

Building a sustainable future:

Assessing subcontractor sustainability practices in New Zealand

June 2025

Executive summary

This report, "Building a Sustainable Future: Assessing Subcontractor Sustainability Practices in New Zealand", presents a thorough analysis of the current state of sustainability practices and perceptions within New Zealand's subcontractor community in the building and construction sector. Recognising the industry's significant contribution to the national economy and greenhouse gas emission, this research investigates the crucial role subcontractors play in achieving New Zealand's net-zero carbon goals.

The report reveals a growing awareness of sustainability among subcontractors, yet identifies a gap between interest and active implementation, particularly in areas like sustainable procurement and the utilisation of sustainability rating tools. Engagement in levels vary significantly - highlighting the need for targeted interventions to address diverse levels of readiness. Key drivers for adopting sustainable practices include attracting customers, supporting national environmental goals, and enhancing competitiveness, with education and awareness being strong influencing factors.

Subcontractors see their potential to contribute to cost-effective carbon reduction through early involvement, value engineering, and material selection expertise.

While some are addressing their carbon footprint, this practice is not yet widespread, presenting an opportunity for sector-wide expansion. The current sustainability efforts are focussed on resource efficiency, waste management, and sustainable procurement, all with room for improvement in carbon reduction strategies. Moreover, the influence of sustainability rating tools and frameworks is acknowledged, underscoring their importance in driving sustainable behaviours. The report also identifies barriers hindering broader adoption, including perceived high initial investment, slow return on investment, a lack of robust sustainable building codes, and insufficient stakeholder coordination. To overcome these challenges and foster a more sustainable future, key recommendations are proposed:

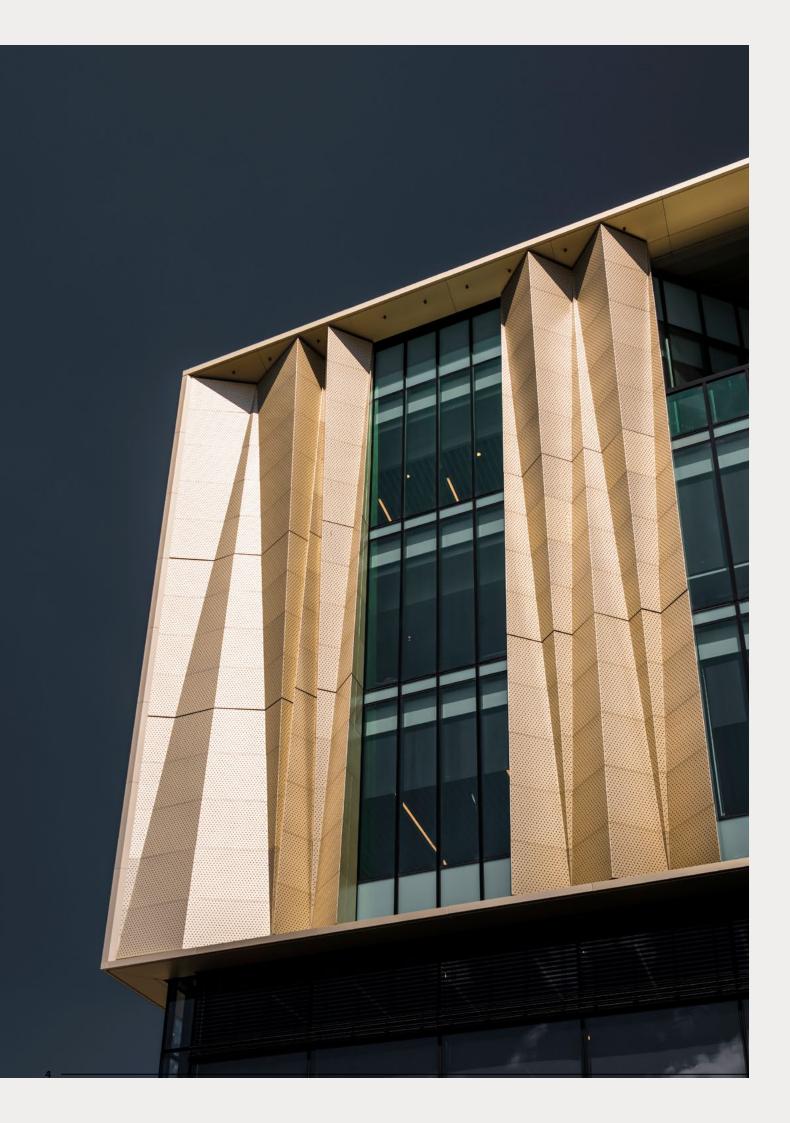
- Develop and deliver targeted education and training programmes tailored to different trades and business sizes.
- Implement financial and procurement incentives to encourage the adoption of sustainable practices.
- Strengthen regulatory frameworks by establishing clear and consistent sustainable building codes.
- Promote greater collaboration and coordination among different industry stakeholders.
- Provide resources and support for carbon footprint assessment and reduction target setting.
- Enhance supply chain sustainability through the promotion of locally sourced and certified materials.
- Support waste reduction and recycling initiatives by improving infrastructure and providing training.

This research provides a critical data-driven overview of subcontractor sustainability practices in New Zealand. While progress is evident, a concerted and collaborative effort involving the different stakeholders, i.e., subcontractors, main contractors, clients, policy makers, and industry associations, is essential to accelerate the transition towards a more sustainable built environment.



Kishan Seger Technical Director – Sustainability





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About this report

This report presents the findings of a comprehensive survey exploring the current state of sustainability practices and perceptions among subcontractors in the New Zealand building and construction sector. Commissioned by Preformance (a Southbase company) through a grant from Callaghan Innovation, this research aims to provide valuable insights into the challenges and opportunities facing subcontractors as the industry strives to achieve a more sustainable built environment. The New Zealand construction sector plays a vital role in the nation's economy and currently accounts for around 20% of New Zealand's annual greenhouse emissions. Thus, the construction sector must decarbonise in order for New Zealand to meet its net-zero carbon goals. Subcontractors, who carry out a substantial portion of physical construction work, are essential to this transition. Understanding their current practices, perceptions, and needs is crucial for developing effective strategies to promote industry-wide sustainability.

This report addresses this need by providing a data-driven snapshot of subcontractor sustainability in New Zealand. The report explores:

1. Current sustainability practices:

Examining the specific sustainability initiatives that subcontractors are currently implementing, focusing on areas such as resource efficiency, waste management, sustainable procurement, and carbon emissions.

2. Perceptions and attitudes:

Analysing subcontractors' views on the importance of sustainability, their perceived barriers and opportunities, and their engagement with sustainability rating tools and frameworks.

3. Challenges and opportunities:

Identifying the key challenges that subcontractors face in implementing sustainable practices, as well as the opportunities that exist to support and encourage their efforts.

4. Recommendations:

Based on the research findings, practical recommendations for subcontractors, main contractors, clients, policymakers, and industry associations to foster sustainability and resilience within the sector.

This research was undertaken by Kat Raneses (Analyst - Sustainability) on behalf of Preformance between October 2024 - April 2025

Introduction: Setting the scene

Sustainable construction has gained significant traction in recent years as the construction industry grapples with the need to minimise environmental impacts while maximising social and economic benefits.

New Zealand's construction industry, a significant economic driver, faces mounting pressure to minimise its environmental footprint. The national commitment to net-zero carbon emissions by 2050 necessitates a fundamental transformation of the building sector. This transition demands a collaborative approach involving all key stakeholders: architects, engineers, main contractors, and, critically, subcontractors. The current context for New Zealand subcontractors is a complex one. While client demand for sustainable building practices is on the rise, alongside evolving regulations and a growing awareness of embodied carbon, subcontractors often operate with tight margins. Accessing the necessary resources and expertise to implement comprehensive sustainability strategies can be a significant hurdle.

This report seeks to illuminate these complexities, offering a clearer understanding of the challenges and opportunities at hand.







Subcontractors are the backbone of the construction industry, responsible for executing a substantial portion of the work on any given project. Their collective actions, therefore, exert considerable influence on the industry's overall sustainability performance. From selecting materials and managing waste to improving energy efficiency and reducing carbon emissions, subcontractors are at the forefront of implementing sustainable practices on a daily basis. Their active engagement and commitment are indispensable for achieving meaningful progress towards a greener built environment. In New Zealand, a significant proportion of subcontractors are small to medium-sized enterprises (SMEs), often lacking dedicated sustainability personnel or resources. Understanding their specific needs and challenges is paramount to developing effective support mechanisms. Within the New Zealand construction industry, there is a growing consensus that collaborative strategies are essential to achieving shared sustainability goals.

This report focuses specifically on subcontractors, recognising their unique and often under-recognised position within the construction ecosystem. It acknowledges the distinct challenges and opportunities they encounter regarding sustainability and emphasises the need for a targeted approach to effectively support their efforts.

Recent research shows that the integration of sustainability practices among subcontractors is essential for achieving overall sustainability goals within supply chains.

Respondent snapshot: Who participated?

This section presents a profile of the subcontractors who participated in the survey, providing crucial background for interpreting the report's findings. The respondent's characteristics – including trade, business size, operating sector, and other key demographics – have been examined, facilitating the identification of trends and patterns within the data and allowing for consideration of how various factors may have shaped their sustainability practices.

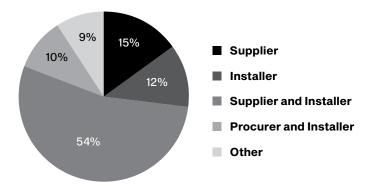
The survey captured a diverse range of subcontractor businesses. The majority of respondents identified as both suppliers and installers (54%), followed by suppliers (15%), installers (12%), with a smaller proportion being both procurers and installers (10%). This representation ensures that the findings reflect the varied roles within the construction supply chain. Furthermore, a significant representation from trades specialising in site supply, steel, concrete, and service supply was seen. The respondents operate across various sectors, including Commercial (52%), Residential (26%), and Civil (19%). This diverse sectoral engagement provides a holistic view of sustainability practices across different project types. The majority of respondents operate nationally (49.5%), while others focus on regional markets (43.9%), particularly in Auckland and Canterbury.

The experience of the businesses surveyed ranges from relatively new entrants to established players with decades of experience. While a significant portion of respondents have been in business for more than 21 years (57%), we also had a strong representation from businesses with 11-20 years of experience (21.5%), providing valuable context. The turnover figures indicate a mix of small, medium, and large enterprises, with the largest group falling within the \$5M to \$20M bracket (37.4%). This demographic information helps us understand the relationship between business maturity, financial capacity, and the adoption of sustainable practices.

Business type

Diverse range of participating organisations

This distribution provides a comprehensive view from various actors within the construction supply chain



Trade

Wide spectrum of trades within the construction industry

This representation ensures the findings reflect diverse perspectives and experiences across different construction specialisations

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Carpentry, Civil, Concrete, Electrical, Façade, Fire, Fit-out, Flooring, HVAC, Joinery, Plumbing, Roofing, Service Supply, Site Supply, Steel, Steel Reinforcing, Timber, Waterproofing

The subcontractors who responded to the survey represented a diverse cross-section of businesses operating across New Zealand's construction industry.



Key demographics

Business scope

Fairly split in terms of operational reach

This suggests a good representation of both larger and more localised subcontractors.

Operating sector

Predominantly active in building construction

Respondents primarily operate within the commercial sector.

National	53%
Regional	47%
Other	7%

Commercial	52%
Regional	26%
Civil	19%
Other	2%

Years in operation and annual turnover

A mix of established and newer businesses

This lends credibility and depth of experience to their perspectives on sustainability.

Annual turnover	0 – 5 years	6 – 10 years	11 – 20 years	21+ years
1M – 5M				
5M – 20M				
20M – 50M				
50M – 100M				
100M+				
Prefer not to answer				



discuss industry actually engagement consultants option specify suppliers early subcontractors items stages subcontractors esign products access trade requirements embodied low contractors site use construction steel sustainable benefits effective contractors waste involvement earlier value eci selection carbon architects designs possible materials efficient market able projects generally detail needs project knowledge around reduce system wastage supply member type engineers solutions weight

Sustainability awareness and engagement: From interest to action

The findings reveal a generally high level of interest in sustainability among subcontractors.

This section delves into the heart of subcontractor engagement with sustainability, exploring their levels of interest, involvement, the driving forces behind their actions, and the challenges they encounter. Understanding this landscape is crucial for fostering a more sustainable construction industry.

Levels of interest and involvement

Understanding the interplay between interest and action is fundamental to gauging the true level of sustainability engagement within the subcontractor community. While awareness of sustainability principles may be high, the crucial question is whether this translates into tangible involvement in sustainable practices. This section explores the levels of interest and involvement across various sustainability areas, identifying potential gaps between awareness and implementation and highlighting where targeted interventions might be most effective.

Sustainability planning and resources

This section looks the current state of sustainability planning and resource management among subcontractors. It analyses the prevalence of formal sustainability plans, the focus of dedicated sustainability teams, and the role of sustainability certifications within their operations. Understanding these foundational elements provides critical insight into the existing capacity and strategic direction of subcontractors in contributing to a more sustainable built environment.

Certification landscapes and motivation

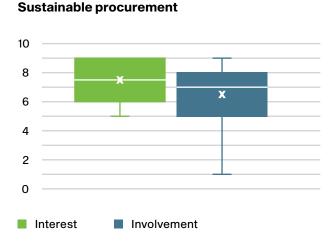
Sustainability certifications serve as powerful indicators of a company's commitment to environmentally and socially responsible practices. This section investigates the current landscape of sustainability certifications among subcontractors, identifying the most prevalent certifications and exploring the underlying motivations for seeking them. Understanding the certification landscape and the driving forces behind it sheds light on the role of third-party verification in promoting sustainable practices within the construction industry.

Cost-effective sustainability initiatives

This aspect explores the potential for achieving environmental benefits and reducing costs simultaneously within construction projects. It investigates the unique perspectives and recommendations of subcontractors, leveraging their practical experience and supply chain knowledge to identify opportunities for more economical sustainable solutions. Understanding these insights is crucial for promoting resource efficiency, minimising waste, and driving value-conscious sustainability practices throughout the industry.

Levels of interest and involvement

Subcontractors are showing a growing awareness of sustainability, but the transition from interest to active engagement reveals some nuances.

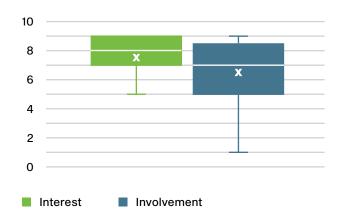


The box plots illustrate the distribution of interest and involvement levels (on a scale of 1 to 9) across four sustainability areas: Sustainable Procurement, Sustainable Practices, Sustainable Design, and Sustainability Rating Tools.

The length of the boxes and the whiskers in the plots provide insights into the variability of responses. The data suggests a positive inclination towards sustainability among subcontractors, with a strong interest across various domains. However, there is a discernable gap between expressed interest and actual involvement, particularly in areas like Sustainability Rating Tools. Efforts to bridge this gap by addressing potential barriers and providing support for implementation could be crucial in advancing sustainability within the subcontractor community.



Sustainable practice



Generally high interest

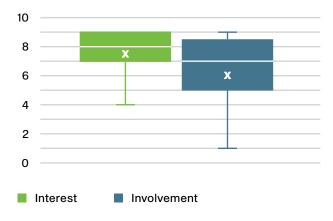
Across all four categories, the plots for "Interest" tend to be positioned higher on the scale compared to "Involvement". This suggests that subcontractors generally express a greater level of interest in sustainability topics than their current level of active involvement.

Sustainable practices - Highest interest and involvement

The plots indicate that "Sustainable Practices" appear to have the highest median interest and involvement levels among the respondents. The range of scores also suggests a relatively strong and consistent engagement in this area.



Sustainable design



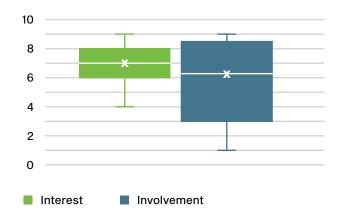
Sustainable procurement and design - moderate engagement

"Sustainable Procurement" and "Sustainable Design" show interest levels that are moderately high, but the involvement levels appear to be slightly lower, indicating a potential area for growth in translating interest into action.

Sustainability rating tools - potential gap

"Sustainability Rating Tools" shows a noticeable gap between interest and involvement. While there is a degree of interest, the involvement levels appear lower and more spread out, suggesting that subcontractors may be less actively utilising or engaged with these tools.

Sustainability rating tools



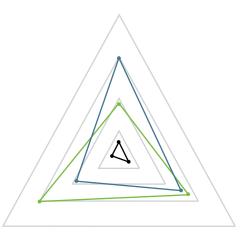
"We work on sustainability from two angles: how we operate as a company and what we offer to our customers. Within our customer offering, we commit to improving Hilti products, our shared projects (the building as well as the jobsite) and working to push the construction industry as a whole towards more sustainability".

(Hilti New Zealand)

Sustainability planning and resources

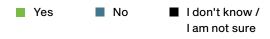
The data reveals a mixed landscape in terms of sustainability planning and resources among subcontractors. While a majority have a sustainability plan, the establishment of dedicated sustainability teams is less prevalent. There is a growing engagement with sustainability certifications or actively pursuing them. These findings underscore the varying levels of formalization and resourcing dedicated to sustainability.

Sustainability plan



Sustainability team

Sustainability certification





Sustainability plan

A significant majority of the surveyed subcontractors (56.1%) reported having a sustainability plan in place. However, a notable proportion (34.6%) indicated they do not have one, and a smaller percentage (9.3%) were unsure. This suggests that while a considerable portion of the industry is formalising their sustainability commitments, there is still room for growth in developing structured plans.



Sustainability personnel

The presence of dedicated sustainability team is less common among the respondents. Only 35.5% reported having a sustainability team or a sustainability professional within their organization. A larger proportion (60.7%) indicated they do not have a dedicated team, and a small fraction (3.7%) were unsure. This highlights a potential area for development in building internal expertise and focus on sustainability.

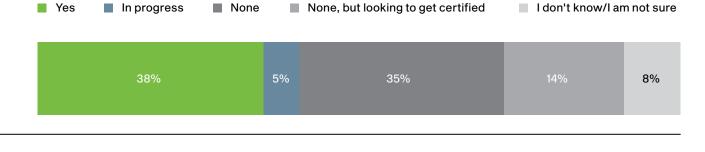
"We're a small organisation — with a total team of around seventy, most of whom are out in the field. Given our scale, we can't justify a dedicated sustainability team. It's not a lack of commitment, but a practical reality of our size."

(Contech)



Certification landscape and motivations

Sustainability certifications serve as tangible indicators of a subcontractor's commitment to environmental responsibility. The certification landscape among subcontractors in this survey is dynamic, with a significant number already certified and a strong interest in pursuing certifications. When it comes to sustainability certifications, the responses are varied. The largest segment (38.3%) specified that they hold certain certifications or have achieved specific ratings. A smaller portion (4.7%) indicated they are in the process of obtaining certifications. Notably, 34.6% reported having no certifications, while 14.0% stated they do not currently have certifications but are looking to get certified. A further 8.4% were unsure. This indicates a growing awareness of the value of certifications, with a considerable number already certified or planning to become so.



To attract customers	23%
To support NZ in its road net	26%
To compete in NZ's growing market	26%
To compete in the international market	4%
To prepare for the future in case it becomes mandatory	20%

The data reveals several key drivers behind the decision to obtain or plan for sustainability certifications:

Supporting New Zealand's road to net zero

Many subcontractors are driven by a sense of responsibility and a commitment to contributing to national sustainability goals.

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Competing in New Zealand's growing market

As sustainability becomes increasingly important in the local construction sector, certifications are seen as essential for staying competitive.



Attracting customers

A prominent motivation is the desire to appeal to environmentally conscious clients and gain a competitive advantage in the market.



Preparing for the future

Some organisations view certification as a proactive measure to prepare for potential future mandatory requirements or evolving industry standards.

5

Competing in the international market

For some, particularly those specifying certifications like EPDs and ISO standards, international market access is a key motivator.

The primary motivations revolve around market competitiveness, environmental responsibility, and future preparedness.

"On Green Star projects, our environmental credentials are definitely a key factor particularly when submitting registrations of interest. Our ISO certifications resonate with clients, but it's more than just ticking boxes. The actions we've taken have not only strengthened our sustainability credentials but also delivered cost savings. The two go hand in hand."

(Grayson Engineering (2015) Ltd)

Cost-effective sustainability initiatives

Procurement processes are a key catalyst. With feedback from subcontractors noting that design and build, pre-construction services agreement (PCSA) contracts allowing for more collaboration and innovation leading to more cost effective sustainability initiatives. As opposed to a traditionally procured project with a short tender period that drives the cost of sustainability initiatives up.

Early Contractor Involvement (ECI) and pre-tender design review

A recurring suggestion was the importance of engaging subcontractors much earlier in the project lifecycle, ideally during the design phase or even at the concept stage. This early involvement allows subcontractors to provide practical, buildable, and cost-conscious input, potentially avoiding over-engineered designs, costly rework, and consent amendments later on. Several respondents specifically mentioned the benefit of pre-tender design reviews.

Value engineering and practical design considerations

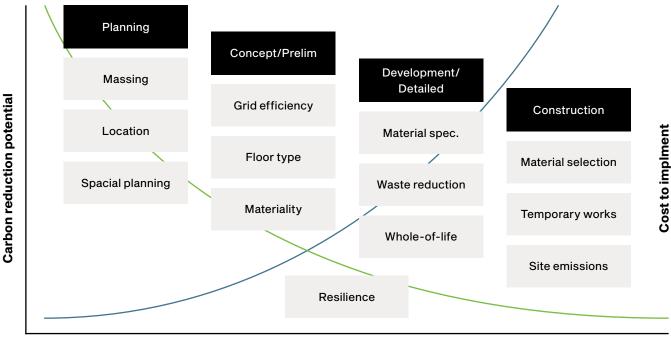
Subcontractors emphasised their on-the-ground experience and understanding of constructability. They recommended designing with practical installation in mind, avoiding overly complex or bespoke solutions that lead to increased waste and costs. Value engineering projects with the most economical and fit-for-purpose options was also frequently mentioned.

Material selection and sourcing expertise

Subcontractors highlighted their direct access to a wider range of suppliers and their knowledge of material costs and sustainable alternatives. They recommended sourcing consumables and primary materials from sustainably produced sources, considering the embodied carbon of materials (with examples of using embodied carbon calculators and sourcing from EPD accredited mills), and promoting locally sourced options to reduce shipping costs and environmental impact. Some suggested limiting the number of material suppliers to streamline logistics and potentially leverage better pricing.

Optimising design for material efficiency and waste reduction

Recommendations included designing structures and components to minimise material wastage (e.g., considering standard sheet sizes and timber lengths), optimising reinforcing steel content in concrete structures, and exploring off-site prefabrication to reduce on-site waste.



Project timeline

Lifecycle cost considerations

One interesting suggestion was related to demonstrating a focus on lifecycle cost and material efficiency (e.g., to specify 56-day concrete strength instead of 28-day strength, allowing for potential cement savings without compromising performance over the longer term).

Integration of building systems

Examples like integrating HVAC and lighting with security systems to reduce energy consumption showcased the potential for subcontractors to identify cost-effective sustainability measures through a holistic understanding of building systems.

Challenging over-specification

Some responses suggested that engineers and architects sometimes over-specify materials or design overly complex systems. Subcontractors believe they can offer more practical and cost-effective alternatives based on their installation experience.

Improved communication and collaboration

A general theme was the need for better communication and collaboration between design professionals and subcontractors throughout the project. This includes architects and consultants engaging in early discussions with specialist subcontractors to benefit from their expertise.

Fostering better collaboration and incorporating subcontractor expertise early in projects could unlock significant opportunities for achieving more sustainable and cost-effective building outcomes.



Current sustainability practices: On-theground initiatives

On-site sustainability practices represent the practical manifestation of a subcontractor's commitment to environmental stewardship. This section examines the practical actions and on-the-ground measures that subcontractors are currently implementing to advance sustainability within their operations and projects. It delves into the specific initiatives being adopted across various areas of their work, providing a snapshot of the tangible steps the industry is taking towards more environmentally and socially responsible practices. Understanding these current initiatives is essential for gauging the industry's progress and identifying areas of innovation and widespread adoption.

An overview of the sustainability initiatives currently being practiced by the surveyed subcontractors, offering a practical insight into the industry's on-the-ground efforts, is presented. The data reveals the prevalence of various sustainable approaches, highlighting the areas where subcontractors are most actively engaged in promoting environmental responsibility within their operations.

Current sustainability initiatives

Promoting sustainable design, development and construction practices	13%
Encouraging the sustainable use of resources and new materials	17%
Reducing energy consumption	15%
Reducing water consumption	9%
Reducing waste generation and encouraging responsible disposal of waste	19%
Sourcing low carbon products	9%
Opting for suppliers that practice sustainable supply chain management	12%
Encouraging the use of sustainable transportation	7%

Reducing waste generation and encouraging responsible disposal of waste

Emerges as the most widely practiced sustainability initiative among the subcontractors surveyed. This suggests a strong focus on minimising their environmental impact through effective waste management.

Encouraging the sustainable use of resources and new materials

Is also highly prevalent, indicating a significant effort to optimise material usage and explore more sustainable material options

Reducing energy consumption

Is another key area of focus, suggesting that many subcontractors are actively working to improve energy efficiency within their operations and projects.

Promoting sustainable design, development, and construction practices demonstrates an engagement with broader sustainability principles that influence project delivery from inception.

Opting for suppliers that practice sustainable supply chain management

Shows an increasing awareness of the importance of the wider value chain in achieving sustainability goals.

Sourcing low carbon products and reducing water consumption

Are being practiced by a notable portion of respondents, indicating a growing consideration of embodied carbon and water efficiency.

Encouraging the use of sustainable transportation

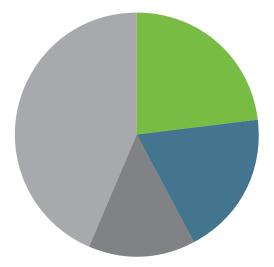
Currently has a lower adoption rate compared to other initiatives, suggesting a potential area for future focus and improvement.

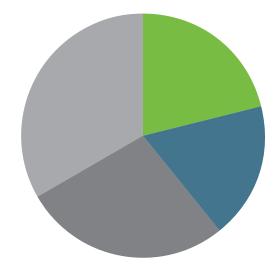
Resource efficiency: Energy

There is a varied approach to energy performance monitoring and consideration of renewal energy.

Does your organisation monitor the energy performance of its buildings and facilities?

Has your organisation considered incorporating renewable energy sources into its projects or office space?





Yes, regularly	23%
Yes, occasionally	19%
No, but planning to	14%
No, not currently	43%

Yes, and implemented	21%
Yes, but not yet implemented	18%
Still thinking about it	27%
No, not considered	33%

Monitoring energy performance

Energy performance monitoring among subcontractors is not yet a standard practice, with the largest group (43%) not currently engaging in it. Regular monitoring is limited to 23%, while a smaller portion (19%) monitor occasionally. In addition, there is a positive indication of future intent, as 14% of respondents are planning to implement energy performance tracking, suggesting a growing awareness of its importance.

The data highlights a significant opportunity for improvement in the area of energy performance monitoring among subcontractors. The fact that over half of the respondents are either not currently monitoring or only doing so occasionally suggests a potential lack of awareness of the benefits, the perceived complexity of implementation, or a lack of resources dedicated to this activity.

The relatively low percentage of regular monitoring could hinder organisations' ability to identify areas for energy efficiency improvements, track the impact of any energy-saving initiatives, and ultimately reduce their operational costs and carbon emissions.

However, the segment of subcontractors planning to implement monitoring in the future is a positive indicator. This suggests a growing understanding of the value of energy data and a potential trend towards more proactive energy management.

Consideration of renewable energy

Subcontractors show a growing awareness of renewable energy, with over half having considered its integration, though actual implementation (21%) remains lower than those planning (18%) or still thinking about it (27%). A significant portion (33%) have not yet considered renewable energy highlights a potential barrier to wider adoption. This could be due to factors such as:

Perceived Costs and Payback Periods

The upfront investment in renewable energy systems might be seen as a deterrent.

Lack of Information or Expertise

Some subcontractors may lack the knowledge or understanding of the available renewable energy options and their suitability for their operations. Focusing on raising awareness, addressing potential barriers, and providing support for implementation could be crucial steps in promoting more widespread energy performance monitoring and driving energy efficiency improvements within the industry.

Lease agreements or property ownership

Subcontractors who lease their premises might face limitations in implementing renewable energy installations.

Focus on core business activities

For some, exploring renewable energy might not be seen as a core business priority.

Lack of client demand or incentives

The demand for renewable energy integration in projects might not be consistently strong, and incentives might not be widely accessible or well-understood.

Encouraging wider adoption requires addressing these obstacles and promoting the benefits and accessibility of renewable energy solutions within the construction sector.

Waste management and recycling: Closing the loop

Subcontractors in New Zealand are making efforts to reduce waste and increase recycling, but they face significant challenges related to infrastructure, market demand, and costs.

The data shows that subcontractor waste management practices in New Zealand reveals a positive inclination towards reducing construction and demolition waste, with encouraging recycling and reuse being the most adopted approach, closely followed by efforts to minimise landfill disposal.

This strong emphasis aligns with the nation's increasing focus on circular economy principles and is likely driven by a combination of rising landfill levies, the economic benefits of efficient resource utilization in the face of potential resource scarcity, and growing environmental regulations and expectations from clients and the public. While these trends are encouraging, the lower rate of subcontractors setting specific waste reduction targets suggests an opportunity to promote more systematic and data-driven approaches to waste management.

Furthermore, there is considerable potential to advance circular economy principles within the sector through initiatives such as designing for deconstruction, increasing the utilization of recycled content in building materials, and fostering the development of robust markets for these recovered resources.



Subcontractors in New Zealand are actively engaging in various waste reduction and disposal practices, with encouraging recycling and reuse being the most common (30%), indicating a strong alignment with the country's emphasis on circular economy principles and waste minimisation. Minimising waste sent to landfills (27%) is also a significant focus, particularly relevant given landfill capacity concerns in some New Zealand regions. Furthermore, a considerable portion (24%) are adopting proactive measures like optimised material ordering to reduce waste generation at the source, yielding both economic and environmental advantages. While a smaller percentage (9%) are setting formal waste reduction targets, suggesting an area for potential growth in systematic tracking, the very low rates for "None" and "Other" (1% each) indicate that most subcontractors are implementing some form of waste management practices. Less prevalent approaches include composting organic waste (5%), likely due to its limited applicability in core construction activities, and utilising waste-to-energy technologies (3%), which is understandable given the current infrastructure in New Zealand.

Subcontractors also face notable hurdles in enhancing their respective recycling programmes and waste management, primarily stemming from systemic issues within the waste management sector.

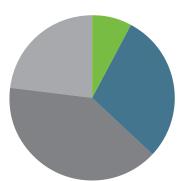
17%
15%
16%
15%
15%
4%
12%
5%
1%

Within the New Zealand construction sector, subcontractors encounter several significant obstacles in their efforts to implement effective recycling programs. Key among these are issues related to the country's waste management infrastructure, including a perceived lack of readily available recycling facilities and collection services specifically tailored for construction and demolition waste, alongside a limited market demand for the resulting recycled materials. These infrastructural and market limitations are compounded by economic disincentives such as the high costs associated with recycling processes and the transportation of waste. Furthermore, a lack of consistent awareness and adequate training in proper waste sorting and recycling procedures contributes to the problem of contamination, which can negatively impact the quality and marketability of recovered resources. While regulatory barriers are not perceived as a primary concern, addressing these interconnected challenges necessitates a collaborative response.

Sustainable procurement and supply chain: Building together

The extent to which subcontractors prioritise the use of materials with environmental certifications and those locally sourced are diverse.

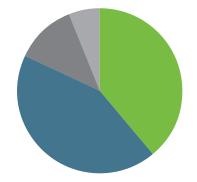
Does your organisation prioritise the use of materials with environmental certification?



Yes, always	8%
Yes, often	29%
Sometimes	40%
Rarely or never	23%

Materials with Environmental Certification

The data reveals a nuanced approach to the prioritisation of environmentally certified materials among subcontractors, with the **largest group (40%) indicating they do so "sometimes".** This suggests that while there's a general awareness and acceptance of certified materials, their selection is not always a primary driver. This "sometimes" response likely reflects a balancing act where subcontractors weigh various factors alongside environmental considerations. Does your organisation prioritise local sourcing of materials?



Yes, high priority	39%
Yes, moderate priority	43%
Yes, low priority	12%
Not considered	6%

A notable 29% reported "often" prioritising certified options, demonstrating a stronger commitment to sustainability in their material choices, possibly indicating that a significant subset of subcontractors are actively seeking out and utilising certified options. However, consistent prioritisation ("always") is limited to a small 8%. This shows that consistently prioritising these materials, regardless of other factors, is still not a widespread norm. On the other hand, a significant minority (23%) "rarely or never" prioritise environmentally certified materials in their selection process.

Local sourcing of materials

The respondents demonstrate a strong tendency to prioritise locally sourced materials, with a significant 82% assigning it either high (39%) or moderate (43%) priority. This preference likely reflects a recognition of the benefits associated with supporting the local economy, reducing the environmental impact of transportation emissions – a key consideration given New Zealand's geographical context – and potentially ensuring more resilient and shorter supply chains. While a smaller segment (12%) give local sourcing a low priority, and a minimal fraction (6%) do not consider it at all, the overall data suggests a prevailing inclination towards utilising New Zealand-based suppliers when making material selection decisions. This points to a potentially positive alignment with broader sustainability goals and a commitment to supporting local industries within the construction landscape.

The responses for environmentally certified materials point to a complex interplay of factors influencing material selection in New Zealand.

Cost sensitivity

New Zealand's construction sector, like many others, is often cost-sensitive. Certified materials, while offering long-term benefits, can sometimes have a higher initial cost. This can be a significant barrier, particularly for smaller subcontractors or projects with tight budgets. The pressure to provide competitive bids may lead to prioritising cost over certification in some cases.

Market demand and client awareness

The demand for certified materials is closely linked to client awareness and their willingness to pay for sustainable options. While there's growing awareness of sustainability in New Zealand, it's not uniformly strong across all sectors or clients. If clients don't specify or prioritise certified materials, subcontractors may be less incentivised to seek them out. This is where tools like Green Star and Homestar play an important role in driving demand.

Supply chain availability and accessibility

The availability and accessibility of a wide range of certified materials can be a challenge. While the New Zealand market is improving, there might still be limitations in the variety or volume of certified options for certain product types. This can force subcontractors to rely on non-certified alternatives, even if they are willing to prioritise certified options.

Certification complexity and recognition

The landscape of environmental certifications can be complex, with various schemes and labels, both local and international. Subcontractors may face challenges in navigating these, understanding their credibility, and determining which certifications are most relevant to their projects. There needs to be clear guidance and education around credible certifications.

Regulatory drivers and policy support

Government policies and regulations can play a crucial role in driving the uptake of certified materials. Incentives, procurement policies, or building code requirements that favour or mandate certified options can create a stronger market pull. New Zealand's commitment to reducing emissions and promoting sustainable building practices provides a strong context for increasing the use of certified materials.

Life Cycle Assessment (LCA) awareness

There's a growing recognition of the importance of considering the entire life cycle impact of materials. This involves evaluating not just the environmental attributes but also factors like durability, maintenance requirements, and end-of-life disposal. Certified materials often provide data that supports LCA, but broader awareness and understanding of LCA principles are needed within the industry

Industry leadership and collaboration

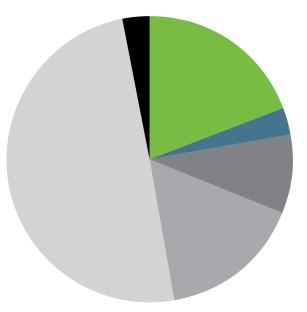
Leadership from key industry players and collaboration across the supply chain are essential for driving change. When main contractors, developers, and designers actively prioritise certified materials, it sends a strong signal to subcontractors and suppliers.

Carbon footprint and emission: Walking towards net zero

The data illustrates that while there is growing awareness of carbon emissions among subcontractors in New Zealand, there is a significant gap between awareness and action. Carbon footprint assessment and emission reduction efforts are not yet widespread, and the adoption of carbon offsetting is low.

Does your organisation conduct regular carbon footprint assessments of its operations and/or projects?

Yes, annually	19%
Yes, biannually	3%
Yes, occasionally	9%
No, but planning to	16%
No, not currently	49%
Other	3%



Carbon footprint assessment

A significant portion of the respondents (49%) do not currently assess their carbon footprint, highlighting a crucial gap in understanding and managing their emissions in the context of national climate goals. While a minority conduct assessments annually (19%) or less frequently (12%), a positive trend is the 16% planning to initiate assessments, suggesting a growing recognition of the importance of measurement, potentially driven by client demand and evolving regulations.



In the context of New Zealand's ambitious climate goals under the Paris Agreement and its national commitments, the finding that nearly half of surveyed subcontractors are not currently assessing their carbon footprint presents a significant challenge.

Accurate measurement is the bedrock of effective emission reduction strategies, providing crucial insights into an organisation's environmental impact. The relatively low rates of annual (19%) and biannual (3%) assessments further underscore this point, limiting the ability to establish baselines, track progress, and identify key areas for intervention. However, the encouraging 16% of subcontractors planning to initiate carbon footprint assessments signals a growing recognition of the importance of understanding their emissions. This shift is likely influenced by a confluence of factors, including increasing client demand for carbon transparency particularly on larger projects and from environmentally conscious clients - evolving government policies and regulations aimed at decarbonising the economy, and the emergence of industry leadership and best practice guidelines promoting carbon management.

Furthermore, a heightened awareness of the potential business risks and opportunities associated with climate change, such as reputational benefits and access to green finance, may also be driving this emerging trend towards assessment. To facilitate wider adoption, there is a clear need for simplified, sector-specific tools and guidance on carbon accounting methodologies, initiatives that promote data sharing across the construction supply chain, and targeted training and support programs to build capacity within subcontractor organizations.

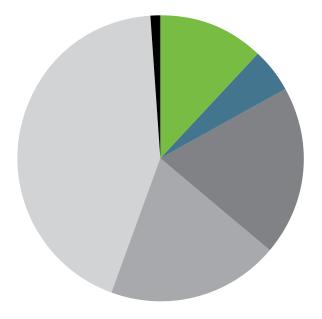
"It's often seen as a 'nice to have' rather than a necessity — but our view is that we must do everything within our power to reduce carbon."

(Complete Reinforcing)

Has your organisation set specific targets to reduce its carbon emissions?

Yes, but with detailed action plans	12%
Yes, but without detailed action plans	5%
Yes, currently working on it	19%
No, but planning to	19%
No, not currently	43%
Other	1%

The distinction between the 12% of respondents with detailed emission reduction action plans and the 5% taking action without such plans is critical. Structured, well-defined plans are far more likely to yield significant and sustained emission reductions compared to ad-hoc or less strategic efforts. Understanding the specific focus areas for those actively reducing emissions – such as energy efficiency improvements in equipment and facilities, the adoption of low-emission fuels or vehicles, optimisation of material use and waste reduction strategies, the integration of renewable energy sources, and process innovation would provide valuable insights into effective pathways for the sector. Driving broader adoption of emission reduction practices will necessitate supportive government policies, including effective carbon pricing mechanisms and building code enhancements, increasing market demand for low-carbon construction services, and the provision of targeted financial incentives. Crucially, the development and dissemination of sector-specific guidance and readily implementable best practice examples relevant to the New Zealand context are essential to empower subcontractors to take meaningful action.



Carbon Emission Reduction

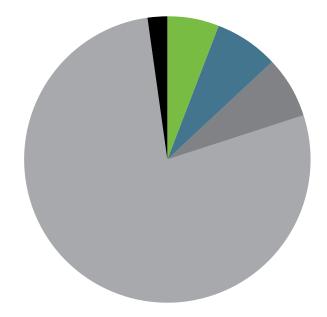
The survey data reveals a notable "action gap" within the New Zealand subcontractor community, with a substantial 43% not currently undertaking any specific actions to reduce their carbon emissions, despite a growing general awareness of sustainability principles. This gap may be attributed to several interconnected factors, including the perceived cost and complexity of implementing effective reduction measures, a lack of clear, readily accessible guidance on suitable strategies tailored to their specific trades and operational contexts, and the presence of competing business priorities that may overshadow long-term sustainability goals. Moreover, uncertainty surrounding the return on investment in emission reduction initiatives can also hinder adoption.

"There's definitely a big knowledge gap. What would be a good resource? Concrete suppliers could educate customers both formally and non-formally. Concrete NZ and NZ Green Building Council can also help to make sure the whole industry is on the same page."

(Holcim)

Does your organisation participate in carbon offset programmes to compensate for its emissions?

Yes, actively	6%
Yes, occasionally	7%
No, but planning to	7%
No, not currently	77%
■ Other	2%



Carbon Offset Program

The low level of engagement with carbon offset programs among New Zealand subcontractors, with 77% not currently participating and limited future interest (7% planning to), suggests a potential preference for direct emission reduction strategies. This aligns with the generally accepted principle that reducing emissions at the source should be prioritised over offsetting them.

Several factors may contribute to this low adoption rate, including concerns regarding the quality and credibility of available offset projects, the perceived cost of offsets, and a potential apprehension about "greenwashing" if offsetting is seen as a substitute for genuine emission reductions within their own operations. While carbon offsetting should not be considered a primary decarbonisation pathway, it can play a valuable role in mitigating unavoidable emissions, particularly in the short to medium term as technological solutions and fundamental process changes are being implemented across the sector.

Given New Zealand's Emissions Trading Scheme (NZ ETS), understanding how subcontractors interact with this framework, including their potential use of NZ Units (NZUs) for offsetting, would be beneficial. Regardless of the level of adoption, if carbon offsetting is utilised, ensuring transparency in the selection of offset projects and implementing independent verification mechanisms are paramount to guarantee their environmental integrity and avoid reputational risks. While offsetting should not be a primary strategy, it can play a role in mitigating unavoidable emissions, particularly in the short to medium term while technological solutions and process changes are being implemented.

"Hilti achieved Carbon Neutrality in our own operations in 2023, for Scope 1 & 2 plus business travel. From our baseline in 2019, we reduced emissions by 60% by transitioning our car fleet to Electric vehicles, sourcing 100% renewable electricity worldwide and more. For the remaining 40%, we chose not to buy credits on the open market, but rather develop projects run exclusively for Hilti, together with external certifiers. We chose programs that have a social as well as environmental benefit, including biogas digesters in India and Clean Cooking stoves in Kenya."

(Hilti New Zealand)

Perceptions and attitudes towards sustainability: A shifting mindset

This section explores the evolving perceptions and attitudes of subcontractors towards sustainability, recognising that a shift in mindset is fundamental to driving widespread change within the construction industry. It examines how external factors, internal motivations, and perceived challenges shape their engagement with sustainable practices. Understanding these perspectives is crucial for identifying effective strategies to promote greater sustainability adoption.

Influence of rating tools and frameworks

Sustainability rating tools and frameworks play a significant role in guiding and benchmarking sustainable construction practices. This section investigates the extent to which subcontractors are aware of, utilize, and are influenced by these tools and frameworks. Understanding their impact and effectiveness is essential for optimising their role in promoting sustainability within the industry.

Key drivers of sustainability

The journey towards a sustainable construction industry is shaped by a complex interplay of motivating forces and hindering factors. Identifying the key drivers that propel subcontractors towards sustainable practices, as well as the barriers that impede their progress, is essential for crafting effective strategies for industry-wide change. This section looks the most prominent drivers and barriers to sustainability engagement, providing insights into what encourages and discourages subcontractors' adoption of sustainable practices.

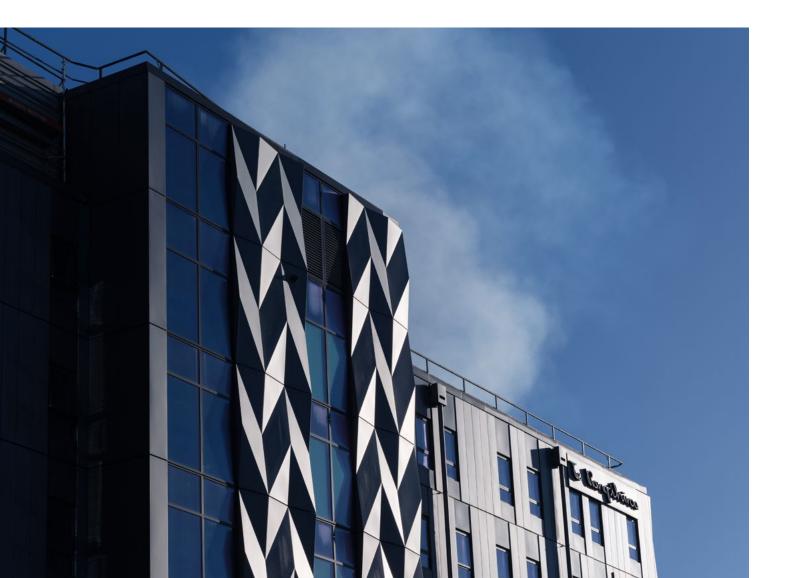
Perceived barriers and opportunities

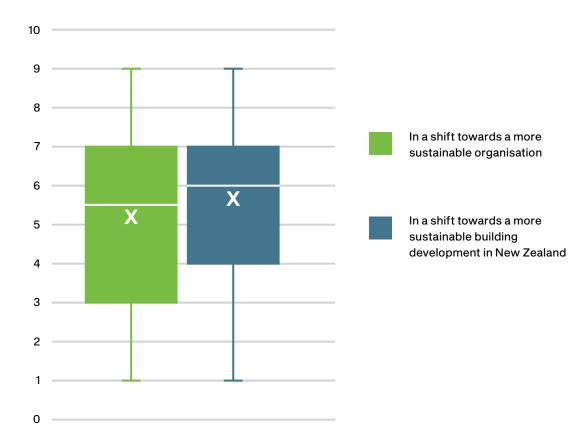
The successful integration of sustainability into construction practices requires a realistic assessment of the challenges and opportunities involved. This section delves into the specific barriers that subcontractors perceive as hindering their sustainability efforts, as well as the opportunities they identify for improvement and growth. Understanding these perceptions is crucial for developing targeted solutions and fostering a more enabling environment for sustainable construction.



Influence of rating tools and frameworks

The data shows that the respondents perceive sustainability rating tools and frameworks as having a moderate influence on both their own organisational shifts towards sustainability and on the broader movement towards more sustainable building development within the country.





Ultimately, while rating tools are seen as contributing to a more sustainable construction industry, their influence is part of a larger landscape of drivers and could be further amplified through targeted efforts.

"Unfortunately, in New Zealand, there's a tendency for action only when something is mandated. It's disappointing, because it highlights a lack of personal responsibility when it comes to striving for a better built environment."

(Thermosash Commercial Ltd)

Subcontractors in New Zealand perceive sustainability rating tools and frameworks as having a moderate influence on both their organisational shifts towards sustainability and the broader building development sector, with median perceived influence scores hovering around the mid-point of the scale. This suggests that while these tools play a role in driving sustainability, they are not the sole or dominant factor. The striking similarity in the perceived influence on both organizational and industry levels indicates a consistent impact, likely through the provision of common standards and language.

However, the wide range of responses highlights significant variability in individual perceptions, potentially influenced by factors such as the level of project engagement with rating tools, the size and specialisation of the subcontractor, their awareness and understanding of the tools, and their views on the associated benefits and costs. In the New Zealand context, where tools like Green Star and Homestar are prominent, the moderate perceived influence suggests room for broader adoption and deeper impact through increased education, greater client demand, potential policy integration, and improved accessibility for all subcontractors.



Key drivers of sustainability

The key factors perceived as driving the adoption of sustainability within the New Zealand construction industry are presented. The data presents the mean scores for each driver, indicating the average level of agreement or importance assigned to it by the respondents. A higher mean score signifies a stronger perceived driver.

Key driver	Mean	Rank
Educating the construction industry	7.16	1
Designing out waste	7.05	2
Driving for value for money solutions that utilise less materials	6.91	3
Approaching procurement with a whole- of-life cost and carbon lens	6.62	4
Building and operating a resilient local NZ supply chain for sustainable materials and reduction in transport emissions	6.62	5
Promoting the usage of energy efficient and environmentally friendly equipment	6.44	6
Financial / procurement incentives for the use of low-carbon materials	6.36	7
Mandating minimum energy performance of infrastructure / buildings	6.00	8
Reporting on carbon	5.09	9

Education and awareness

Educating the construction industry (7.16)

This emerged as the strongest driver, highlighting the critical need for knowledge dissemination and capacity building. This is particularly relevant in New Zealand, where continuous professional development and upskilling are crucial for adopting new technologies, materials, and practices. This includes training on sustainable design principles, waste reduction techniques, life-cycle assessment, and the use of sustainable materials. The high score underscores the importance of addressing knowledge gaps and promoting a culture of learning within the industry. This driver is foundational to the success of all other initiatives.

Resource efficiency and waste reduction

Designing out waste (7.05)

This driver emphasises the importance of proactive design strategies to minimise waste generation throughout the construction process. This aligns with New Zealand's increasing focus on circular economy principles and reducing landfill disposal.

Driving for value for money solutions that utilise less materials (6.91)

This highlights the economic incentive for resource efficiency. Subcontractors are motivated to adopt solutions that not only reduce environmental impact but also lower costs through material optimization.

Procurement and supply chain

Approaching procurement with a whole-of-life cost and carbon lens (6.62)

This driver emphasises the shift from focusing solely on upfront costs to considering the longterm environmental and economic implications of procurement decisions. This includes evaluating the embodied carbon of materials, energy consumption during operation, and end-of-life disposal costs.

Building and operating a resilient local NZ supply chain for sustainable materials and reduction in transport emissions (6.62)

This highlights the importance of supporting local suppliers and reducing the environmental impact associated with transportation. This is particularly relevant in New Zealand, where long distances can increase transport emissions. A resilient local supply chain also enhances the sector's ability to withstand disruptions.

Financial / procurement incentives for the use of low-carbon materials (6.36)

This driver recognises the role of economic incentives in promoting the adoption of sustainable materials. This could include subsidies, tax breaks, or preferential procurement policies for projects that utilize low-carbon options.

Energy efficiency and regulation

Promoting the usage of energy efficient and environmentally friendly equipment (6.44)

This driver emphasises the importance of using equipment that minimizes energy consumption and reduces emissions. This includes construction equipment, as well as building systems and appliances.

Mandating minimum energy performance of infrastructure / buildings (6.00)

This highlights the role of regulation in setting minimum standards for energy efficiency. This can create a level playing field and drive innovation in energy-efficient design and construction.

5

Carbon reporting

Reporting on carbon (5.09)

This driver received the lowest mean score, suggesting that it is currently perceived as less influential than other factors. However, it is important to note that carbon reporting is a crucial tool for measuring progress and driving accountability.

A holistic approach is needed that integrates education, resource efficiency, sustainable procurement, energy efficiency measures, and robust carbon reporting frameworks.

Perceived barriers and opportunities

The key factors perceived as driving the adoption of sustainability within the New Zealand construction industry are presented. The data presents the mean scores for each driver, indicating the average level of agreement or importance assigned to it by the respondents. A higher mean score signifies a stronger perceived driver.



Barrier	Mean	Rank
Having government support for sustainable practices impacts our path to sustainability.	6.27	1
The tendency to maintain current or traditional practices hinders our path to sustainability.	6.26	2
The requirement for extra investment hinders our path to sustainability.	6.23	3
The lack of coordination among stakeholders impacts our path to sustainability.	6.22	4
The lack of training and education on sustainable practices impacts my path to sustainability.	6.20	5
The perceived slow recovery of investment in sustainable practices impacts our path to sustainability.	6.19	6
The availability of green materials and technology impacts our path to sustainability.	6.09	7
The lack of understanding about sustainable practices for my trade impacts my path to sustainability.	5.96	8
The lack of sustainable building codes and regulations impacts our path to sustainability.	5.91	9
The demand from clients for sustainable practices and sustainable buildings impacts our path to sustainability.	5.88	10
The unequal distribution of benefits across trades for sustainable practices impacts our path to sustainability.	5.87	11
The availability of measurement tools and frameworks for sustainable practices impacts our path to sustainability.	5.60	12
The perceived risks and uncertainties associated with sustainable practices impact our path to sustainability.	5.60	13
Offering incentives for sustainable practices impacts our path to sustainability.	5.56	14
The potential reduction of aesthetics associated with sustainable practices impacts our path to sustainability.	4.73	15

Economic barriers

The requirement for extra investment hinders our path to sustainability. (6.23)

This is a significant barrier. Subcontractors often operate on tight margins, and upfront costs associated with sustainable materials, technologies, or processes can be a major deterrent.

The perceived slow recovery of investment in sustainable practices impacts our path to sustainability. (6.19)

Even if willing to invest, subcontractors need to see a reasonable return. Uncertainty about long-term cost savings or market premiums for sustainable construction can hinder adoption.

Offering incentives for sustainable practices impacts our path to sustainability. (5.56)

While presented as an "impact," this highlights the opportunity that incentives can provide. The relatively moderate score suggests that while incentives are helpful, they might not be perceived as a complete solution on their own.

Systemic and industry-wide barriers

Having government support for sustainable practices impacts our path to sustainability. (6.27)

This strongly emphasizes the need for a supportive regulatory environment and policy framework.

The lack of sustainable building codes and regulations impacts our path to sustainability. (5.91)

Clear codes and regulations provide certainty and drive industry-wide change. Their absence or weakness can create a disincentive for those who invest in sustainable practices.

The lack of coordination among stakeholders impacts our path to sustainability. (6.22)

Fragmentation within the construction industry (designers, contractors, suppliers, clients) can hinder collaboration and the adoption of integrated sustainable solutions.

The tendency to maintain current or traditional practices hinders our path to sustainability. (6.26)

Resistance to change and a preference for familiar methods can impede innovation and the uptake of new sustainable approaches.

The unequal distribution of benefits across trades for sustainable practices impacts our path to sustainability. (5.87)

If some trades bear more of the cost or risk of sustainable practices while others reap the benefits, it creates inequity and discourages participation.

Knowledge and capacity barriers

The lack of understanding about sustainable practices for my trade impacts my path to sustainability. (5.96)

Subcontractors need specific knowledge relevant to their work. Generic information is not always sufficient.

The lack of training and education on sustainable practices impacts my path to sustainability. (6.20)

This is closely related to understanding. Training provides the skills and know-how to implement sustainable practices effectively.

Resource and technology barriers

The availability of green materials and technology impacts our path to sustainability. (6.09)

Access to sustainable materials and technologies at competitive prices is essential. Supply chain development is important.

Perception and demand barriers

The perceived risks and uncertainties associated with sustainable practices impact our path to sustainability. (5.60)

New technologies or approaches can be perceived as risky. Reducing uncertainty through research and demonstration is important.

The potential reduction of aesthetics associated with sustainable practices impacts our path to sustainability. (4.73)

This had the lowest impact score. It suggests that aesthetic concerns are less of a barrier than other factors, or that sustainable design is increasingly seen as compatible with good aesthetics.

The demand from clients for sustainable practices and sustainable buildings impacts our path to sustainability. (5.88)

Client demand is a key driver. Increased demand can incentivize subcontractors to adopt sustainable practices.

The journey towards greater sustainability within the New Zealand construction sector is fraught with interconnected barriers, most notably those of an economic nature, where concerns about upfront costs and the perceived timeline for return on investment remain significant deterrents for subcontractors. Overcoming these financial hurdles necessitates a broader systemic shift, requiring robust government support through clear and consistent policies and regulations that provide a level playing field and long-term certainty.

Furthermore, enhanced coordination and collaboration across all industry stakeholders – from designers and contractors to suppliers and clients – are crucial for fostering integrated and effective sustainable solutions. A fundamental aspect of this transition involves bolstering knowledge and capacity within the workforce through targeted training and education programs that empower subcontractors with the specific skills and understanding needed to implement sustainable practices relevant to their trades. The development and strengthening of the supply chain for readily available and cost-competitive green materials and technologies are also essential to facilitate the adoption of more sustainable building methods. Ultimately, a key driver for widespread change will be the increasing demand from clients for sustainable practices and demonstrably sustainable buildings, which will in turn incentivize the entire sector to prioritize environmental considerations.

To effectively address these multifaceted challenges and capitalise on the inherent opportunities for a more sustainable built environment in New Zealand, a comprehensive and collaborative strategy is suggested.

This necessitates strong government leadership in establishing clear policies, effective regulations, and well-designed incentives that can help offset the initial costs and accelerate the adoption of sustainable practices. Industry collaboration is paramount for sharing best practices, developing industry-wide standards, and working collectively to overcome common obstacles. Investing in education and training initiatives will build the necessary capacity and knowledge within the workforce to implement sustainable solutions effectively. Supporting innovation and the development and adoption of green materials and technologies will be crucial for providing viable and competitive sustainable alternatives. Finally, actively working to develop the market by increasing client demand for sustainable construction will create a powerful pull factor, driving the entire sector towards more environmentally responsible practices.

To overcome these barriers and capitalise on the opportunities, a multi-faceted approach is suggested which includes government leadership, industry collaboration, education and training, innovation and technology, and market development.

Key Insights and recommendations: Charting the course

Key Insights

1. Growing awareness

The research, aligned with survey findings on interest, reveals a growing awareness of sustainability among New Zealand subcontractors. However, a gap exists between interest and active involvement, particularly in sustainable procurement and utilising sustainability rating tools. This disparity highlights the need to translate awareness into tangible action.

2. Varying levels of engagement

The survey reveals a spectrum of sustainability engagement among New Zealand subcontractors. While some organisations demonstrate proactive adoption of sustainable practices, others are in the early stages of awareness and implementation. This **disproportion** highlights the need for targeted interventions to address different levels of readiness.

3. Drivers and motivations

Several factors influence subcontractors' decisions to adopt sustainable practices. These include attracting customers, supporting New Zealand's net-zero goals, and enhancing competitiveness. Education and awareness are strong drivers of sustainable practices, consistent with the importance subcontractors place on them.

4. Subcontractor value proposition

Subcontractors believe they can contribute to costeffective sustainability through early contractor involvement, value engineering, material selection expertise, and design optimisation for efficiency and waste reduction. This highlights their potential to drive practical, on-the-ground sustainability improvements.

5. Carbon footprint awareness

While some subcontractors are assessing and targeting carbon reduction, this isn't universal. There's an opportunity to expand carbon footprint management across the sector.

6. Areas of focus

Subcontractors are actively involved in various sustainability initiatives, with a strong emphasis on resource efficiency, waste management, and sustainable procurement. However, there is room for improvement in areas such as carbon footprint assessment and target setting.

7. Influence of tools and frameworks

Sustainability rating tools and frameworks are recognized as having a moderate to significant influence on driving sustainable practices within the sector. This underscores the importance of promoting and utilizing these tools to guide and incentivize sustainable behaviour.

8. Perceived barriers

The research identifies several challenges hindering the widespread adoption of sustainability. These include the requirement for extra investment, the perceived slow recovery of investment, the lack of sustainable building codes and regulations, and the lack of coordination among stakeholders.



Key Insights and recommendations: Charting the course

Recommendations

1. Targeted education and training

Develop and deliver targeted education and training programs to address the varying levels of sustainability engagement. These programs should focus on raising awareness, providing practical guidance on implementing sustainable practices, and showcasing the long-term benefits of sustainability. Tailor content to specific trades and business sizes.

2. Incentivize sustainable practices

Implement financial and procurement incentives to encourage the adoption of sustainable practices. This could include tax breaks, subsidies, preferential treatment in tendering processes, and recognition programs. Address concerns around initial investment and ROI.

3. Strengthen regulatory frameworks

Establish clear and consistent sustainable building codes and regulations to provide a level playing field and drive industry-wide change. Mandating minimum energy performance and waste reduction targets can accelerate progress.

4. Promote collaboration and coordination

Foster greater collaboration and coordination among stakeholders, including subcontractors, clients, designers, and government agencies. This can be achieved through industry forums, working groups, and digital platforms that facilitate knowledge sharing and best practice dissemination.

5. Support for carbon reduction

Provide resources and support to help subcontractors conduct carbon footprint assessments and set emission reduction targets. This could include access to carbon accounting tools, technical assistance, and guidance on carbon offsetting.

6. Enhance supply chain sustainability

Encourage and facilitate sustainable procurement practices by promoting the use of locally sourced, environmentally certified materials and working with suppliers who adhere to sustainable supply chain management principles.

7. Promote waste reduction and recycling

Address the challenges subcontractors face in implementing effective recycling programs by improving recycling infrastructure, providing training, and exploring waste-to-energy technologies.



Recommendations	Key audience	Method of delivery
Targeted education and training	Subcontractors, main contractors, designers, industry associations.	 Subcontractor targeted programmes and certifications. Supplier x designer talks focused on specifying for sustainability. Toolkits and resources.
Incentivise sustainable practices	Industry associations, clients, governing authorities.	 Implement financial and procurement incentives: tax breaks, subsidies, preferential tendering treatment.
Strengthen regulatory frameworks	Industry associations, governing authorities.	 Clear and consistent sustainable building codes and regulations. Minimum energy performance and waste reduction targets.
Promote collaboration and coordination	Clients, governing authorities, designers, industry associations, main contractor, sub contractors.	 Forums, working groups, and digital platforms. Facilitate knowledge sharing and best practice dissemination.
Support for carbon reduction	Industry associations, consultants, main contractors, sub contractors.	 Access to carbon accounting tools. Carbon accounting advisory.
Enhance supply chain sustainability	Industry associations, main contractors, subcontractors, designers, Quantity Surveyors, suppliers.	 Encourage and facilitate sustainable procurement practices by promoting the use of locally sourced, environmentally certified materials and working with suppliers who adhere to sustainable supply chain management principles.
Promote waste reduction and recycling	Main contractors, sub contractors, designers, waste contractors, suppliers.	 Implement effective recycling programs by improving recycling infrastructure, providing training, and exploring waste-to-energy technologies.

Conclusion: Building a sustainable future

The findings of this study provide a valuable snapshot of the current state of subcontractor sustainability in New Zealand. While progress has been made, there is a clear need for continued effort to accelerate the transition towards a more sustainable built environment.

The New Zealand construction sector has a significant opportunity to contribute to the nation's environmental goals and enhance its competitiveness in the global market. By embracing the key insights and implementing the recommendations outlined in this report, subcontractors can play a pivotal role in building a sustainable future for New Zealand.

This requires a collaborative approach involving all stakeholders – subcontractors, main contractors, clients, designers, government, and industry organisations. By working together, fostering innovation, and committing to continuous improvement, we can create a resilient, low-carbon, and environmentally responsible construction sector that benefits both present and future generations.

The journey towards sustainability is ongoing. It demands a commitment to learning, adaptation, and a willingness to embrace change. By prioritising sustainability, the New Zealand construction industry can not only minimise its environmental impact but also create long-term value, enhance its reputation, and contribute to a more prosperous and sustainable future for all.





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Limitations

While this report provides valuable insights, it is important to acknowledge certain limitations. The response rate may introduce some bias and, the findings may not be fully representative of all subcontractors in New Zealand. Self-reported data may be subject to social desirability bias. The cross-sectional nature of the survey provides a snapshot at a particular time and does not capture changes overtime. Despite these limitations, this research offers a valuable contribution to understanding and advancing subcontractor sustainability in New Zealand.

Contact information

We hope this report, **"Building a Sustainable Future:** Assessing Subcontractor Sustainability Practices in New Zealand", has provided you with valuable insights into the current state of sustainability within the New Zealand construction sector. We believe that collaboration and communication are crucial for driving positive change, and we encourage you to reach out with any questions, feedback, or suggestions.

For inquiries regarding this report, please contact:

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We are committed to ongoing research and engagement in this important area. Your feedback will help us to refine our understanding of subcontractor sustainability and contribute to the development of more effective strategies for driving positive change within the New Zealand construction industry. We look forward to connecting with you.

You can also find more information about Southbase and our work on sustainability at southbase.co.nz.





Partner with Southbase to deliver value throughout your project lifecycle

Get in touch to discuss how we can support on your next project.

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