

CONSTRUCTION INDUSTRY SURVEY

2020

A partnership between Teletrac Navman
and Civil Contractors New Zealand



Taipa Bridge construction, Northland.
Photo by Arden Hermans, Fulton Hogan

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

CONTENTS



Key Findings	Key Industry Issues	Industry Outlook / Confidence	Business Sustainability & Covid-19 Impacts	Workforce	Sustainability & Technology
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INDUSTRY SNAPSHOT

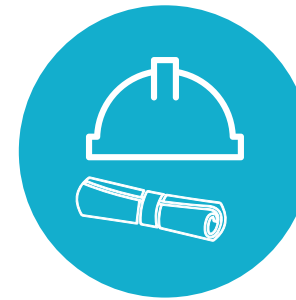
The civil construction industry is a major employer.

Civil construction companies play a vital role in the development of our country, our economy and our way of life. They build and maintain the roads connecting cities and towns. They install and care for the water networks that bring fresh water to houses and wastewater to treatment plants. They install building foundations as well as internet and energy infrastructure. These are services a modern and developed economy must have to compete efficiently in world markets and deliver high living standards for its people

Transport, water and subdivision projects

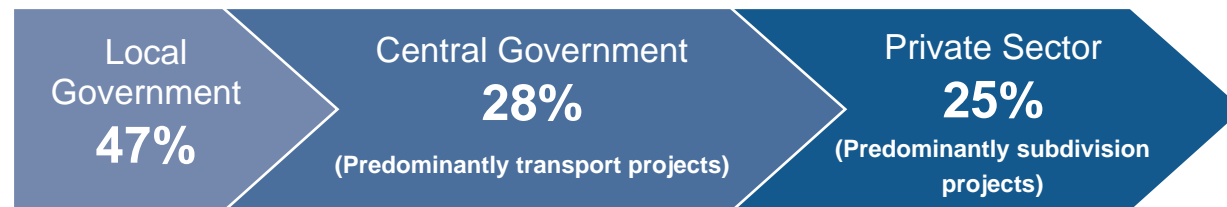
dominated new infrastructure activity in 2019, contributing 83% of the projects and 93% of the total value.*

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



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

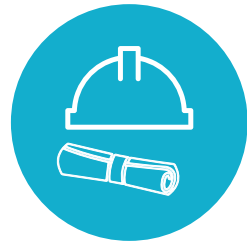
Project initiators from 2019 – 2024*



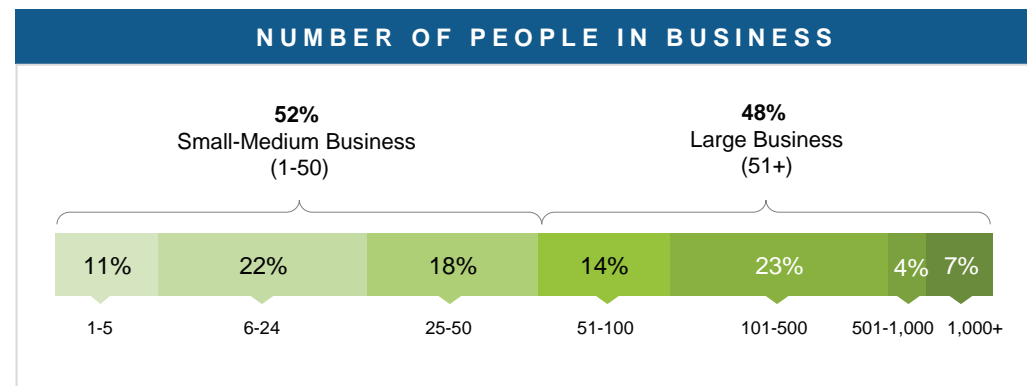
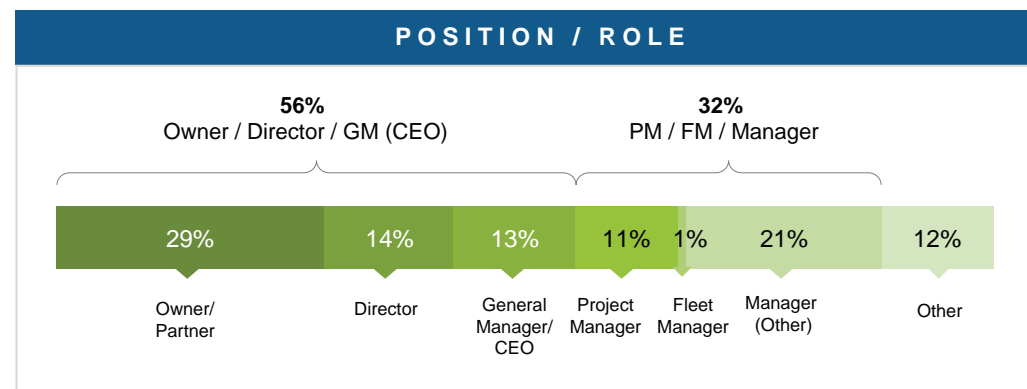
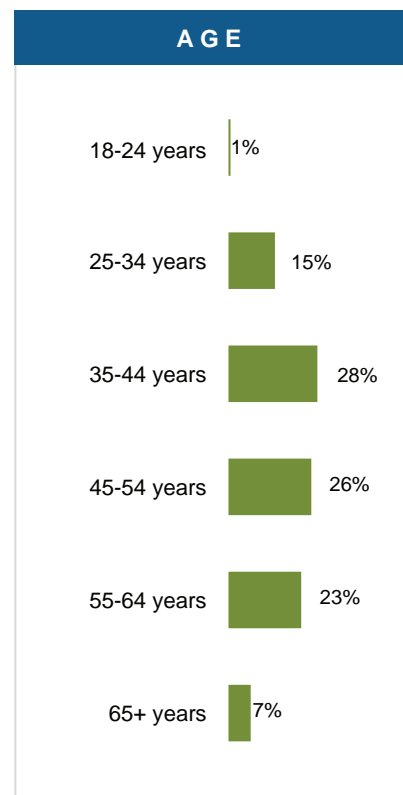
* Ministry of Business, Innovation and Employment. (August 2019). National Construction Pipeline Report 2019. <https://www.mbie.govt.nz/assets/national-construction-pipeline-report-2019.pdf>

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.



Base: 2020 Total (n=188)

KEY FINDINGS



* Survey taken 8 – 28 June 2020

A black and white photograph showing a person in the foreground wearing a helmet and safety harness, looking down towards a valley. In the valley, a river flows through a landscape with some buildings and trees. A helicopter is visible in the air, flying over the valley. The background features mountains under a cloudy sky. A green overlay is present in the top right corner.

KEY INDUSTRY ISSUES

Abseil inspection at Nevis Bluff.
Photo by Oscar Tatom, Fulton Hogan

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.

TOP 5 EVENTS / ISSUES



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



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



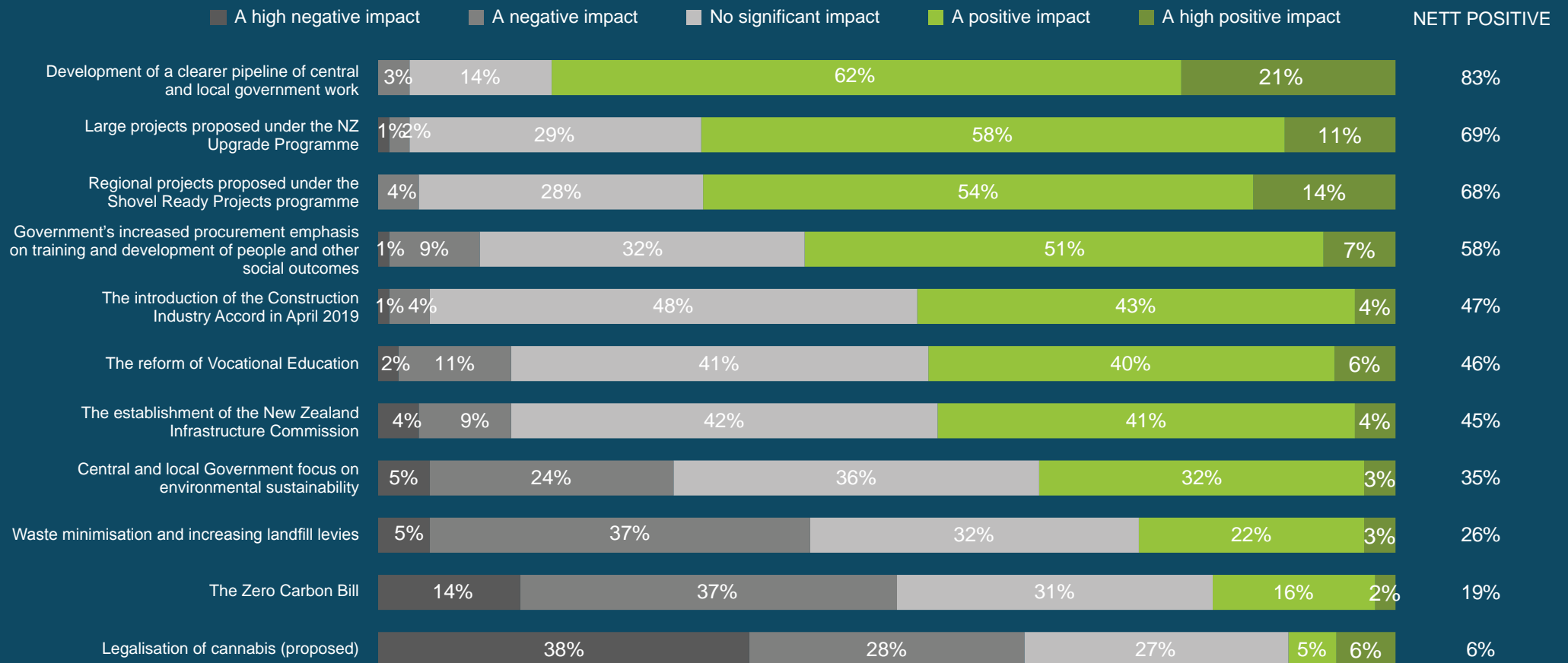
Central and local Government focus on environmental sustainability

Q1. What impact do you think these actual or potential issues/events could have on your business in the next three years?

Base: 2019 Total (n=186), 2020 Total (n=188)

This 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



Q1. What impact do you think these actual or potential issues/events could have on your business in the next three years?

Base: 2019 Total (n=186), 2020 Total (n=188)

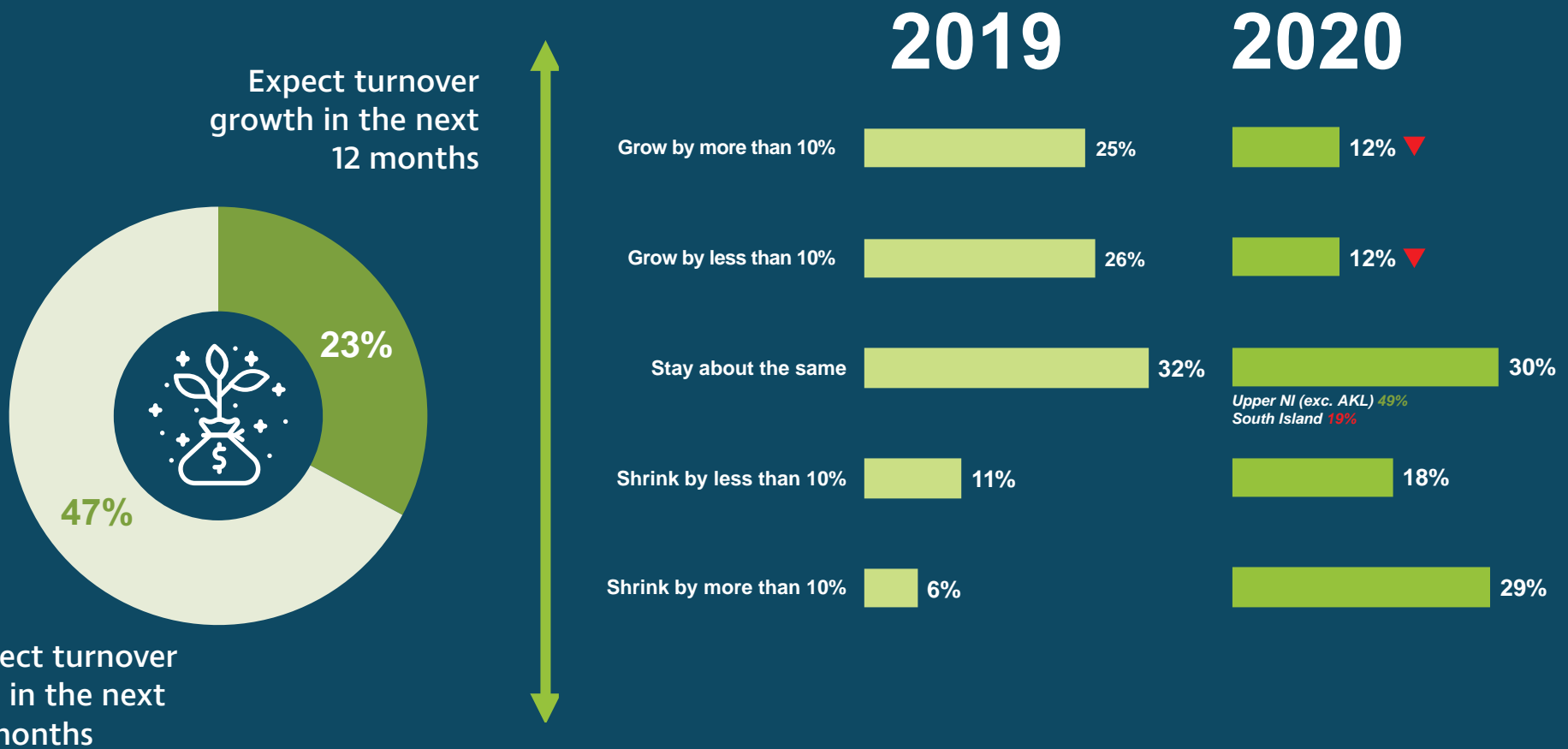
A silhouette of a Hitachi excavator is shown against a bright, hazy sky at sunrise. The excavator's arm, with the word "HITACHI" visible, extends across the upper right portion of the frame. The bucket is positioned near the horizon, where the sun is low, creating a strong backlight effect. In the background, a body of water reflects the light, and a distant landmass is visible. The overall scene is in black and white, with the sun providing the primary light source.

INDUSTRY OUTLOOK / CONFIDENCE

Excavator pre-check at sunrise.
Photo by Michelle Bathurst, EPL Construction

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 loss in the next 12 months

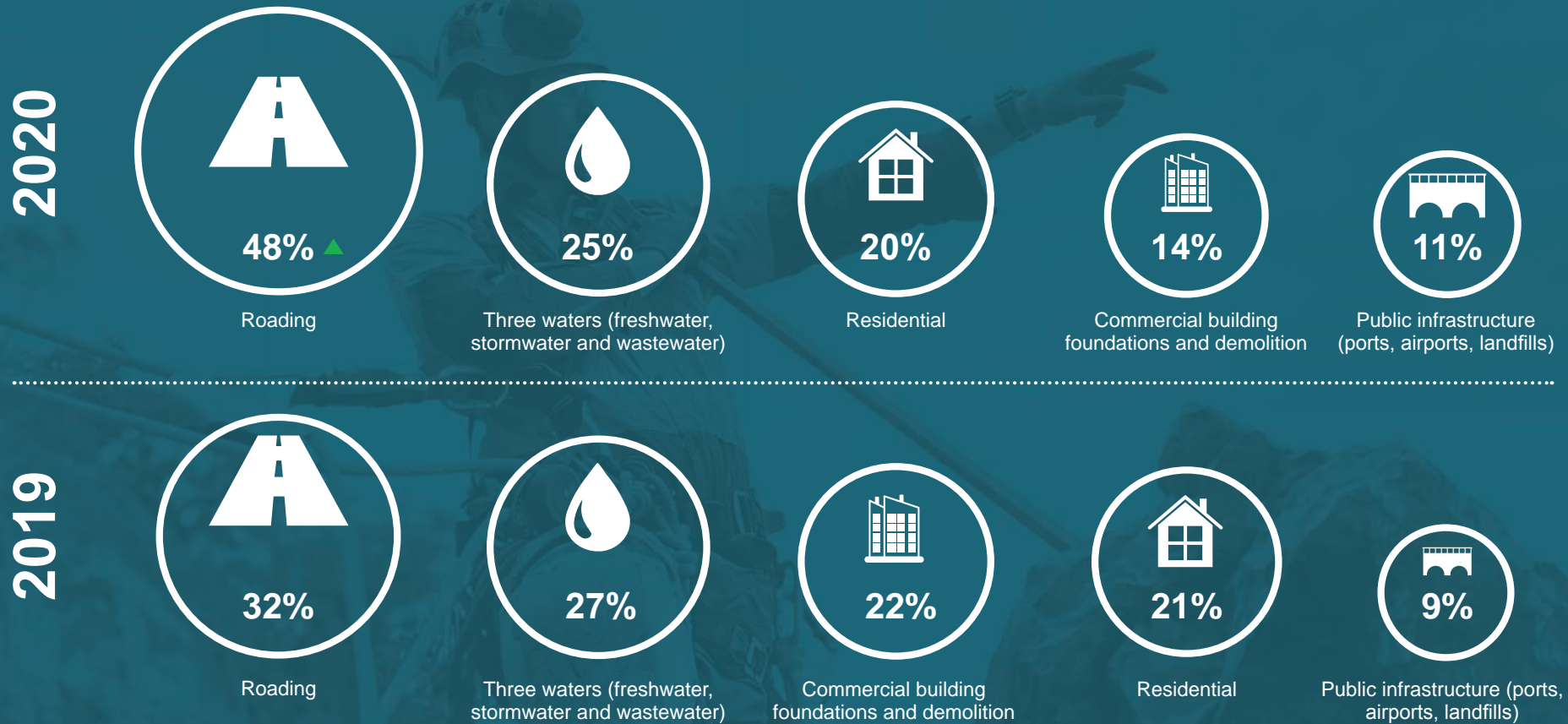
South Island 60%

Q2. Do you expect that your turnover will grow, stay about the same, or shrink in the next 12 months?
Base: 2019 Total (n=186), 2020 Total (n=188)

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



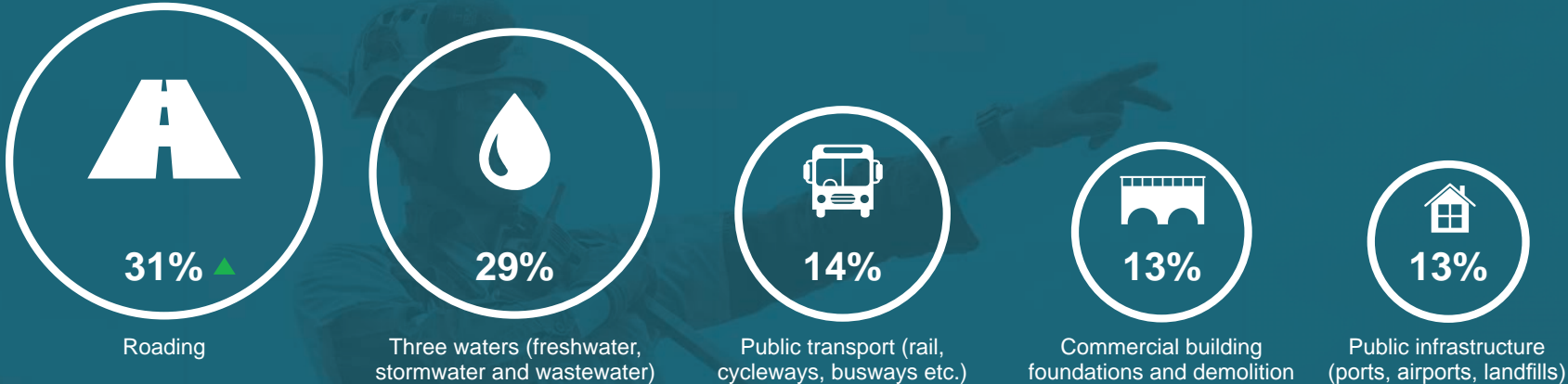
Q1. What impact do you think these actual or potential issues/events could have on your business in the next three years?

Base: 2019 Total (n=186), 2020 Total (n=188)

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

2020



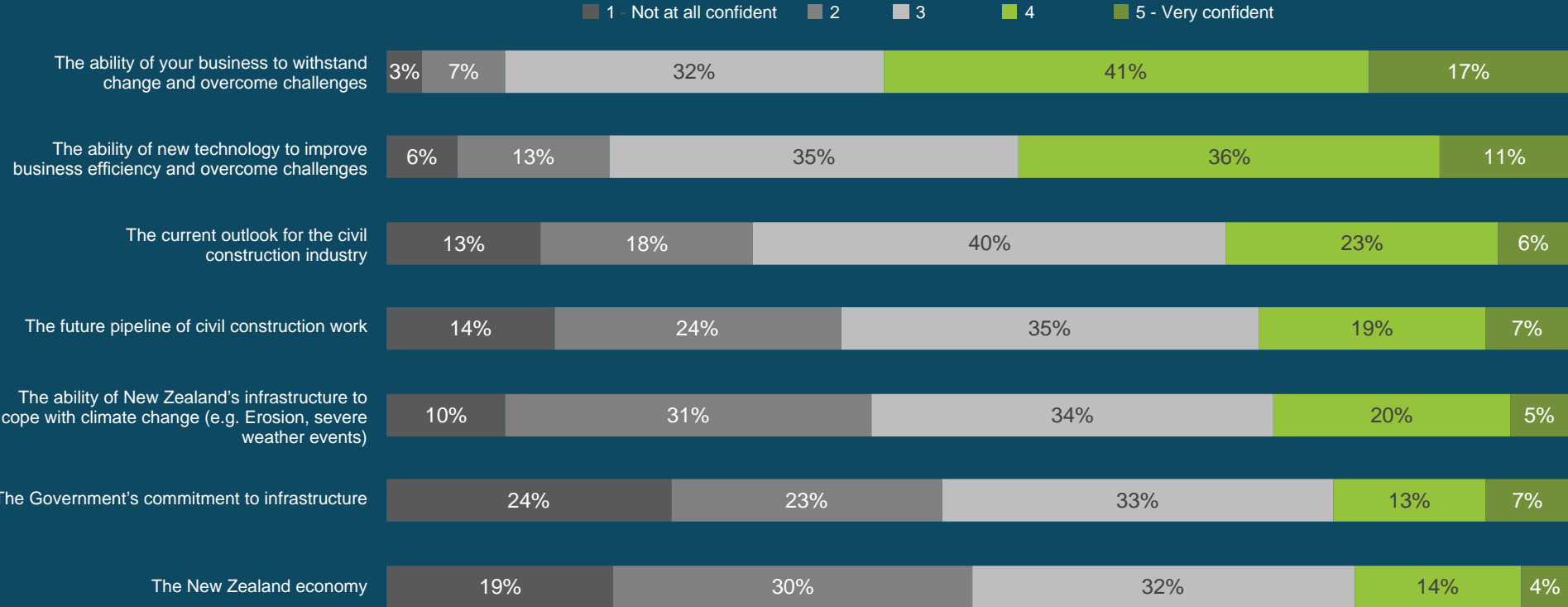
2019



Q4. What area / type of project within civil construction do you plan to increase your capability in over the next 12 months?
 Base: 2019 Total (n=186), 2020 Total (n=188)

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



Q5. Thinking about the future, how confident are you in...
 Base: 2020 Total (n=188)

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.



Q5. Thinking about the future, how confident are you in... Q6. Why did you give the rating of confident for the current outlook of the civil construction industry?

Base: 2020 Total (n=188)

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.

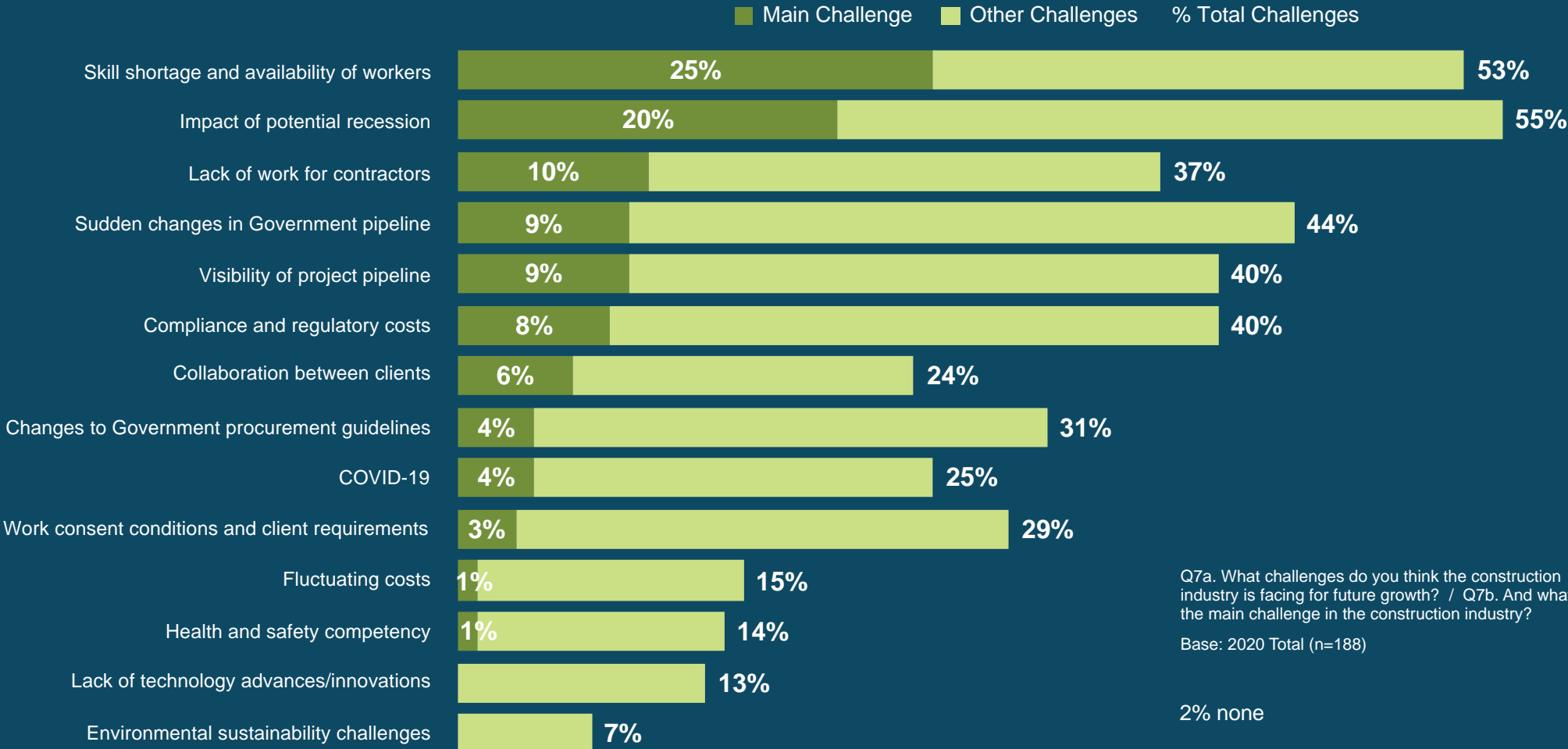


Q5. Thinking about the future, how confident are you in... Q6. Why did you give the rating of confident for the current outlook of the civil construction industry?

Base: 2020 Total (n=188)

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



Q7a. What challenges do you think the construction industry is facing for future growth? / Q7b. And what is the main challenge in the construction industry?

Base: 2020 Total (n=188)

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

Q8. What do you think could be done to overcome the issue of ?

Base: 2020 Total (n=188)



BUSINESS SUSTAINABILITY & COVID-19 IMPACTS

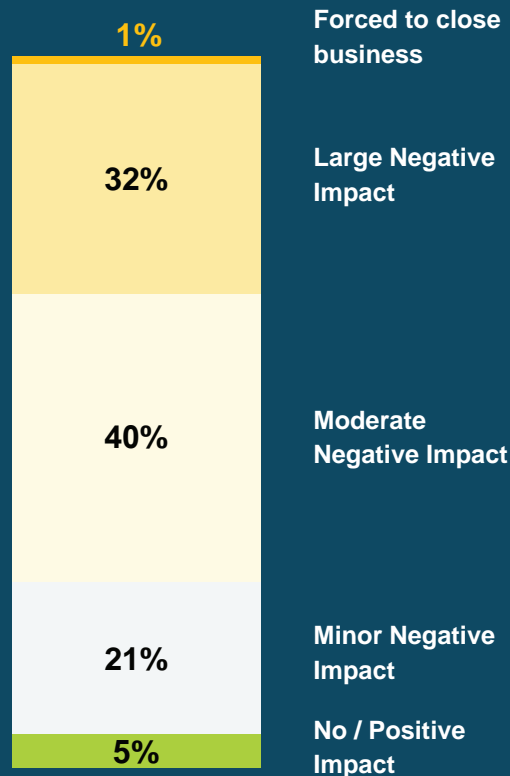
Attenuator fence installation near Kaikoura.
Photo by Rob North, Rock Control

COVID-19

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



26%

Uncertainty of work pipeline



23%

Cashflow



21%

Loss of profit



19%

Contracts cancelled or deferred



6%

Business productivity impacts



2%

Added costs of compliance

Q29. What impact has COVID-19 had on your business? / Q30. What has been the biggest impact of COVID-19 on your business?

Base: 2020 Total (n=188)

COVID-19

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

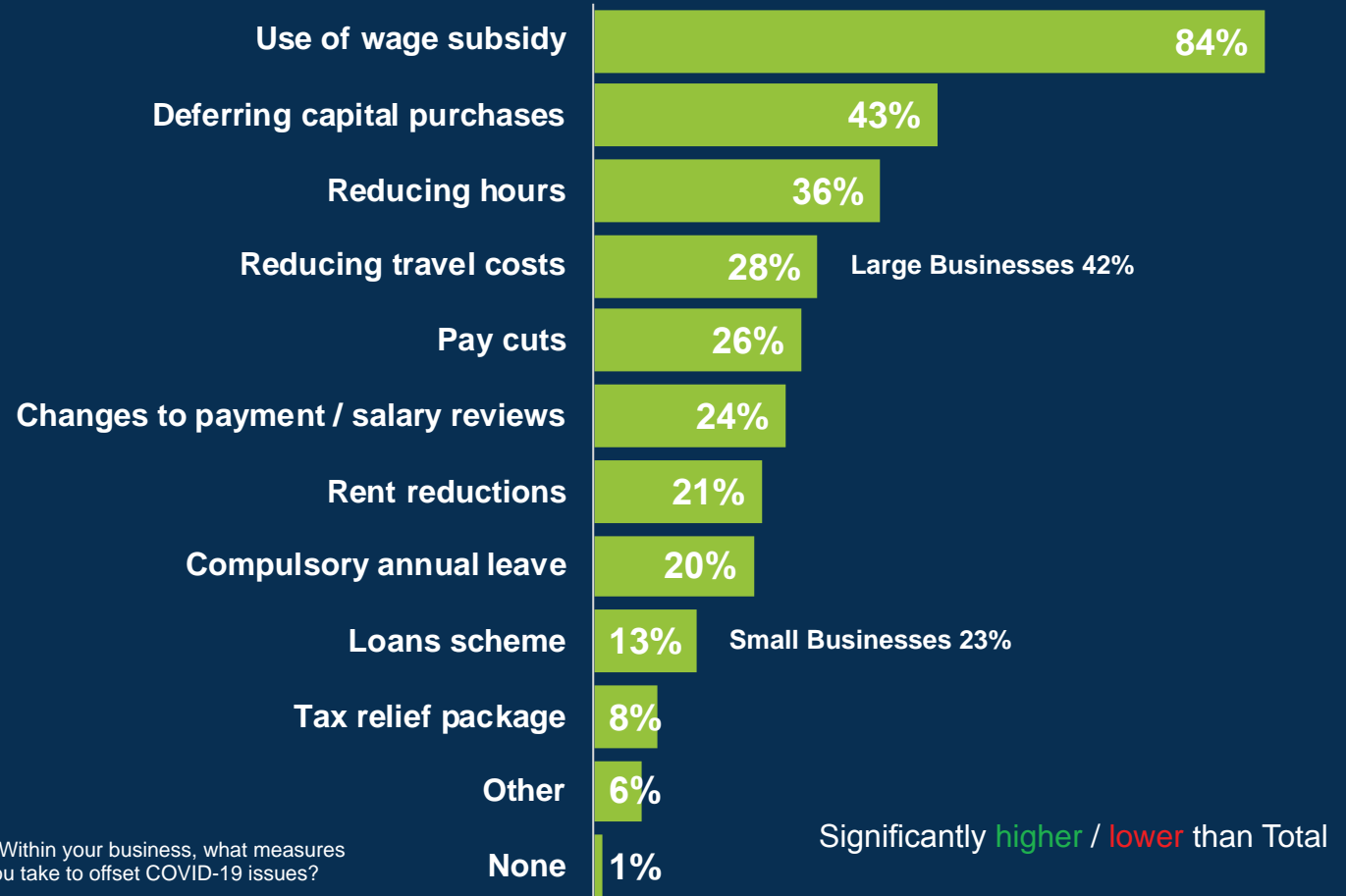
Minimum actual or predicted revenue loss of 40% over the period of a month when compared to the same time last year

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

<https://workandincome.govt.nz/covid-19/wage-subsidy-extension/index.html>

Q31. Within your business, what measures did you take to offset COVID-19 issues?

Base: 2020 Total (n=188)



COVID-19

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



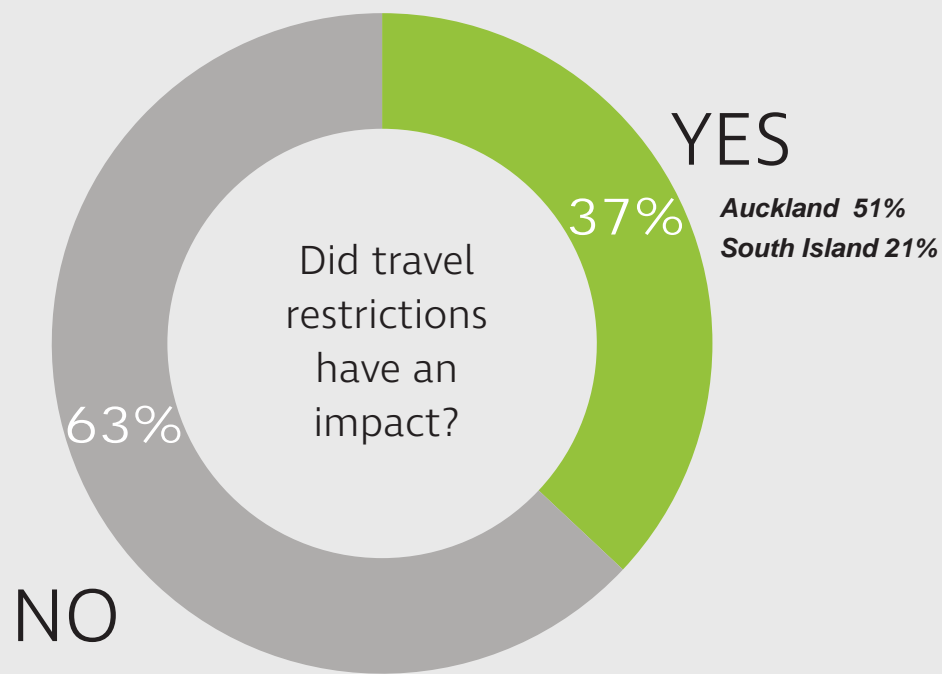
Building a temporary bund to hold out the tide.
Photo by Michelle Bathurst, EPL Construction

Q36a. Were you forced to lay off staff because of COVID-19? / Q36b. How many staff did you need to lay off due to COVID-19?

Base: Owner, Director, General Manager, Project Manager, Fleet Manager, 2020 (n=127), 2020 Total (n=188)

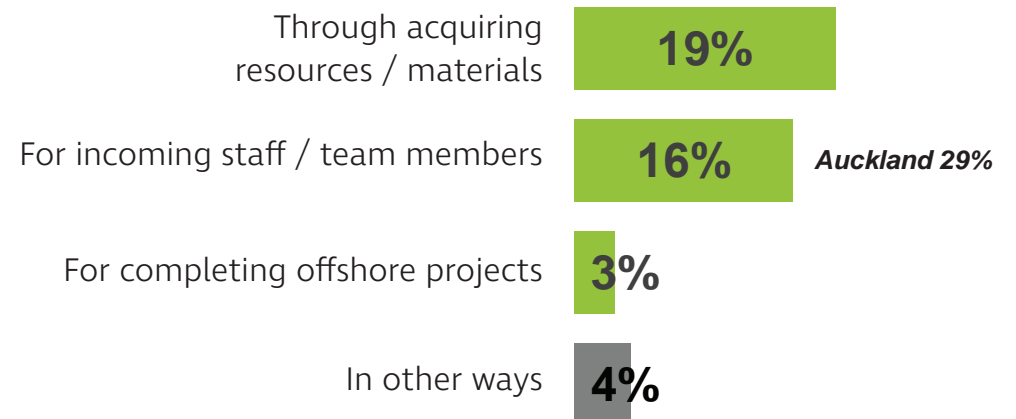
Auckland businesses felt the impact of international travel restrictions considerably more than other regions, mainly for incoming staff members. The main impact for most of the country was in acquiring overseas resources and materials.

MEASURES TAKEN TO OFFSET COVID-19 ISSUES



Q33. Have restrictions on international travel impacted on your business?
 Base: 2020 Total (n=188)

How has it impacted?



Significantly higher / lower than Total



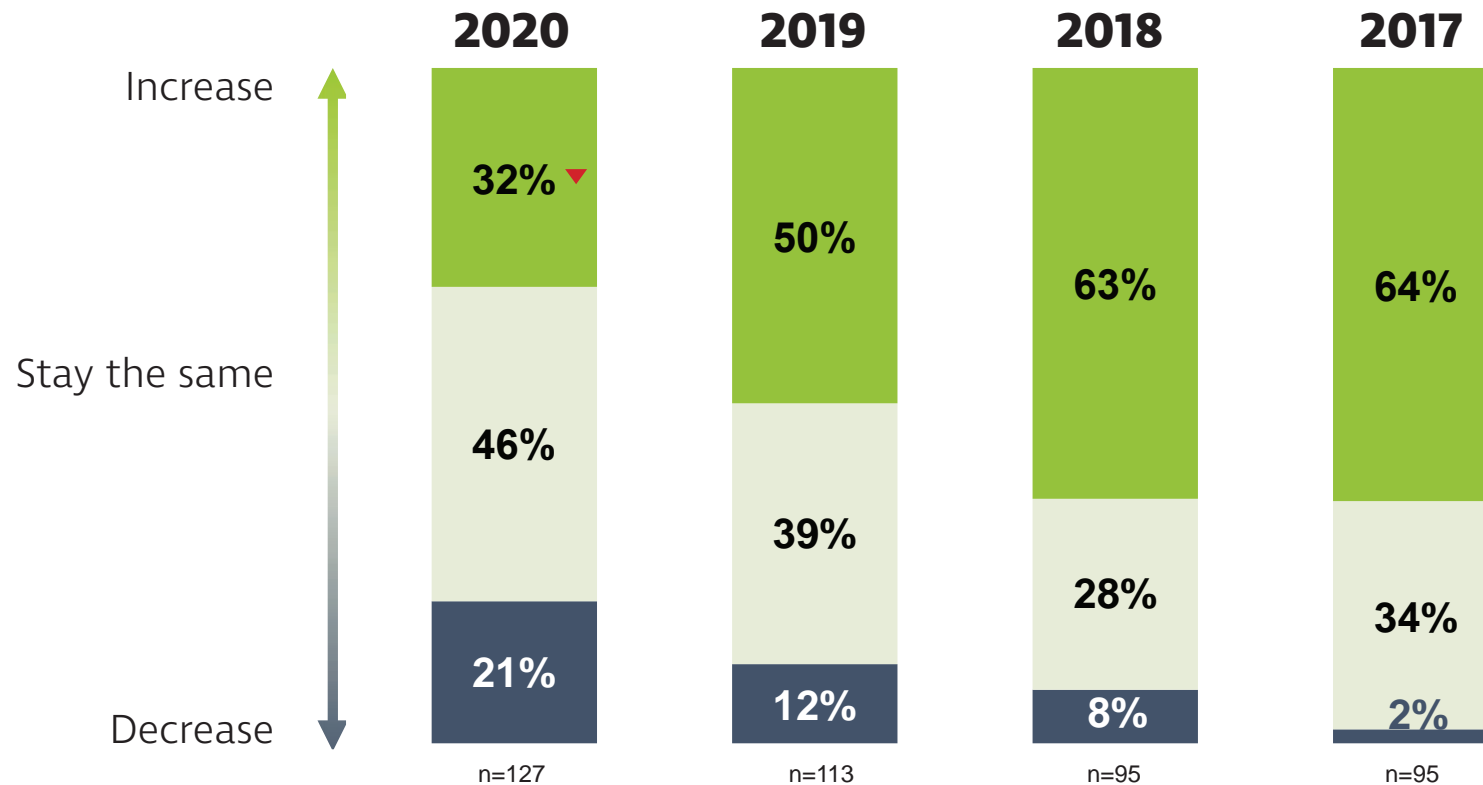
WORKFORCE

A custom designed and built conveyor being put to good use.
Photo by Shona Tokana, Pipeline & Civil

COVID-19

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



Q19. Over the next year, do you think your requirement for staff will...

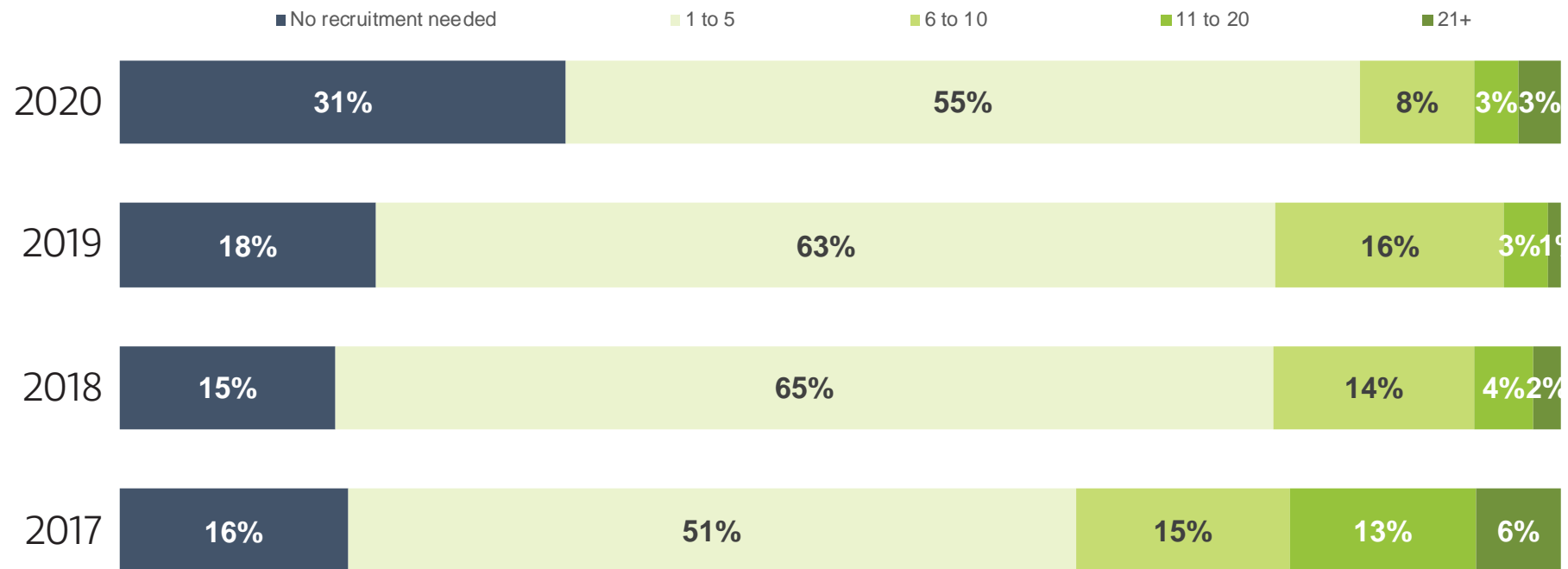
Base: Owner, Director, General Manager, Project Manager, Fleet Manager

▲▼ Significantly higher / lower than 2019

COVID-19

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?



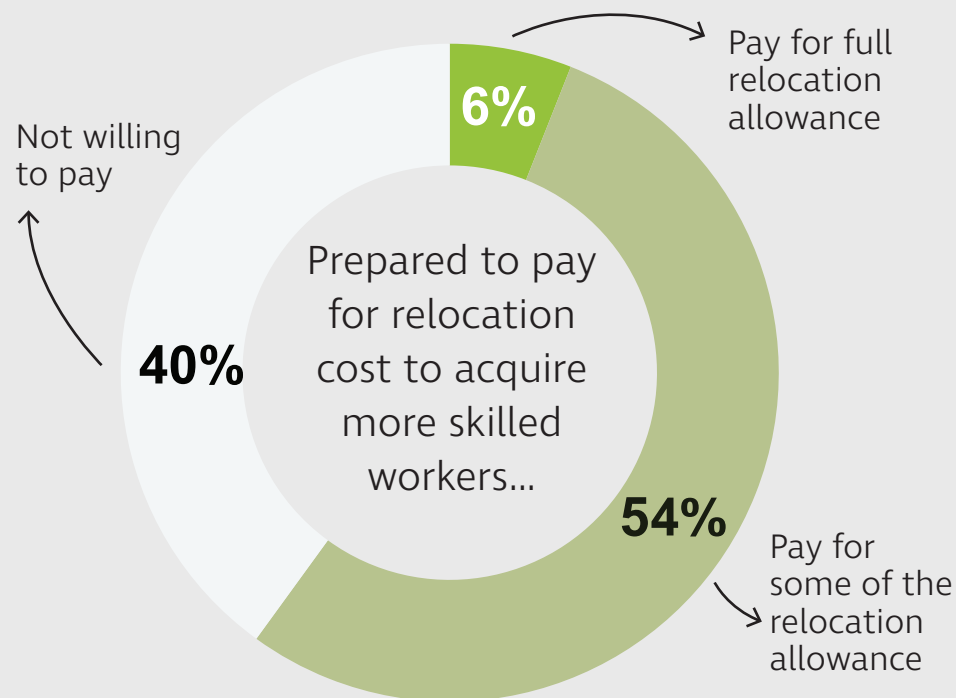
Q17. How many staff would you recruit today if people with the right skills were available?

Base: Owner, Director, General Manager, Project Manager, Fleet Manager

▲▼ Significantly higher / lower than 2019

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








Q18. Would you be prepared to invest/pay for relocation cost to get more skilled workers? / Q20a. Are you applying any recruitment incentives to help recruit staff? / Q20b. What are you putting in place to help with recruitment?

Base: Those who would recruit in 2020 if found available skilled staff (n=126)

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

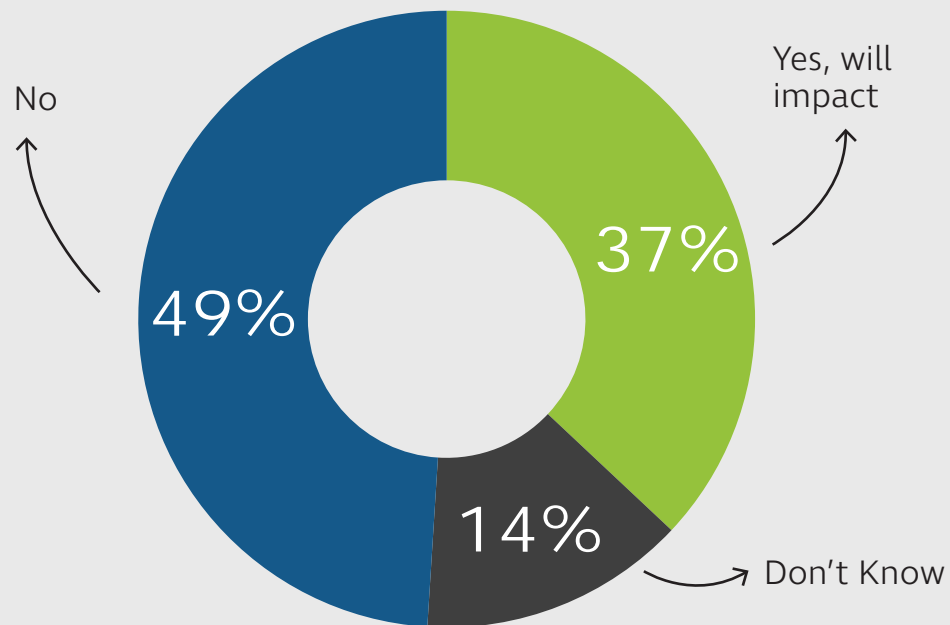


Excavators performing a lake mouth opening
Photo by James Sokalski – JPS Earthmoving

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?



Q11. Have your clients indicated that your business's sustainability (economic, social, environmental) practices will impact their procurement decision making? / Q12. Which of the following procurement initiatives are affecting your business?

Base: Total Sample 2020 (n=188)

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.

TECHNOLOGY IS BEING USED TO MEASURE...

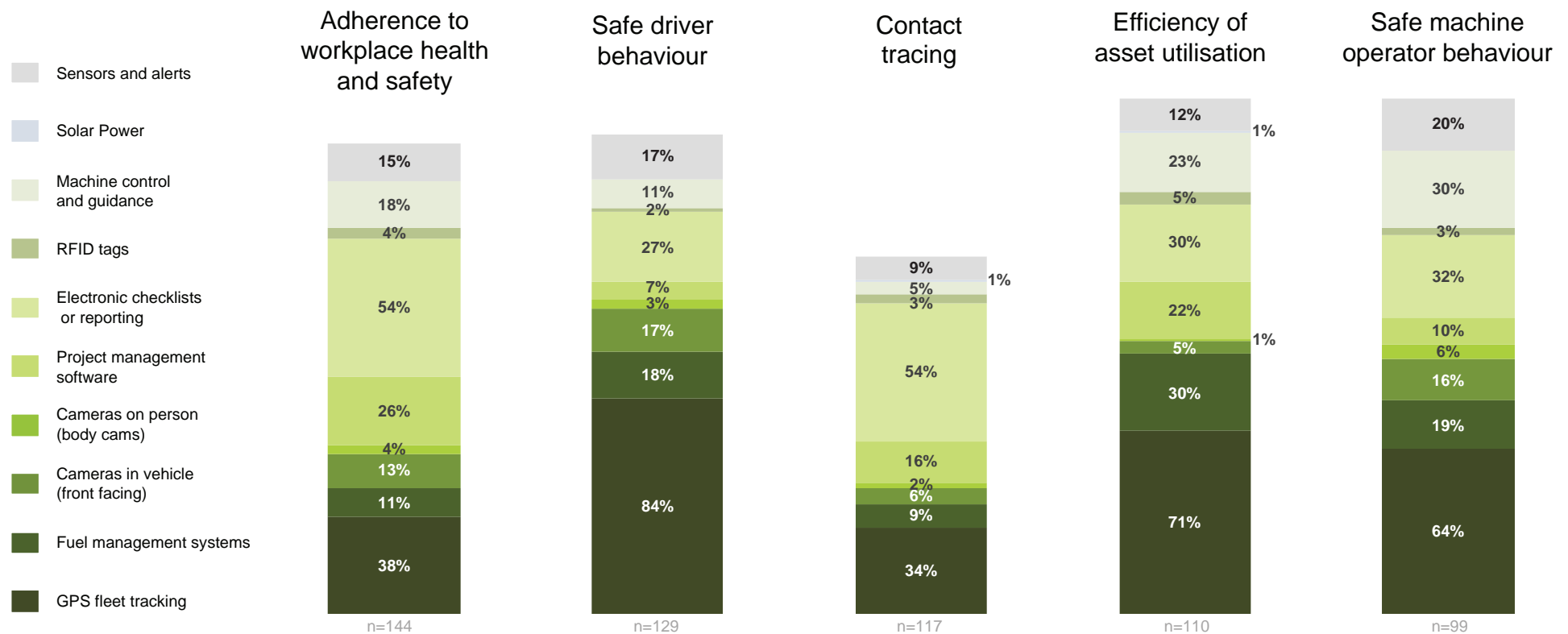


Q15. Are you using technology to measure the following?

Base: Total Sample 2020 (n=188)

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...

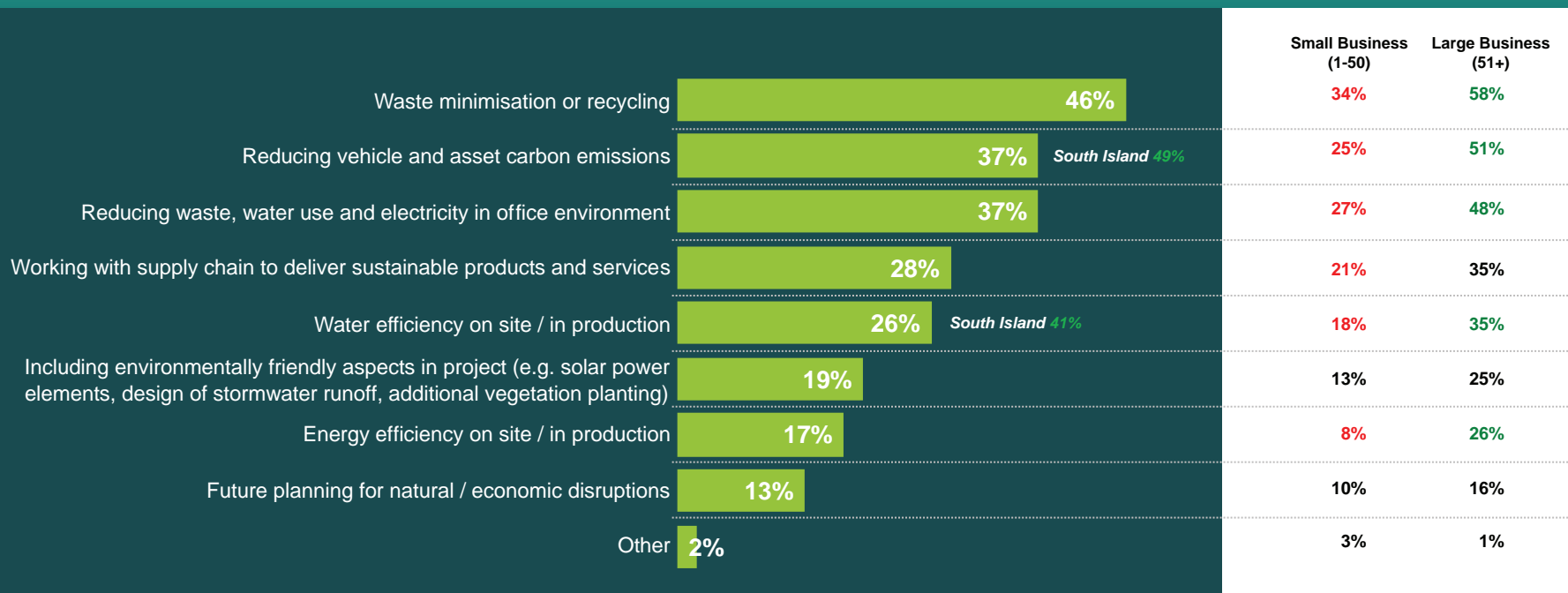


Q16. And what technology are you using to measure...?

Base: Those using each technology

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

Q14. Is your business taking action to become more environmentally sustainable in any of the following areas?

Significantly higher / lower than Total

Base: Total Sample 2020 (n=188)

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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CONSTRUCTION INDUSTRY
SURVEY

2020



A partnership between Teletrac Navman and Civil Contractors New Zealand

Piling progress at Ahaura.
Photo by Todd Wilkins – HEB Construction



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