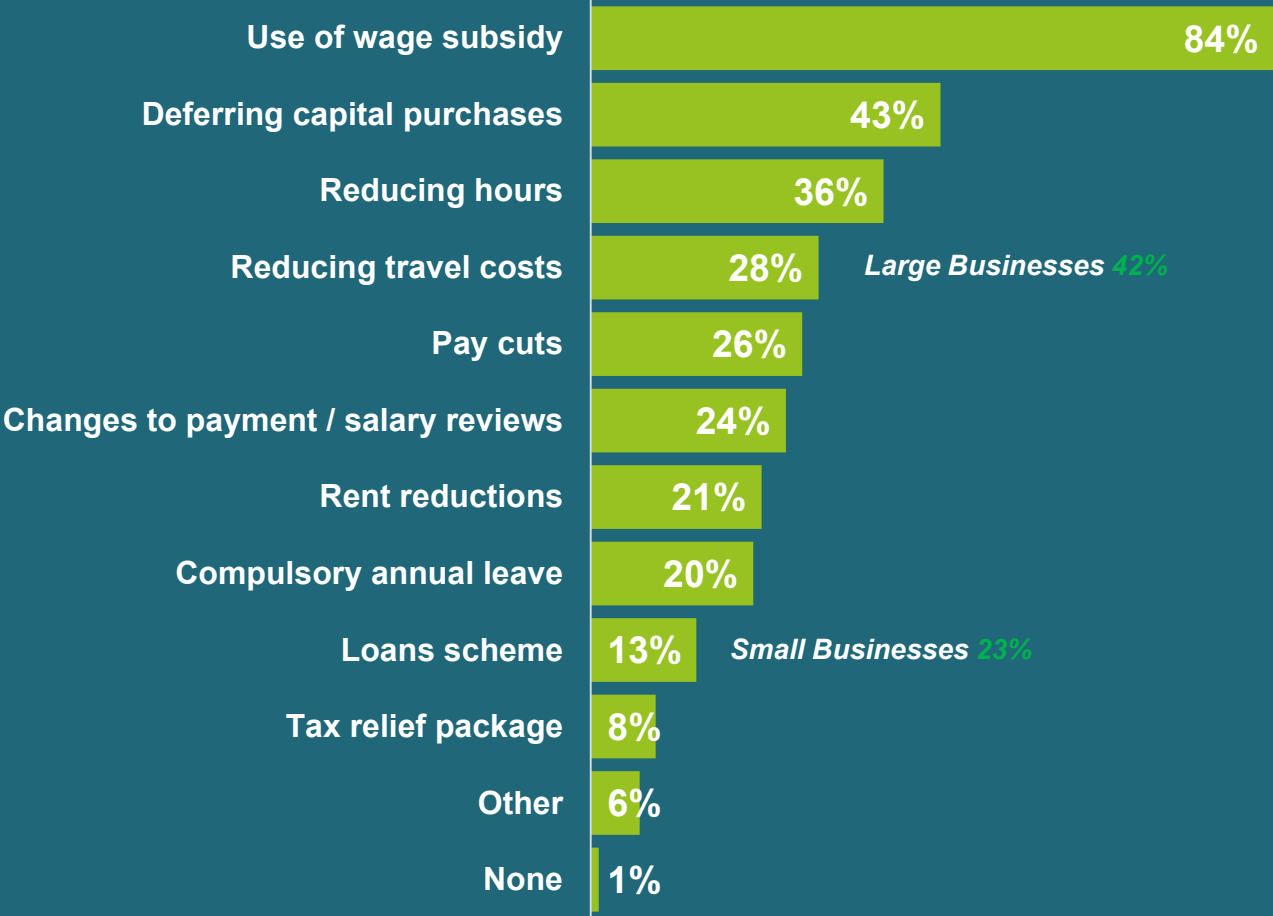
Round One: 12 Week Subsidy

Minimum actual or predicted revenue loss of **30%** over the period of a month when compared to the same time last year

10th June 2020

Round Two: 8 Week Subsidy

Minimum actual or predicted revenue loss of **40%** over the period of a month when compared to the same time last year



Large Businesses 42%

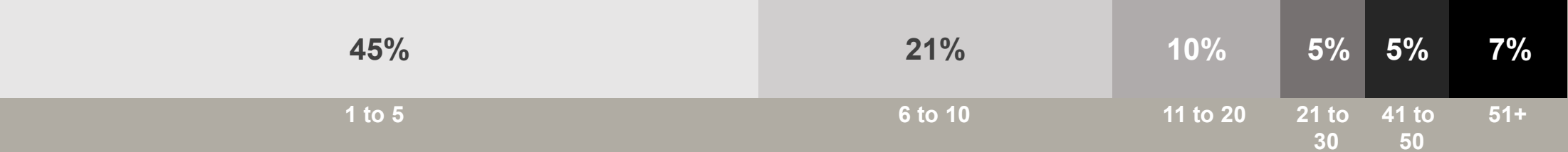
Small Businesses 23%

SOURCE: <https://workandincome.govt.nz/online-services/covid-19/declaration-wage-subsidy.html>,
<https://workandincome.govt.nz/covid-19/wage-subsidy-extension/index.html>

Significantly higher / lower than Total

THE IMPACT OF COVID-19 ON STAFF NUMBERS

22% were forced to lay off staff. Here's how many staff they laid off...

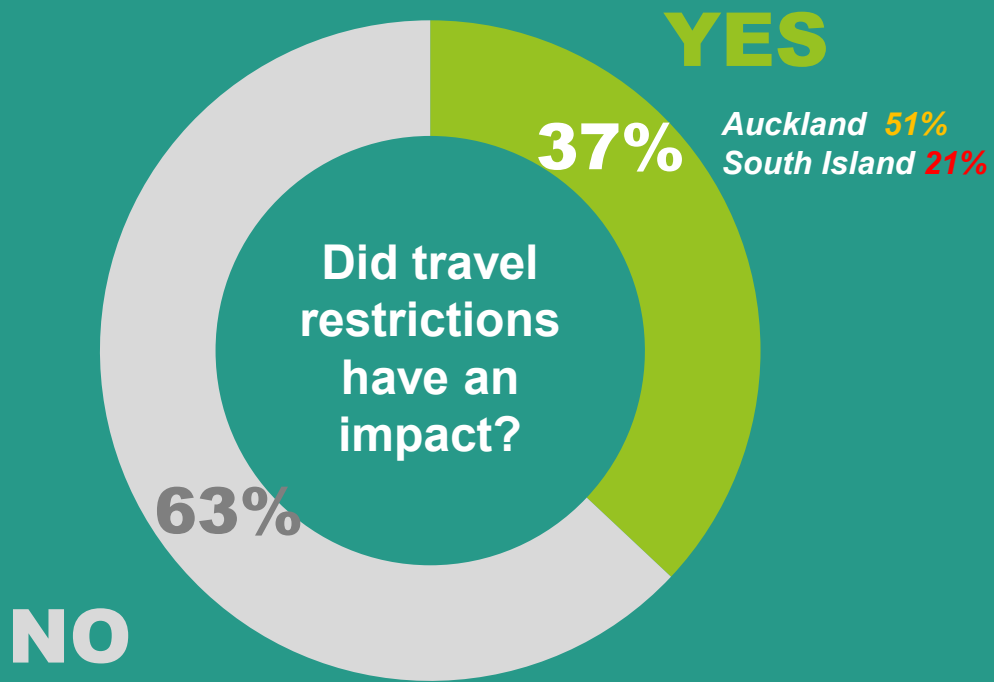


Note: 0% for 31 to 40

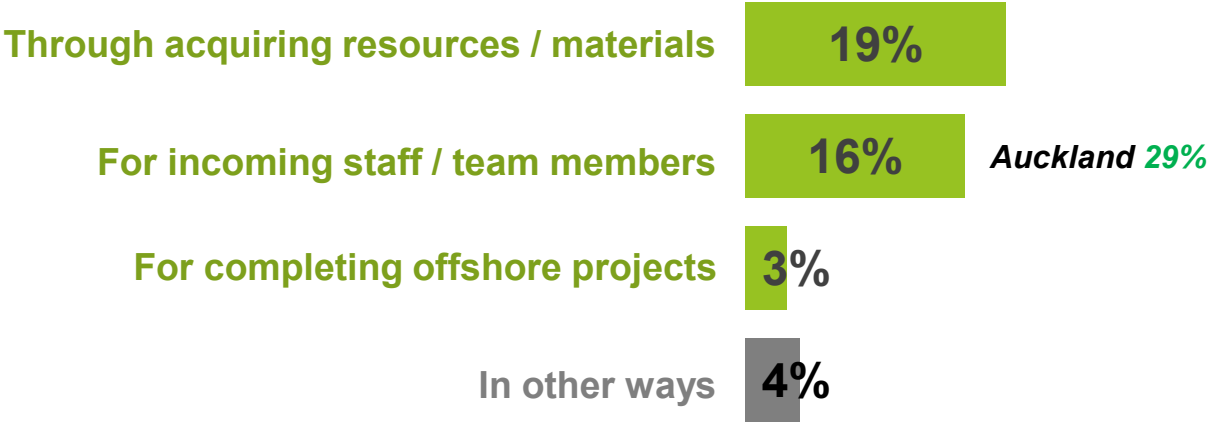


Auckland businesses felt the impact of international travel restrictions considerably more than other regions, mainly for incoming staff members. The main impact for most of the country was in acquiring overseas resources and materials.

IMPACTS OF INTERNATIONAL TRAVEL RESTRICTION ON BUSINESSES



How has it impacted?



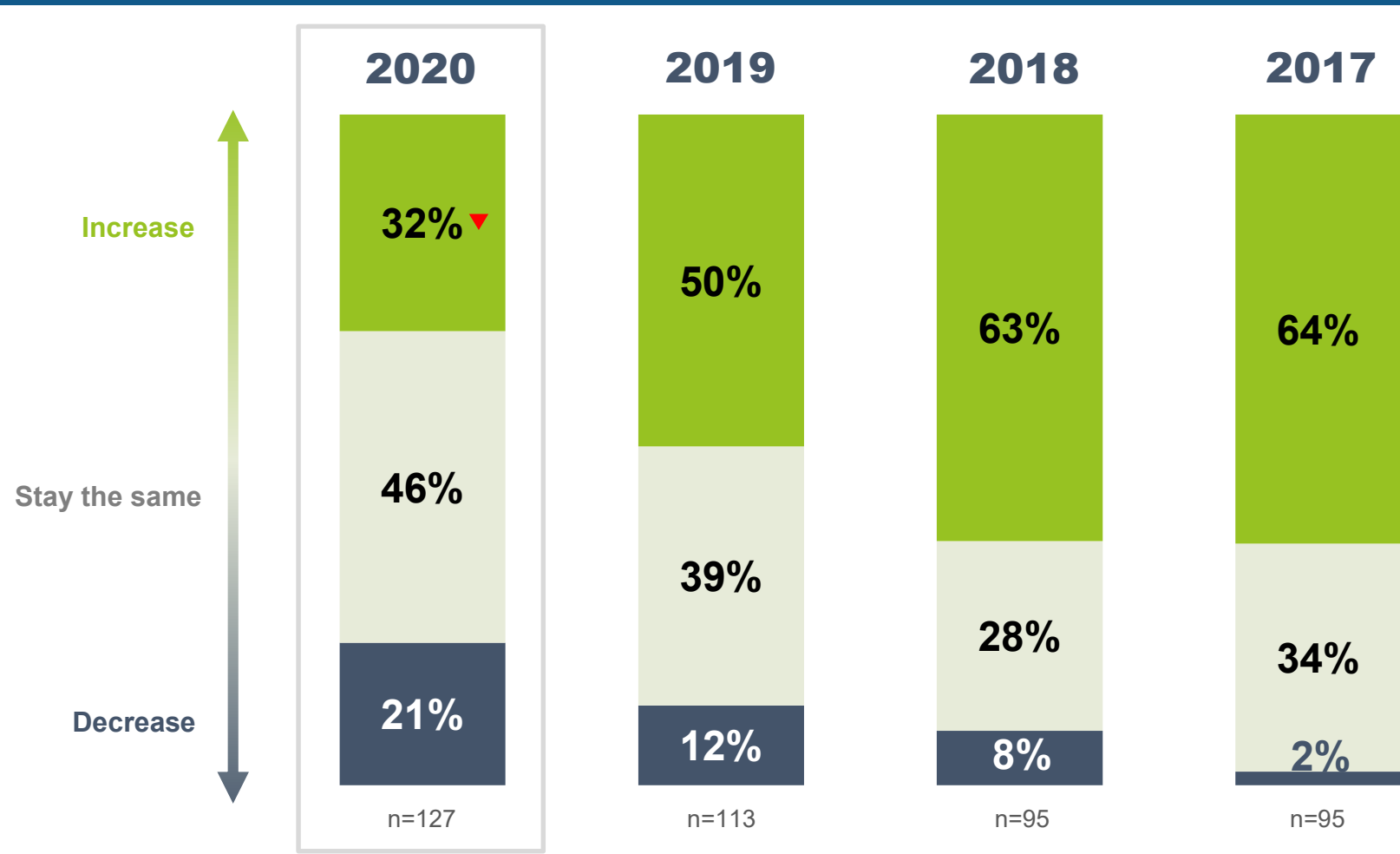
Significantly higher / lower than Total

Workforce



There is a significant decline in the number of businesses saying they will require more staff in the next year. It is feared that during this contraction, skills will not be developed or will be lost overseas, leading to a larger skills shortage once Government projects come to market.

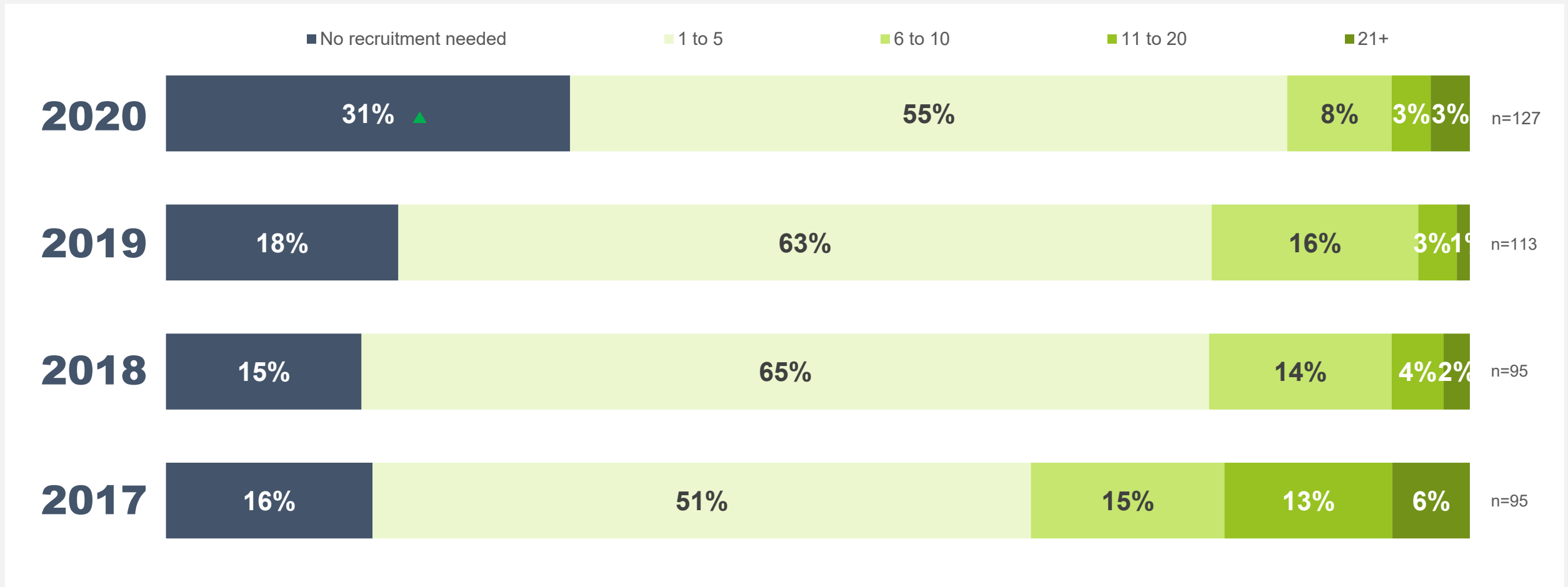
REQUIREMENT FOR STAFF IN THE NEXT YEAR





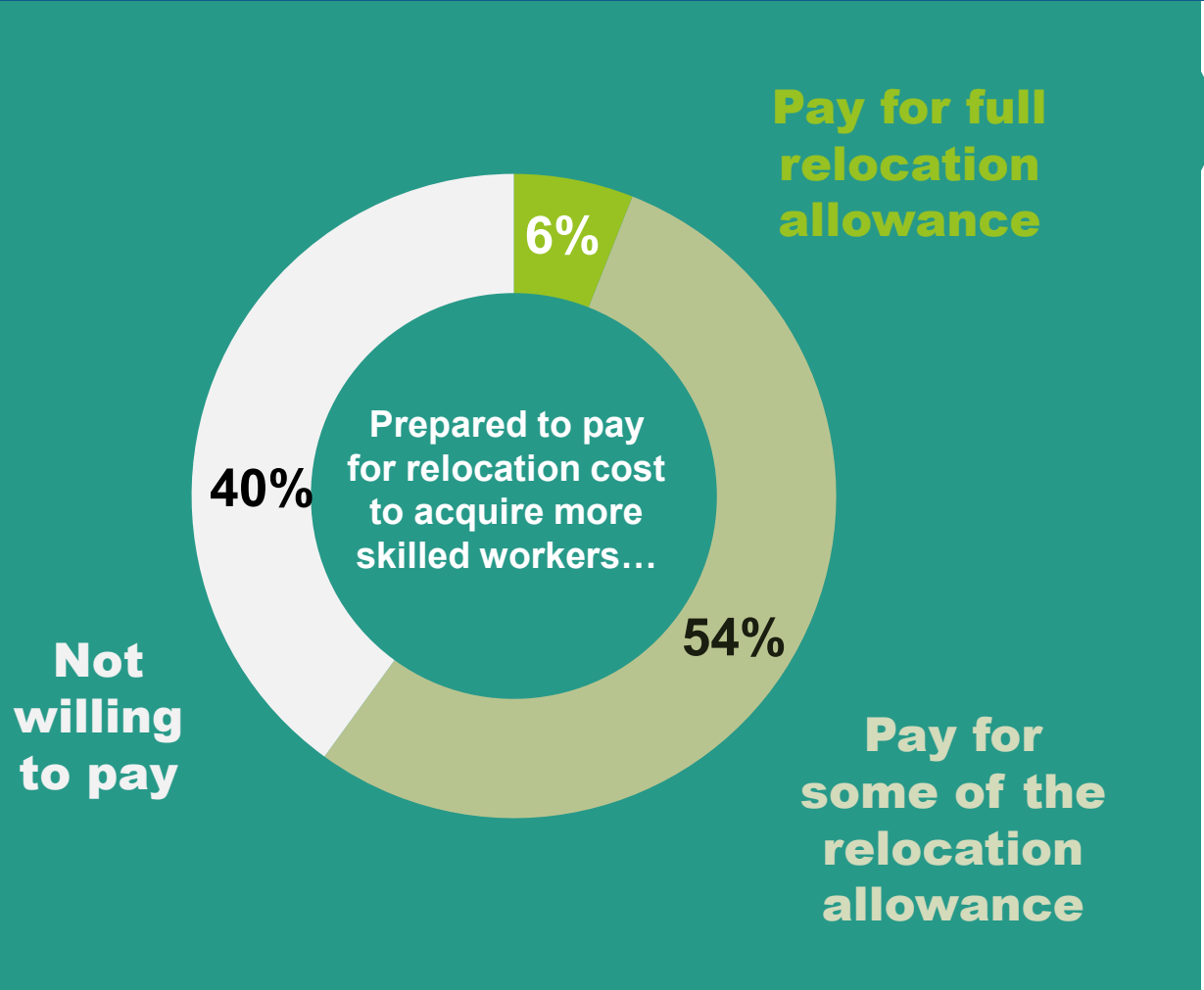
Despite the negative impacts of Covid-19 and the economic downturn, a large number of businesses still answered that they would recruit 1-5 people, indicating that specific skills are needed to deliver on New Zealand’s infrastructure needs. In previous years, the survey found a need for off-site training on specialist equipment for tasks such as drilling, piling and deep foundations, and training in handling specialised materials.

HOW MANY STAFF WOULD YOU RECRUIT TODAY IF THE RIGHT SKILLS WERE AVAILABLE?



Of those who would recruit staff, over half would also be prepared to cover some the relocation costs to get more skilled workers. Only 16 percent of businesses are applying recruitment incentives to help find staff, with competitive pay packages being the preferred measure.

THOSE WHO WOULD RECRUIT IN 2020



16% are applying recruitment incentives to help recruit staff

MEASURES BEING PUT IN PLACE TO HELP WITH RECRUITMENT :

	Competitive wages / salaries	80%
	Improved inclusiveness and diversity within your organisation	45%
	Working more closely with training organisations	35%
	Relocation incentives	30%
	Flexible hours	10%

Sustainability and Technology



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Navman

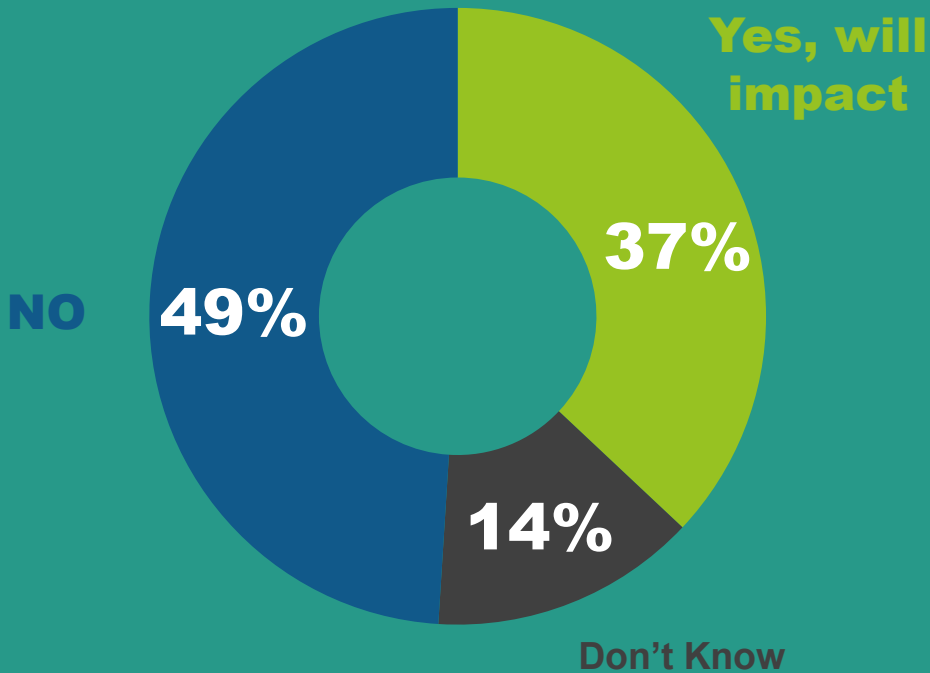


CIVIL CONTRACTORS
NEW ZEALAND

Local and central Government make up around 75 percent of the clients for civil construction work. Client focus on more sustainable business practices - social, environmental, financial - is starting to impact on procurement decisions. In coming years, sustainability initiatives could offer contractors an opportunity for competitive advantage.

PROCUREMENT

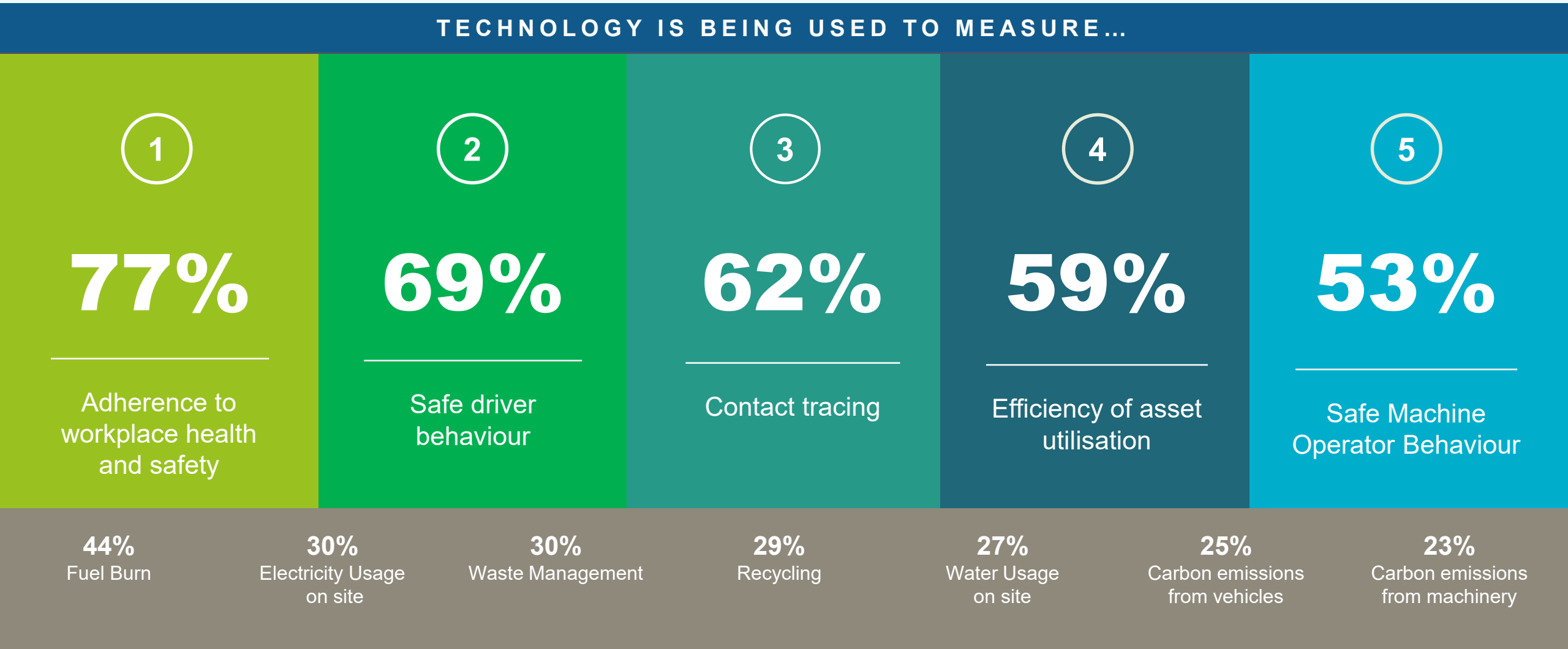
Have clients indicated that your business's sustainability efforts will impact their procurement decisions?



Procurement initiatives affecting businesses:

Deviation from standard contract terms	30%
Increasing use of panels amongst local Government and CCOs	24%
The inclusion of more environmental outcomes in procurement (e.g. the Zero Carbon Bill requirements)	20%
Bundling of contracts	18%
A shift in procurement outcomes from lowest cost towards social outcomes	16%
None	35%

Health and safety in the workplace is a strong driver behind the adoption of measurement technology. Technology is also used by some contractors to measure environmental impacts such as waste management, water usage on site and carbon emissions.

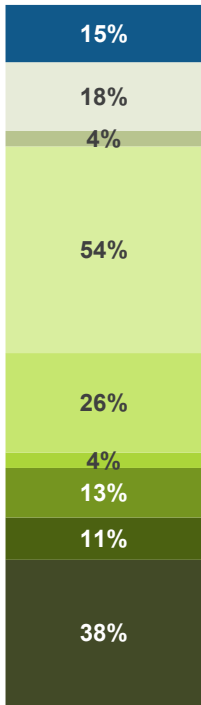


GPS fleet tracking, electronic checklists, and machine control and guidance are the most widely used technologies for measuring safety in the civil construction industry.

TECHNOLOGY TYPE BEING USED TO MEASURE THESE AREAS...

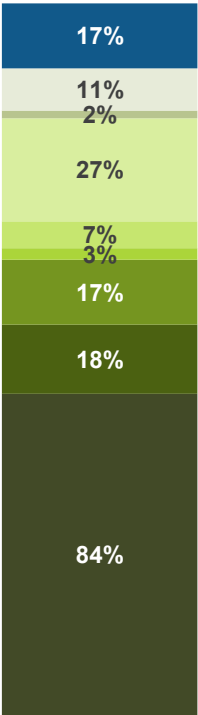
- Sensors and alerts
- Solar Power
- Machine control and guidance
- RFID tags
- Electronic checklists or reporting
- Project management software
- Cameras on person (body cams)
- Cameras in vehicle (front facing)
- Fuel management systems
- GPS fleet tracking

Adherence to workplace health and safety



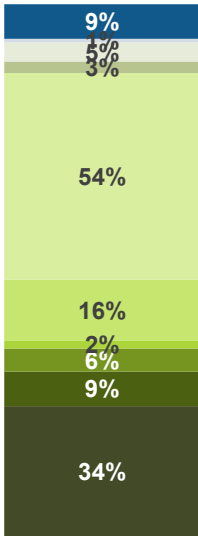
n=144

Safe driver behaviour



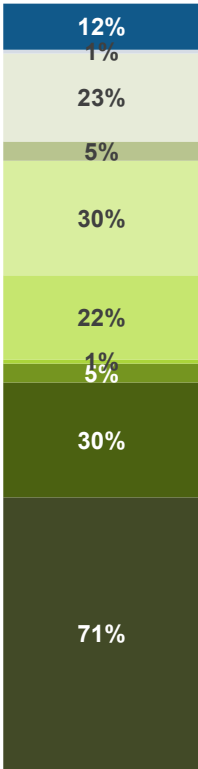
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Contact tracing



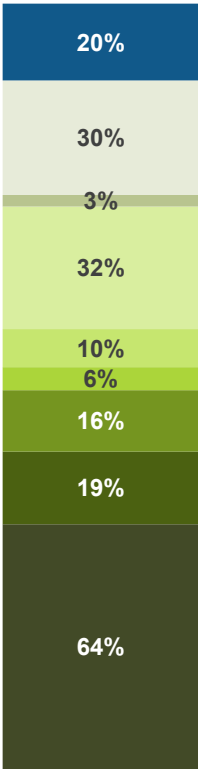
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Efficiency of asset utilisation



n=110

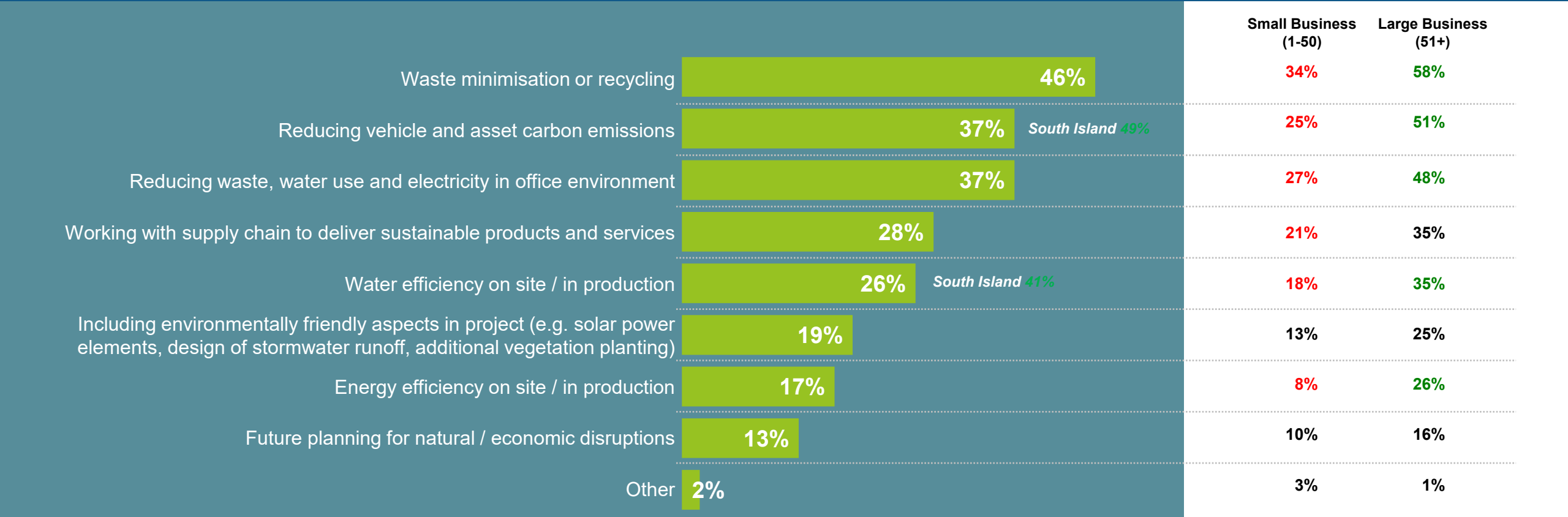
Safe machine operator behaviour



n=99

Sustainability offers an area for competitive advantage in the sector. Changes will be driven by clients building environmental and sustainability requirements into their contracts, as initiatives such as the Zero Carbon Act are implemented into central and local government procurement. Large businesses are leading the way in environmental sustainability with waste minimisation being the top focus. South Island businesses are more focussed on reducing carbon emissions and water efficiency.

ACTIONS TO BECOME MORE ENVIRONMENTALLY SUSTAINABLE



23% of businesses are not currently taking any actions

Significantly higher / lower than Total

Civil Contractors New Zealand

Civil Contractors New Zealand represents the interests and aspirations of more than 600 member organisations – including large, medium-sized and small businesses in civil engineering, construction and general contracting. It also has associate members who provide valuable products, support and services to contractor members.



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Teletrac Navman

Teletrac Navman is a leading software-as-a-service (SaaS) provider leveraging location-based technology and services for managing mobile assets. With specialised solutions that deliver greater visibility into real-time insights and analytics, Teletrac Navman helps companies make better business decisions that enhance productivity and profitability. It tracks and manages more than 550,000 vehicles and assets for more than 40,000 companies around the world. The company is headquartered in Garden Grove CA, with additional offices in New Zealand, United States, United Kingdom, Australia and Mexico.



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