

# Annual report

**JULY 2023 TO JUNE 2024**



## **Ministry of Business, Innovation and Employment (MBIE) Hīkina Whakatutuki – Lifting to make successful**

MBIE develops and delivers policy, services, advice and regulation to support economic growth and the prosperity and wellbeing of New Zealanders.

### **MORE INFORMATION**

Information, examples and answers to your questions about the topics covered here can be found on our website: [www.standards.govt.nz](http://www.standards.govt.nz) or by calling us free on: **0800 782 632**.

### **DISCLAIMER**

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## Our vision

Prosperity and protection through trusted standards.  
Kia whakahaumarū, kia whakapūawai tātou mai i tā mātou paerewa

## Our mission

Bringing leading experts together to develop high-quality, accessible standards to support New Zealand's economic growth and keep New Zealanders safe.

## Our functions

Standards New Zealand is the national standards body for New Zealand. It is governed by the Standards and Accreditation Act (2015), the Public Finance Act (1989) and the Public Service Act (2020).

As New Zealand's national standards body, we represent New Zealand on the international stage, develop and review standards (adopting international standards where appropriate) and sell standards. For a full list of our statutory functions, please go to [www.legislation.govt.nz](http://www.legislation.govt.nz).

## Our principles

**International first** // We don't reinvent the wheel, but instead look to international standards first to help ensure global connection, compatibility, consistency, and market access.

**Consensus** // We get agreement across industry and government, resulting in better buy-in, support and adoption of solutions.

**Consultation** // We consult far and wide.

**Representation** // We make sure everyone's views are captured and heard. Everyone is represented and has a voice.

**Partnership and collaboration** // We work with commissioning organisations, industry, government regulators, consumer groups and international standards bodies to deliver our products and services.

**Integrity** // We are independent and transparent. We follow international good practices.

## Our goals

- To improve the sustainability and growth of our business through our strategic priority initiatives that focus on our services and products, operating model, partnerships and business efficiencies.
- To make an active and valuable contribution to New Zealand efforts to address climate change issues and reduce our carbon footprint as a nation.
- To make an active and valuable contribution to New Zealand's evolving digital economy by helping define good practice, performance and protection requirements.
- To develop our people, including committee members, so that we have the right skills, capabilities, diversity, and cultural awareness to serve the needs of our customers, industry, the public sector, and consumers and meet the government's priorities.

## Our values

Māia – Bold & brave

Pae kahurangi – Build our future

Mahi tahi – Better together

Pono me te tika – Own it

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## About Standards New Zealand

Standards New Zealand (Standards NZ) is New Zealand’s internationally recognised, independent, national standards body. It is responsible for managing the development, adoption and publication of standards and standards-related products and services, including New Zealand, joint Australian/New Zealand and international standards.

Established in 1932, Standards NZ has been a business unit within the Ministry of Business, Innovation and Employment (MBIE) since 2016, pursuant to the Standards and Accreditation Act 2015.

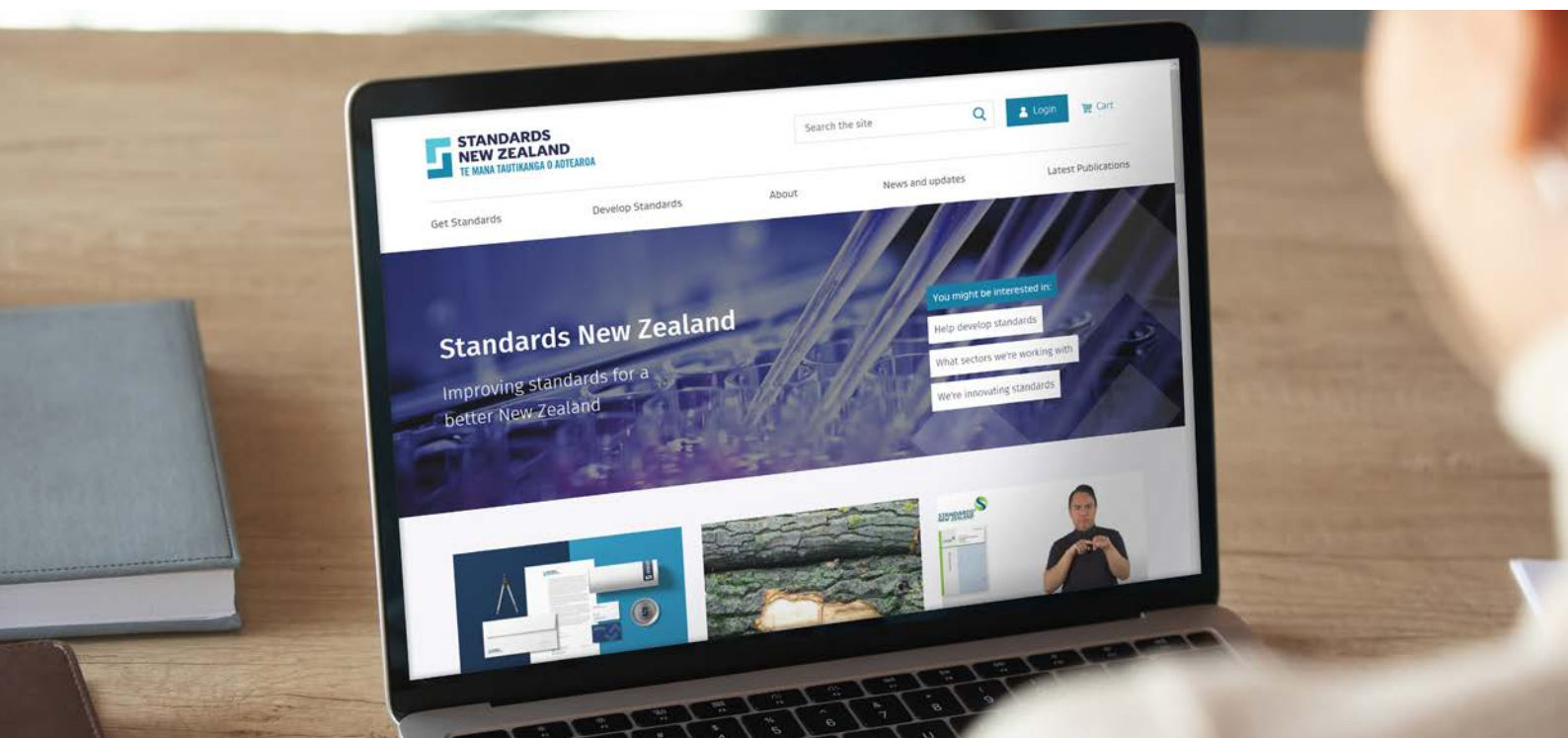
As a part of MBIE, Standards NZ is well placed to engage with a wide range of government agencies and provide new opportunities for standards to be developed or adopted as a means to support existing and planned government priorities and reforms and facilitate trade and market access.

Our extensive experience in standardisation and alignment to international practice also means that our products and services carry a reputation for being accurate, credible and authoritative. Over the years, we have forged and maintained strong working relationships with a wide range of government organisations, industry groups, and national and international standards bodies and organisations.

As New Zealand’s country representative for the International Organization for Standardization (ISO) and, via a New Zealand National Committee, the International Electrotechnical Commission (IEC), the Pacific Area Standards Congress (PASC) and Pacific Islands Standards Committee (PISC), we ensure New Zealand has a voice in the international standards community by participating in international standards development activities, forums, workshops and meetings.

Our international connections ensure that we keep up to date with the latest standards developments, trends and innovations, and that we are strongly aligned to international good practice in standards development, with New Zealand standards being recognised and utilised internationally.

A brief overview of Standards NZ is at [www.standards.govt.nz](http://www.standards.govt.nz) or YouTube channel [www.youtube.com/@standardsnewzealand7344/videos](https://www.youtube.com/@standardsnewzealand7344/videos).



## **New Zealand Standards Executive's foreword**

Not a day goes by that your life won't be touched by standards. Delve deep enough into how the things we use are made and how we measure quality, define and measure performance, facilitate trade and protect consumers, and you'll find standards.

They sit behind almost everything, from our built environment to the products and services we buy, supporting New Zealand to grow, enabling government priorities and reform initiatives, and shaping the world around us. They guide consistency, set expectations and define the right way to do things. They have been a valued component of productive sectors and have underpinned New Zealand's regulatory systems for more than nine decades.

Behind standards lies Standards NZ, our internationally recognised national standards body and a crucial component of our wider standards and conformance quality infrastructure. This system and the standards that permeate throughout many sectors keep New Zealanders safe, open markets to the flow of quality goods and services and help New Zealand work towards national priorities, such as our transition to a lower carbon economy.

Standards NZ is part of a global system, with a role to help New Zealand influence and shape international standards that align domestic needs with international good practice and open avenues to trade. Without standards and the ability to integrate subject matter expertise into all we do, the challenges for our society would be far more significant.

With opportunities for greater investment in, and utilisation of, the standards system, Standards NZ is well positioned to add value on behalf of all New Zealand.



**Sanjai Raj**

*New Zealand Standards Executive*

*General Manager Market Integrity*

*Ministry of Business, Innovation and Employment*

# National Manager Standards New Zealand's foreword

As I reflect on the past year, I remain grateful to live in a society that has and values standards. Change in our world is a given, and while standards evolve to meet and shape change through revisions and adoptions, they also provide a constant. They provide continuity, assurance, protection and reliability. They also support innovation, competition, market access and trade opportunities by helping provide an all-important level of performance, safety and reliability for new and alternative products and services.

## Prosperity and protection through trusted standards

We believe in prosperity and protection through trusted standards. Te whakamaru me te houkura mai i ngā paerewa whirinaki. We have heard from New Zealand businesses that they can enter competitive Australian and Pacific markets because joint standards help them demonstrate that their products or services meet regulatory compliance, safety and other customer needs and expectations. Innovators are using standards content in new digital products and technologies, such as apps, business software and artificial intelligence (AI) to gain market confidence.

This past year, we have seen standards being increasingly used across our energy sector, laying the path for hydrogen adoption in New Zealand, supporting our growing electric vehicle (EV) infrastructure, and improving efficiency of energy use in homes and businesses. Standards are also being integrated throughout building and construction work, from lighting, electrical installations and plumbing to new ways to build, seismic resilience and robust contracting arrangement requirements. They may often be hidden from view, but behind so many industries, products and services lie standards adding value, shaping change, protecting people and opening business opportunities.

Looking forward, the role of standards, and that of Standards NZ in developing and providing access to standards, doesn't falter. There is still a need to support climate change action, integrate renewable energies and improve energy efficiency. There is still a need to protect people, ensure the quality and safety of the products we all use, and support businesses to be more productive, efficient and prosperous.

## Relationships the backbone of better practice

Our somewhat isolated geographic position means relationships are core to our prosperity. Our four-decades-long partnership with Standards Australia means we make the most of our wider trans-Tasman economic market. Together, we participate on the global stage, capitalise on the collective capability of our sectors' combined technical experts and experiences, and introduce harmony and interoperability across industries, through working on joint Australasian standards and adopting international standards together. This partnership promotes efficiency, capitalises on wider industry capabilities and makes economic sense.

Our wider engagement with ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) means New Zealanders benefit from international good practice developed by minds across the world. Our own Kiwi experts contribute to dozens of ISO and IEC international standards development committees. The value in the opportunity to shape and influence world standards, which matter to New Zealand's economy and trading markets, cannot be understated.

We can also be a capability development provider to support our neighbours throughout the Pacific region. These nations are most likely to feel the impacts of climate change sooner and more significantly. We are actively sharing our skills and expertise in supporting the Pacific Island region's standards and conformance capability development. Together, we can all enjoy better economic and social prosperity.

## **Experts at the heart of standards**

Throughout this report are case studies of some of the projects, publications, engagements and activities from the past year. While some activities get more attention than others, I would like to acknowledge the hundreds of smaller, niche projects that ensure standards permeate the real, everyday tools, appliances, professional services and processes tied to thousands of New Zealanders' jobs. I also want to acknowledge the people behind standards – the dedicated team of staff at Standards NZ and our alumni of hundreds of largely volunteer committee members, who, over the past year, have left their mark on defining good industry practice, quality, performance and safety expectations used in their industries. Without them we could not make standards.

The work achieved within this report is a credit to the incredible work, passion, dedication, commitment and perseverance of all those who make standards. Standards may often be hidden from view, and those working on them invisible behind the scenes, but the benefits and outcomes of their mahi shapes our world, keeps people safe and enables trade for prosperity and protection of all New Zealanders, and beyond.



**Malcolm MacMillan**

*National Manager, Standards New Zealand  
Ministry of Business, Innovation and Employment*



## Executive summary

As the national standards body, Standards NZ adds considerable value to our economy and way of life. Standards NZ provides a means for industry and regulators to develop and access fair and independent good-practice solutions to help address the needs of today and tomorrow. For more than 92 years, Standards NZ has been responsible for managing the development, publication, access and adoption of standards for New Zealand.

Our 2023-2027 strategy, with its focus on customer service, sustainability, climate change and the digital economy, will ensure that we continue to support the standardisation needs of New Zealand's industries and government agencies now and into the future. A summary of this plan is included in Appendix One. The full version is available online at: <https://www.standards.govt.nz/about/corporate-publications/strategic-plans/strategic-plan-2023-2027>.

## Achievements

Together with our committee members, commissioning organisations and sponsors and the New Zealand Standards Approval Board, the team at Standards NZ contributes the guidance, specifications, performance requirements, and compliance tools that helps make businesses, services, and products safe, efficient, reliable, innovative and robust. This significant public good benefits all New Zealanders.

Over the past 12 months, the Standards NZ work programme has delivered 221 new standards to support growth, innovation, competition, regulatory compliance and safety across nine New Zealand sectors. This included the adoption of 193 international standards, as well as work to maintain joint standards between New Zealand and Australia, and to develop unique domestic standards to meet New Zealand-specific needs.

We continue to offer access to 6,700 standards publications that have been developed in, or formally adopted by, New Zealand, as well as an additional 126,000 standards developed by international standards bodies such as ISO and IEC.

## Opportunities abound

In a fast-changing and dynamic global trade environment, relevant and up-to-date standards help maintain New Zealand's reputation as a producer of high-quality export goods and support its trade ambitions. Standards NZ plays a key role in this by facilitating New Zealand's contribution to international standards, helping to minimise technical barriers to trade, comply with trade and market access requirements, align with and participate in the international rules-based systems and institutions, all of which is key to ensuring the interoperability of New Zealand's products and services into other markets.

Given New Zealand's reliance on global trade, international market access and supply chains, supporting the development, adoption and use of international standards is becoming increasingly important. This is particularly obvious in regard to digital technology. Every aspect of our economy is reliant on rapidly evolving digital technologies and data information security, integrity and management. Standards can help New Zealand keep pace with global technological developments and expectations and make it easier for businesses, large or small, to operate securely and efficiently in an increasingly digitally connected world.

Standards can also help to further other national interests, such as supporting New Zealand's infrastructure, climate resilience and renewable energy needs and maintaining public safety and consumer protection.

Over the coming period there are many opportunities to deploy standards in support of the expansion of new areas of economic activity in safe and competitive ways and the strengthening of existing relationships with Australia and the Pacific Islands. Taking the opportunities to shape and influence world standards which matter to New Zealand's economy and trading markets can add great value for New Zealand.

## Challenges we face and the work we are doing to address them

Changing technology and the dynamic global political and economic environment are challenging many of our existing practices. We see ongoing dejointing and opting out of standards with Australia, and new expectations of digital format products. It is increasingly difficult to recruit the voluntary industry expert input crucial to the development of standards. Allied to these are difficulties with the sustainability of funding for the standards system in New Zealand. We are tackling these challenges from multiple directions, further diversifying our products and services, promoting the value of standards, targeting high priority opportunities and refining our structure, resources and processes for cost savings.

### Earth-buildings standards update laying path for new building designs

Commissioned by the Earth Building Association of New Zealand and Building Performance, drafts of three earth-building standards have been published for public comment: DZ 4298, *Materials and construction for earth buildings*, DZ 4299, *Earth buildings not requiring specific engineering design* and DZ 4297, *Engineering design of earth buildings*.

Earth-building techniques combine the use of ancient, natural materials with modern, innovative, structural-engineering and design elements to create buildings more sympathetic to the environment. Earthen homes are known to be energy efficient and employ thermal mass that passively absorbs solar heat to make them warm in winter and cool in summer. They are relatively strong and durable, making them a much-underutilised method suitable to New Zealand's environmental conditions.

The standards set out requirements for the use of unfired earth in the form of adobe, cob, pressed-earth brick, rammed earth and poured earth, and are of particular interest to structural engineers, architects, designers, builders, apprentices, building consent authorities and building industry regulators. While these standards were updated as recently as 2020, the revisions incorporate proposed changes to make them citable as Acceptable Solutions in the New Zealand Building Code and help make the techniques more attractive for new home builders.

# Achievements in 2023/24

Our 2023-2027 Strategic Plan<sup>1</sup> sets out four strategic priorities. Customer service, Business sustainability, Climate change and Digital economy.

### CUSTOMER SERVICE

# 221

## New standards published

**87%** Adopted international standards  
**10%** Joint Australasian standards  
**3%** NZ domestic standards

Sector	Percentage
Energy, electricity and gas	32%
Business and trade	22%
Consumer and occupational safety	15%
Building construction and fire prevention	13%
Manufacturing and processing	9%
Other sectors e.g. primary industries, tourism etc	9%


Made **3,085** current NZ standards and **126,000** international standards available to NZ customers

# 148

## sponsored standards free to the public, in the health, building, and electrical safety sectors

- Smart home guidelines
- Ngā paerewa Health and disability services standard
- Residential electric vehicle (EV) charging

<sup>1</sup> Our 2023-2027 strategy summary is in Appendix One and full version available online at: [www.standards.govt.nz/about/corporate-publications/strategic-plans/strategic-plan-2023-2027](http://www.standards.govt.nz/about/corporate-publications/strategic-plans/strategic-plan-2023-2027)




**370,677** publications sold:

<b>52%</b> Online library subscription	<b>45%</b> Sponsored downloads
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Hardcopies and PDFs **3%**

**Most sold publication:**  
**NZS 3910:2023**  
*Conditions of contract for building and civil engineering construction*





**134** new NZ subject matter experts appointed to standards development committees




**CLIMATE CHANGE**

**Standards for sustainability**  
 Adoption of international standards for hydrogen to lead energy transition. New energy efficient heat pump systems guidance – cost saving, energy use reduction. EV charging guidance downloaded over 2,000 times.

**BUSINESS SUSTAINABILITY**

**New curated collections**




**More flexible and scalable standards development project management resourcing model implemented**

**DIGITAL ECONOMY**

Helped shape international digital and data standards on **nine** international committees

**BIOMETRICS**  
*Cyber security* **PRIVACY**  
**Artificial Intelligence**  
 Security & ID devices  
**Software engineering**  
*Geographic information*  
**BLOCKCHAIN**

**Improved search, information and structure of website**



- Self help functionality
- Customer enquiries
- Security improvements

## Opportunities

More effective use of the standards system will benefit New Zealand in a number of ways, including:

1. Furthering New Zealand's economic, digital, trade, market access and climate change response, and renewable energy adoption ambitions.
2. As an alternative to regulation.

## Supporting New Zealand's ambitions and priorities

### Supporting trade, investment, and market access, and increasing opportunities for innovation and competition

*In the dynamic global trade environment, standards help maintain New Zealand's reputation as a producer of high-quality export goods. Standards NZ plays a key role by facilitating New Zealand's contribution to international standards development. We help minimise technical barriers to trade, which is key to the interoperability of New Zealand's products and services in other markets.*

Standards are fundamental ingredients in many of New Zealand's free trade and mutual-recognition agreements, including those with our two largest trading partners, China and Australia. In Europe and Asia, more and varied trade opportunities have emerged in recent years, including the recently signed New Zealand-European Union Free Trade Agreement. More opportunities are on the horizon in the Indo-Pacific, South-East Asia and the Middle East.

Standards can help businesses lower their production costs by reducing redundancy, minimising errors, and shortening time to market. These cost savings can help drive competition within New Zealand, offering flow-on benefits to consumers.

Businesses can also gain a competitive edge by demonstrating their compliance with standards. This can provide assurance of a product's standard of quality or safety, or both, over other goods and services which do not have the same demonstrable proof.

### Helping small businesses make better use of technology and increase their digitalisation

*Digital technology standards can help reduce unnecessary compliance costs faced by small businesses and improve their productivity and prosperity by making it easier for them to operate securely and efficiently in an increasingly digitally connected world.*

Every aspect of our economy is reliant on rapidly evolving digital technologies and data information security and management. However, in a survey of 2,702 New Zealand businesses across 2022/23:<sup>2</sup>

- only 57 per cent of small businesses in New Zealand reported having an online presence (in other words, their own website, social media account, web shop or the use of a third-party sales platform such as Trade Me or Facebook Market Place)
- only 34 per cent of small businesses reported using cloud-based payroll solutions, and only 14 per cent had digital inventory management tools
- 52 per cent of all businesses (all sizes) thought they would benefit from being more digital.

The survey also found that barriers to adoption included:

- difficulty in choosing the right digital tools
- a lack of awareness of the tools available and what is valuable
- concerns about cybersecurity
- affordability
- a lack of time to acquire new skills.

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<sup>2</sup> <https://www.betterforbusiness.govt.nz/assets/better-for-business-files/documents/business-digital-capability-monitor-key-findings-and-update-may-2023.pdf>

However, with the continued rapid growth and evolution of digital solutions and the increasing use of sometimes contentious technologies (such as artificial intelligence, machine learning and facial recognition), small businesses will increasingly need to come to grips with the challenges posed by a complex and changing technological landscape.

Standards NZ has a clear role to play, as standards are a key part of any digital solutions being developed, particularly regarding the use of new technologies. Digital-focused standards can provide assurance to New Zealanders by setting performance expectations and safety measures, and providing good practice guidance, helping protect businesses and the public by ensuring activities in the digital sphere are conducted fairly, securely and lawfully.

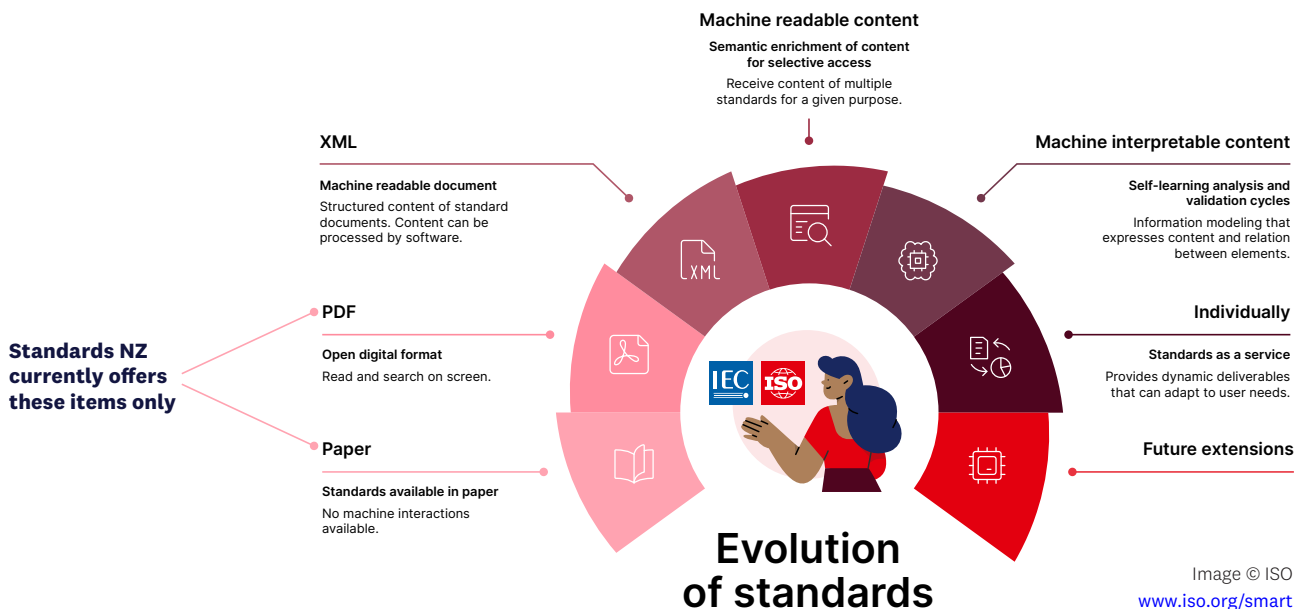
These standards may also be useful in reducing unnecessary compliance activities domestically (for example, by removing the need to provide the same information to multiple government agencies and providing new markets with the assurances they require). For New Zealand’s small and medium businesses, the greatest opportunities lie in adopting and utilising more digital business solutions, all built and operated to standards (for example, by adopting accounting packages like MYOB and Xero to help automate their business transactions).

## Digitalised standards

*With digitalised delivery in more accessible formats, standards would be easier to use, more effectively meeting customer needs.*

Currently, the Standards NZ website predominantly sells hard copies and PDFs. To meet our customer needs, we want to sell access to browser-based digital editions (web editions) which can be read on more device types and are particularly well suited to being read on smart phones and tablets (devices less suited to PDFs and often used in the field). Web editions are also more accessible generally, working with screen readers for the visually impaired and making it easy for readers to enlarge text and zoom into the details of images, hyperlink to references, use built-in calculators and make digital notes. Having standards as code also helps digital providers create helpful tools for standards users (for example, apps and business software programmes incorporating standards content) and interoperability with software products like CAD, CRM, BIM and financial and other business software products.

**Figure 1 - The digital evolution of standards**



Standards NZ has developed a plan for digitalising our standards which is ready to operationalise once revenue levels are sufficient to fund the investment needed.

## **Increasing renewable energies including electricity and hydrogen generation and adoption**

*Standards can help to increase New Zealand's climate resilience by supporting innovations to lower greenhouse gas emissions, adopting circular economy principles, decarbonising sectors, and improving the climate resilience of our built infrastructure.*

### **Renewable energies**

Standardisation offers significant ongoing opportunities for New Zealand's renewable energy generation and use, including electric, hydrogen, solar, wind and geothermal energy. In 2024, New Zealand will adopt 14 international standards for the safe production, distribution and storage of hydrogen energy. Further investment in this area would allow New Zealand to adopt more international standards to support our renewable energy priorities.

Internationally, standards that underpin the adoption of renewable energies, and the use of new and energy efficient technologies, are already being used to help reshape energy landscapes, improve climate change resilience, minimise waste, and support the decarbonising of key sectors.

### **Energy efficiency**

This year, Standards NZ was commissioned by EECA to survey energy efficiency standards used in other jurisdictions around the world. While the relevant international standards and joint Australian/New Zealand standards underpinning our own regime for energy performance of appliances were well known, the local standards used in Asia, Europe and North America were less so. Standards NZ's resulting report listed around 200 standards and other instruments in six product category areas. The main finding was that all jurisdictions surveyed, except the United States and Canada, which continue to rely on local laws and standards, have been shifting their energy-efficiency-related product benchmarks and performance tests to an international standards base (for example, IEC).

We think that New Zealand's advancements in EV technology and hydrogen adoption present learning opportunities for partners such as Australia, in areas such as energy management and the use of smart technology.

### **Resilient infrastructure**

Adverse climatic events like Cyclone Gabrielle have highlighted how vulnerable New Zealand's infrastructure can be, and how expensive it is to fix.

Standards which support building resilient infrastructure are a focus for both Standards NZ and ISO. While New Zealand has adopted some international infrastructure-related standards, there is significant opportunity for further international standards adoption to support other types of infrastructure, including telecommunications, transport, water services, renewable energies and the built environment.

Earthquake resilience of our buildings and wider built environment also continues to be an important area of work for Standards NZ, applying the lessons from the Christchurch and Kaikōura earthquakes into our building and engineering standards.

In October 2022, GNS Science published the updated National Seismic Hazard Model, which calculates the likelihood and strength of earthquake shaking in different parts of New Zealand. To support the rapid uptake of the learnings gained in the development of this model and since the publication of other relevant building standards, Standards NZ has led the development of a technical specification, SNZ TS 1170.5, *Structural design actions – Part 5: Earthquake actions*, which will allow engineers to voluntarily test, and put into practice, new technical specifications within the context of the updated National Seismic Hazard Model. This is an important tool in improving New Zealand's earthquake resilience.

## Adopting more international standards

*International standards help New Zealand keep pace with developments in international markets.*

Standards NZ has a statutory obligation to participate in the international standardisation system and to actively support the adoption of relevant international standards, reflecting New Zealand's reliance on international market access and supply chains.

This gives New Zealand the opportunity to participate in the development of standards likely to impact New Zealand's national and economic interests.

Benefits of adopting international standards include:

1. **Trade facilitation.** International standards help ensure that products and services meet common quality and safety requirements, making it easier to trade within international markets. By adopting and complying with these standards, New Zealand businesses can access a wider range of markets and increase their competitiveness globally.
2. **Increased innovation and efficiencies.** International standards often incorporate good practices and the latest technological developments. By adopting these, New Zealand industries can benefit from increased innovation and efficiencies, leading to streamlined processes, reduced duplication of effort, and increased productivity, competitiveness and economic growth.

### Adoption of 13 international hydrogen-related equipment safety standards

Commissioned by WorkSafe NZ Energy Safety, Standards NZ's 2023 *Hydrogen standards review* report provided a thorough review of international standards needs to support the production, distribution, and utilisation of hydrogen across New Zealand's energy landscape. The review led to a recommendation to directly adopt relevant international standards that would allow New Zealand to draw upon international good practice and tried and tested solutions – an economical and efficient way to pave the path for hydrogen integration and safety. The project has progressed with thirteen ISO and IEC draft standards provided for public comment to make sure they work for all user needs across Aotearoa.

Sustainably produced hydrogen has significant potential as a next-generation renewable green fuel source and is part of New Zealand's largest energy transition in more than 100 years. The government has a legislated target of net zero greenhouse gas (GHG) emissions – other than from biogenic methane – by 2050, and a target under the Paris Agreement to reduce net GHG emissions to 50 per cent below gross 2005 levels by 2030. This project forms a part of a greater concerted effort by multiple organisations leading the way in hydrogen use.



- 3. Enhanced interoperability and compatibility.** International standards help ensure that products and services from different countries are compatible and interoperable. This is particularly important in sectors such as information technology, electrical appliance manufacturing, telecommunications and energy. Through the adoption of these standards, New Zealand can ensure integration with global supply chains.
- 4. International recognition.** Compliance with international standards can enhance the reputation of New Zealand businesses and regulators by demonstrating a commitment to quality, safety and good practices, which builds trust with customers, partners and stakeholders.

The international adoption process administered by Standards NZ includes the assessment of a standard's suitability for the New Zealand market, enabling modifications to be made where necessary (for example, for environmental, safety, regulatory or natural hazard issues specific to New Zealand), and providing industry with the confidence and assurance needed to use these standards.

## Standards as a tool for compliance and assurance

*The development of new (and amendments to existing) standards follows a clearly defined and structured consensus-based and representative approach. This process is led by a core team of recognised industry experts to make sure that the standards produced are sufficiently robust, relevant and enduring.*

### Standards as a regulatory tool

High confidence in standards as reliable indicators of quality provides potential for the standards system to play a greater role in achieving regulatory objectives.

Individual standards specify the criteria needed to determine if a particular product or service meets a required level of quality, performance and safety. Hundreds of standards are already used to support New Zealand regulatory systems through citation in legislation or regulation; 13 per cent of our current catalogue, including both New Zealand Standards and joint standards with Australia, is cited. Half of all standards purchased this year were cited publications.

Rather than developing technical regulations, more government regulators could identify standards with quality, safety or performance specifications that, if met, will achieve the desired regulatory objectives. Meeting them can then be cited in outcome-based regulations as an acceptable means of compliance.

### Standards as a non-regulatory tool

Standards can also be a valuable tool to achieve desired quality, performance and safety outcomes outside of regulatory systems.

Due to the process by which they are developed or adopted (wide industry representation and consensus-based decision making) industry users tend to have high levels of buy-in to, and compliance with, standards. Even outside of regulatory systems, there are significant commercial, quality and safety drivers to comply with the practices and requirements specified in standards and realise the benefits that assurances of quality and safety provide. Good examples of this are the EV standards NZ have produced which, while not made compulsory in regulations (cited), are highly popular and are helping support the adoption of EVs within New Zealand.

## Challenges

This section covers challenges such as contributing to the de-jointing of joint Australia/New Zealand standards, our reliance on a small volunteer workforce, and our ability to invest in improving our products and services and the potential solutions we are exploring or implementing. Underlying all of these challenges is what we see as the major challenge we are navigating, our revenue model and what it's able to fund.

### De-jointing and opting out of joint standards with Australia

New Zealand and Australia have been developing and using joint standards for 41 years, and parts of both economies and regulatory systems are underpinned by joint standards. Particularly high users of joint standards include the building and construction, energy, gas, electrical safety, manufacturing, consumer products and services, and occupational safety sectors.

Joint standards also underpin and support the Australia-New Zealand Closer Economic Relations Trade Agreement, the Trans-Tasman Mutual Recognition Agreement, the Joint Accreditation System of Australia and New Zealand, and the broader one-economic market objectives between our two nations, including the interoperability of products and services transacting across the Tasman. There are explicit requirements in these instruments around standards and their use.

Each year, Standards Australia initiates projects to review and update existing joint standards. As agreed, when Standards NZ became part of MBIE in 2016, each standards body contributes towards the joint standards work being led by the other.

Under New Zealand's user-pays standardisation model the contribution ('commissioning fees') must be sourced from industry and government agencies seeking to participate in or use the joint standards. If the funding is insufficient New Zealand industry technical experts cannot be found New Zealand must opt out of participating. The project then continues without New Zealand, and the updated version of the previously joint standard becomes an Australian-only standard. The old version remains current in New Zealand, but is often out of step with modern science, industry practice, and performance and quality expectations. This is known as a 'de-jointed standard'.

New Zealand's challenge in sourcing commissioning fees is primarily due to the small size of the New Zealand sectors and economy, our disproportionate number of small and medium business enterprises (97 per cent of all businesses in New Zealand), fluctuating economic conditions, the absence of specific dedicated public good funding for standards, and government agencies understandably allocating their limited funding to competing initiatives and priorities other than standards work.

Over the past eight years, New Zealand's inability to find sufficient funding for the volume and type of work we do with Australia has resulted in us opting out of more than 550 joint standards projects and hundreds of previously joint standards, relating to multiple sectors, becoming de-jointed.

Industry bodies and organisations in New Zealand and Australia are concerned about this issue. They believe that the de-jointed standards are impacting, or will impact, the interoperability of products and services, trade and market access, and business efficiencies across our trans-Tasman economies. We receive regular feedback from industry on both sides of the Tasman that there are unfavourable consequences of de-jointing standards.

Similarly, standards committee participation and contribution from New Zealand subject matter experts is held in high regard and is of high value, but it ceases when a standard is de-jointed. So too does the intellectual property held by Standards NZ as a Crown asset.

#### What we are doing to address this issue

We work hard to secure the industry funding needed to participate in joint standards development with Australia. Hundreds of hours each month are spent engaging, negotiating and brokering funding and industry participation and financial support for joint standards work. We have updated our external messaging to better demonstrate the value of maintaining alignment with Australia and the risks of not doing so. We are constantly working to widen (better identify) the network of parties who we think may be interested in participating in and funding joint standards.

Our involvement in the Trans-Tasman Regulatory Coherence engagement and in the development of its joint work programme has helped raise the issue of de-jointing for consideration at Ministerial level. There is now a greater focus on maintaining this trans-Tasman alignment, particularly for the building and construction sector and small business enterprises in New Zealand.


## The digitalisation of standards

Customers, industry associations, government regulators and, notably, commissioners of standards development have been asking for digital editions of standards for a number of years.

Other national standards bodies (for example, the British Standards Institute, the Standards Council of Canada, Standards Australia, and the Singapore Standards Council) and international standards bodies (ISO and IEC) have successfully digitalised their library content.

To deliver digitalised standards, Standards NZ needs to meet investment costs and initial outlays that are beyond our current resources. This delay in delivering a modern standards system represents an opportunity cost for New Zealand. As the technological landscape continues to evolve, there is a risk that New Zealand's standards system will not meet the market's service delivery expectations and New Zealand may lag behind standards systems operating in other comparable countries.

### Improving dairy herd testing with revision of NZS 8100:2015



Commissioned by Dairy NZ, a revision of NZS 8100:2015, *Dairy herd testing* will align the standard with international practices and technological advancements. This project makes use of our partnership model, which provides Standards NZ's independent oversight and project management assistance for organisations with a more limited budget and with resource to contribute.

The standard supports an industry contributing more than \$20 billion in export value and employing over 50,000 people. With 3.73 million cows herd tested across New Zealand's 11,000 herds, the standard impacts a significant number of stock and farmers. The long-term efficiency of the dairy industry relies on accurately identifying the future dams (mother cows) of bulls whose progeny, or descendants, will be the most efficient converters of feed to farm profit. The standard is also essential to ranking the actual performance of the sires in the New Zealand herd. The aim is for the next generation of sires to be better than the previous generation and for farmers to determine which animals to keep replacements from and which are contributing the least to their profitability.

NZS 8100 is a key tool for Certified Herd Testers and applies to herd testing covered by the Dairy Industry (Herd Testing and New Zealand Dairy Core Database) Regulations 2001, or its successor.

### **What we are doing to address this issue**

It will require some additional revenue levels / injection in future to develop the ICT capability and infrastructure for digitising and hosting digital standards. Digitalisation remains on our longer-term radar for when revenue / funding levels are sufficient to fund the investment needed. We continue to explore different options for how this customer service product offering could be delivered in future.

## **Standards could not exist without industry volunteers**

Technical experts who volunteer their time and expertise are at the heart of standards development around the world. In New Zealand's small market, this volunteer model poses several challenges:

- Limited availability of technical experts means that it can be difficult to identify and source suitable experts in sufficient numbers to ensure balanced and competent representation.
- There are difficulties in recruiting and retaining relevant experts as some people do not see the benefits to participating in a committee, and others (particularly those in small and medium sized businesses) cannot afford the time or financial commitment.
- There is a longstanding lack of diversity of age, gender and ethnicity in the membership of standards development committees (including low representation of Māori and Pasifika perspectives) and difficulty developing a pipeline of future members.
- There is poor general awareness and knowledge of the important role of standards and the committees who develop them.
- There is a lack of involvement from consumer and user organisations that don't have sufficient capacity to participate.
- Participation in the standards development process can be a significant time commitment for industry committee members, with a substantial cost to employers and individuals personally. There is increasing frustration in the lack of financial support for committee members (including associated costs like travel), resulting in a reduction in industry participation.

Although we are working to secure greater representation on committees from a diverse range of industries, genders, and ethnicities, the cost of being involved means that our committee members are sometimes retirees. While they have a wealth of experience to draw upon, this creates risks for the sustainability of the committees. There is also the risk that the standards being produced don't always adequately meet current (and potentially future) needs of New Zealand businesses and society.

### **What we are doing to address this issue**

Standards NZ initiatives underway to grow both the volume and diversity of industry committee membership, include:

- Profiling examples of industry committee members and giving them the opportunity to communicate the value both they and their sector get out of their participation.
- Producing a [short video recruiting and encouraging industry to participate](#) in standards development committees, and developing an action plan to grow Māori participation in particular.
- Greater Standards NZ involvement with the IEC Young Professionals programme.
- Regular engagement with industry organisations and Government agencies to promote and raise awareness of the value of standards to their sectors and regulatory systems.
- Promoting participation opportunities through the professional networks of Standards NZ and MBIE staff.
- Continuing to identify and appoint industry technical subject matter experts onto domestic, joint Australasian and international standards development committees. This year 134 new industry experts have been identified, assessed as suitable and appointed to committees spanning topics including AI, data management and digital technology, building and construction, energy, electrical safety and gas, quality systems and quality management and fire safety:
  - 47 international committee members
  - 72 joint committee members
  - 15 NZ (all hydrogen committee)

# Industry perspectives: What our customers, committees and commissioners say

Standards NZ undertakes regular customer engagement surveys to monitor and evaluate satisfaction with our products and services, and we regularly receive unsolicited feedback from individuals and industry bodies about the standards system. We also receive feedback from the individuals who work as volunteers on standards development committees, and the agencies that fund standards development.

## Value of standards

Feedback from our stakeholders strongly suggests that New Zealand industry appreciates the benefits offered by standards.

“From a business and industry perspective, standards are one of the critical pillars of a highly productive economy. They reduce barriers to trade by allowing interoperability of manufacturing and services trade between countries. They can attest to safety and quality and increased efficiency. Increasingly, they are global, and they give business the certainty to invest, to innovate and train to common standards.”

Catherine Beard, Director of Advocacy, Business New Zealand

“Building standards benefit communities across the design, product, construction, use and maintenance aspects of a building’s life cycle. From simple shelters through to today’s complex buildings, owners and occupiers have sought to ensure the dwellings and buildings they live in are safe and reliable. We more frequently face increasing tests of the resilience of our buildings and infrastructure either through natural hazards, climate change, or innovation in products and systems, which all need robust standards to test and measure against.”

Nicholas W Hill, Chief Executive Building Officials Institute of NZ

### NZS 5442(Int):2024 revision leads the way for biomethane use

A 16-year-old standard has been updated to allow for changes in the type of gas used to fuel homes and workplaces. Newly revised as an interim standard to meet rapidly changing industry needs, NZS 5442(Int):2024, *Specification for reticulated natural gas* supports the safe blending of biomethane within the reticulated, or piped, gas network.

A fully revised version is expected to additionally allow blending of hydrogen gas within the gas distribution network, an important step in New Zealand’s adaptation of more renewable energy sources.

Biomethane comes from anaerobic digestion by micro-organisms breaking down organic matter in food and farm waste (manure). Currently, with the focus being on waste removal rather than energy supply, much of this is simply burnt away. However, a study by First Gas, Beca and Fonterra found that four per cent of the country’s energy-related emissions could be avoided by using low-emitting, renewable alternatives such as biomethane. This interim standard applies to all methane-based gases that come from natural petroleum sources, landfill drainage, biogas production and coal seam drainage.

“AI Group and our members value the role of Standards New Zealand and Standards Australia in working together to support the development and maintenance of joint standards between both nations. Joint standards facilitate trade and ensure that there is alignment in technical regulations on both sides of the Tasman. This boosts consumer confidence and enhances competitiveness and innovation. Joint standards are also a key plank in the Trans-Tasman Mutual Recognition Act (TTMRA) to enable the free movement of goods that ultimately promotes economic growth for both countries.”

James Thomson, Standards and Regulation lead, Australian Industry Group

## Quality and delivery are good

Customers continue to be complimentary about the work of Standards NZ with 9 out of 10 respondents in a recent survey indicating that they are satisfied with our performance and the quality of our standards. Customers in this survey were also generally satisfied with our customer service (89 %), the delivery of their order (90%) and the overall purchasing process (83%).

The desire for digital standards content remains a high priority.

“Standards are critical for the New Zealand Construction and Infrastructure sector and underpin our qualification and training. We would like to see more use of digital tools so the reach of Standards can be increased, and we think it is critical that New Zealand continues to collaborate with Australia to ensure efficiencies and trans-Tasman synergies. With the rapid development of artificial intelligence technology, we believe there will be challenges for standards and how they are delivered to the construction sector, but these challenges will also provide opportunities and it is important that New Zealand standards incorporate AI technology into their workplan. The current model that Standards New Zealand delivers will need to change and evolve quickly with the changing technology platforms.”

Greg Wallace, Chief Executive Master Plumbers

## The costs of the standardisation system

However, we are increasingly fielding concerns from individuals and industry organisations about the performance and ongoing viability of New Zealand’s standardisation system. This feedback generally falls into the following categories:

### Costs of standards

More than 80 percent of survey respondents, and others providing ad hoc feedback throughout the year, were critical of the cost of buying standards. They believe that:

- Standards NZ charges too much to purchase or subscribe to standards
- having to pay for standards can be a barrier to businesses and limits the use of standards throughout New Zealand, to the detriment of the economy
- standards, particularly those cited (mandated) by government regulators or which include health and safety elements, should be freely available

These concerns sometimes reflect a lack of full understanding and appreciation, by our customers, that Standards NZ operates a user-pays full cost recovery business model, one that does not receive direct public funding. They assume that the system is being directly publicly funded, as it is helps support New Zealand’s national interests, including trade and market access facilitation as well as public safety.

## Standards development volunteers to self-fund their participation

Participation in standards development activity can be a significant time commitment for committee members, and a substantial cost to both employers and individual participants. It can be very difficult for small business owners to absorb the time or cost associated with freeing up their employees, or participating themselves, in the standards development process. Several thousands of volunteer hours are provided by industry experts to the standards development system annually.

There is increasing frustration at the lack of financial support or compensation for committee members (including associated costs like travel), which is resulting in a reduction in industry participation on committees. Long-serving volunteers are particularly frustrated because, in previous years when the economic situation was more positive, financial support for participation used to be available. Commissioners would build it into the costs of standards development or revision projects and sometimes regulators would set aside funding to specifically support participation costs. This no longer exists.

### Collaboration and clarity with NZS 3910 underpinning construction contracts



Our building, construction, engineering and civil infrastructure industries rely on NZS 3910 *Conditions of contract for building and civil engineering construction* to ensure that contracts are suited to New Zealand's industrial and legislative scene. The standard underpins nearly 80 per cent of construction contracts written in New Zealand. A 2023 revision brings good practice up to date.

The building and construction industry is worth \$18 billion to New Zealand's economy, equating to a third of New Zealand's workforce and constituting 12 per cent of all businesses. So, contracts that underpin this massive volume of work and set clear understanding for deliverables and responsibilities need to be comprehensive as well as easy to understand. As such, NZS 3910 is designed to be suitable for 'most contracts, most of the time'.

With its origins stretching back nearly 60 years, the 2023 revision of NZS 3910 is the first substantial revision in a decade, jointly commissioned by the Construction Sector Accord (through MBIE) and the New Zealand Infrastructure Commission Te Waihangā.

This revision was hotly anticipated, with more than 2,250 public consultation comments that helped shape the outcome and ensure it met the needs of industry users. Complementary standards used alongside are also proposed for revision.

*“We also think that the technical expertise that is provided by New Zealand associations to ensure we have a fit-for-purpose standard should be better recognised, and member associations should be compensated for the work they do for the entire sector.”*

Greg Wallace, Chief Executive Master Plumbers

Standards NZ is regularly approached with requests for financial support and requests to endorse fundraising activities led by committee members to help fund their participation in standards development work. Committee members are often left personally funding their participation or seeking financial support from their employer or industry body, many of which have their own resourcing challenges and financial constraints.

In a recent survey of committee members who had been involved in projects led by Standards NZ over the past 12 months, 90 per cent of respondents would recommend participating in a standards development project and said they had been treated equitably, communication was good, they gained professional development from the experience and their contribution had been valued. However, only 72 per cent of these respondents were keen to participate in another standards development project themselves, due to the time and effort needed to commit to this work.

*“Engineering New Zealand strongly supports Standards New Zealand’s role within industry, noting that many engineers and industry partners are active participants in the standards process and that standards are heavily cited within the industries engineers work within. Standards are critical for good public safety outcomes. Given the importance of standards for New Zealand, Engineering New Zealand continues to advocate for a review of Standards New Zealand’s operating and funding model, identifying that the current system is stressed and chronically under-resourced in comparison to overseas partners. The user-pays model is not achieving appropriate results.”*

Dr Richard Templer, Chief Executive Engineering New Zealand

In a small economy like New Zealand, it is inevitable that the volunteer experts participating in the development of standards for an industry, or considering standards for adoption in New Zealand, are also the users and buyers of standards. Industry sees it as unfair that they provide their time (many thousands of hours annually) and technical expertise/intellectual property for free, and for the benefit of the wider industry and New Zealand economy generally, but also have to fund their participation in developing the standards, and then purchase the standards as a customer of Standards NZ.

*“Business NZ has long held the view that Standards NZ is inadequately funded and that a full ‘user-pays’ model will never work in such a small domestic market as New Zealand. There are lots of spillover benefits from standards and there needs to be more government funding (as happens in most other countries) or our participation in joint and international standards development will continue to break down.”*

Catherine Beard, Director of Advocacy, Business New Zealand

## Regulatory stewardship and citation of standards

Regulatory stewardship and citation hygiene remains a challenge in New Zealand. Government regulators often cite standards as a means of compliance with a regulatory requirement. However, it takes considerable effort for regulators to keep track of, and consider the appropriateness of, updated standards. As such, citations don’t always get updated as standards are revised and new versions are published. Many hundreds of our mandated New Zealand standards have out-of-date citations by government regulators.

As a result, our customers are often left confused as to whether they should purchase and follow the most recent version of a standard that includes the most up-to-date science, technology, performance requirements and industry practice (labelled ‘current’) or whether they should purchase, and comply with, an older version of the standard that may be out of date (labelled ‘superseded’), sometimes by decades and several publication versions prior to the current version, but is cited and therefore legally required.



“There is immense confusion. For example, AS/NZS 3000:2018, Electrical installations – Known as the Australian/New Zealand Wiring Rules is the current standard but is not cited in the electrical safety regulations and cannot be legally used. Many designers, architects, and engineers are using the 2018 version in their designs and, as an electrical inspector, I must legally fail it.”

Anon. Customer Satisfaction Survey 2024

## Opportunity for more use of international standards

While domestic and joint Australian and New Zealand standards are valued highly in some sectors, other customers also question why a country our size (comparable to the size of a city in some countries) needs our own or regional standards and doesn't adopt, and cite in regulations, more international standards.

## Commissioners' views

We asked five of the organisations that have commissioned Standards NZ to do standards development work in the past 12 months about their experience working with us. All organisations were extremely positive about their experience, confirming that not only would they work with us again but would recommend Standards NZ to others. There was also strong support to maintain sponsorship of standards for free public access where funding allows.

Commissioners' value:

- the international reach that Standards NZ has and our ability to connect agencies and individuals with international standards development work
- the calibre and competence of the New Zealand subject matter experts that Standards NZ recruits to join standards development committees
- the independence and rigour of the processes Standards NZ manages and the consensus-based decision making facilitated by them.

Aligned with the feedback from committee members themselves, commissioners commented on the challenge of a system that depends on volunteer subject matter experts.

Commissioners also expressed concern that insufficient funding to develop, adopt and maintain necessary standards may result in risks to public safety as well as restrict innovation and growth. Commissioners want the system to enable more international standards adoption, more timely reviews of existing standards, and more proactive work. There is growing frustration and commissioners have concerns with the funding model. In response to this, Standards NZ supports wider MBIE policy work to explore sustainable funding options.

# International participation

As the national standards body of New Zealand,  
Standards NZ has an obligation to contribute to the international standardisation system by:

Identifying, sourcing and managing the suitability, appointment and involvement of industry technical experts participating in international standards development committees.

Administering country balloting.

Engaging with other national and international standards bodies to observe global trends, represent New Zealand's interests, and participate in the international standardisation system to inform strategic direction and develop shared solutions.

Representing New Zealand's interests in international systems, forums and institutions related to standardisation, e.g. ISO, IEC, APEC, PASC, UNIDO, PISC.<sup>3</sup>

Providing the secretariat functions for the IEC National Committee of New Zealand.

This international participation is important for multiple reasons:

- It helps New Zealand influence the development of international standards that will have an impact on our national interests – for example, in the areas of international trade, new market access, supply chain requirements, and interoperability of professional services and locally manufactured products.
- It allows Standards NZ to identify emerging areas of standards development and engage with relevant parties in New Zealand to gauge interest and value.
- It supports the credibility and reputation of New Zealand as a good global citizen, as well as a leader within the Pacific.
- It helps show case on the world stage and contribute our unique and highly valued professional skills, knowledge, innovation and expertise in certain fields and areas of business.

## Areas of interest

Over the past year we have seen consistent themes in standards development work emerging from our ISO and IEC international forums. These include renewable energies, carbon emissions reduction, energy efficiency, transport, consumer protection and digital technology. In particular, governments and industry are increasingly using national standards bodies to help support sustainability objectives and climate change action.

As a member of the Pacific Area Standards Congress, the Pacific Islands Standards Committee, and the ISO Asia Pacific Forum, Standards NZ also has a focus on supporting specific development initiatives for the benefit of New Zealand's Pacific neighbours. In the longer term, as Standards NZ achieves its aspirations to increase its access to technical resources and funding, Standards NZ will look to increase the scope of its international participation activities and influence in the Pacific region.

<sup>3</sup> International Organization for Standardization (ISO), International Electrotechnical Commission (IEC), Asia-Pacific Economic Cooperation (APEC), Pacific Area Standards Congress (PASC), Pacific Islands Standards Committee (PISC)

## New Zealand participation

A large part of Standards NZ's internationally focused work is encouraging and facilitating New Zealand industry subject matter experts' involvement in international standards development committees that advance New Zealand's interests. There are three main parts to this:

1. To maintain depth of expertise and succession planning, we identify, and assess the suitability of, new members to join international committees that New Zealand already participates in.
2. When new committees are established by the international standards body, Standards NZ tests New Zealand's interest in joining these committees, and then works to source qualified, capable and willing New Zealanders to participate.
3. As topics become of more interest to New Zealand, we work to transition New Zealand's involvement in relevant committees from 'observing' status to 'actively participating'. This year, New Zealand converted its status on ISO/TC 307, *Blockchain and distributed ledger technologies* and ISO/IEC JTC 1 SC 42, *Artificial intelligence* committees from observing to participating, reflecting that both topics are areas of growing importance to New Zealand.

This past year, Standards NZ facilitated New Zealand's participation in 77 international standards development committees (65 ISO committees and 12 IEC committees). Through these committees, New Zealand industry experts contributed to the development of international standards relating to building construction and fire prevention, consumer and occupational safety, health care and community services, the energy, electricity and gas sector, data and digital systems, engineering, primary industries, and environmental sustainability.

There is significant opportunity for greater participation. The 77 international committees New Zealand participated in represent only 7 per cent of the 1067 current ISO and IEC technical committees and subcommittees. By participating in more committees, New Zealand can influence the content of international standards, making them more relevant to New Zealand's needs and interests, and easier to use and adopt. Greater levels of participation are constrained by the financial costs of participation.

## International engagement

Standards NZ also participated in several international standards forums and international engagement activities, including those outlined in the following table.

### International Organization for Standardization (ISO)

- Attended the ISO General Assembly hosted by Standards Australia, including presenting on the value and benefits of standards for the Pacific.
- Participated in ISO Asia-Pacific monthly meetings, which provided updates from ISO's central office.
- Staff member seconded to the ISO Asia Pacific Regional Coordinator role in Geneva for a three-year term, reflecting our position as independent, honest, professional, capable and credible in the global standardisation system.

### International Electrotechnical Commission (IEC)

- Attended the IEC general meeting in October 2023.
- Hosted IEC Secretary General Philippe Metzger and Dennis Chew IEC Regional Coordinator at a New Zealand-led event to discuss international priorities and the standardisation solutions that are being developed to solve some of the world's most pressing issues, including decarbonisation and digitisation.
- Ongoing support of the IEC New Zealand National Committee as its Secretary, supporting meetings and communicating updates and workshop opportunities from IEC's central office.

In May 2024, hosted all our ISO and IEC convenors to join an informative and useful session entitled Convene the Conveners, which was an opportunity to share ideas and learn as well as discuss challenges such as succession planning and test ways to address them.

### Pacific partnership

- Participated in Pacific Islands Standards Committee (PISC) meetings.
- Participated in a series of meetings relating to the PACER initiative (Pacific Agreement on Closer Economic Relations), a trade and development agreement between nations aimed at helping to raise living standards, create jobs and increase exports in Pacific Island countries, while also lowering barriers and providing greater certainty for New Zealand businesses to export throughout the Pacific.
- Participated in on-line Pacific Area Standards Congress (PASC) Executive Committee meetings to develop a modernised charter and terms of reference for PASC to help improve the professionalism, prioritising, focus and deliverables of this forum.
- Met New Caledonia's Minister for Construction to discuss timber imports and changing standards requirements relating to New Zealand exports.

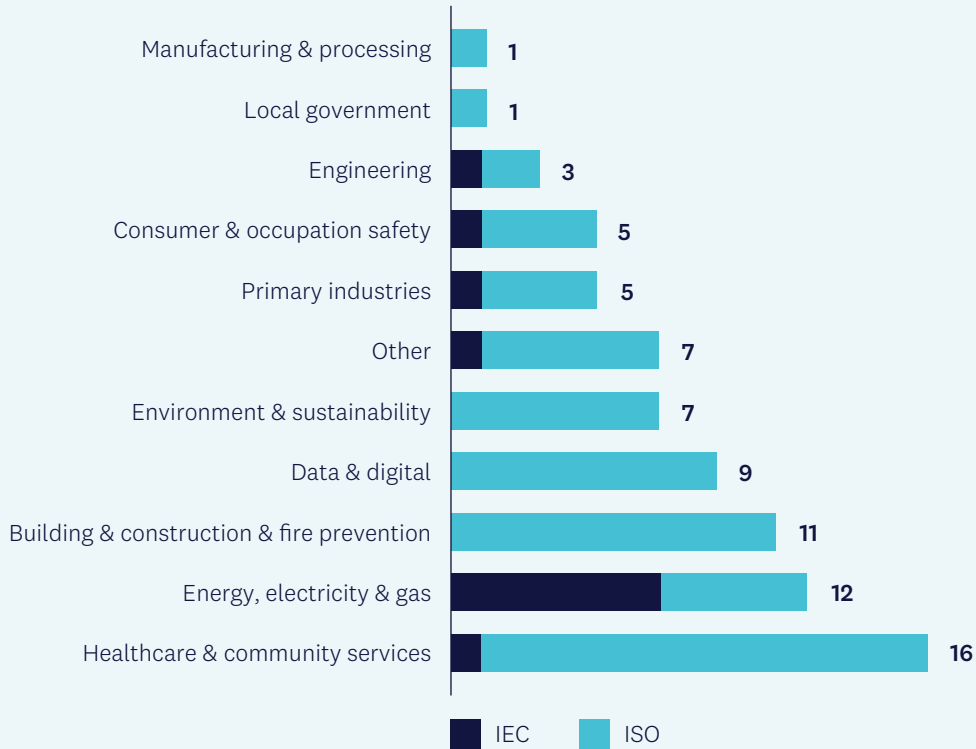
### Other national standards bodies

- Held bilateral meetings with Standards Australia, the Standards Council of Canada, and the Standards Council of Singapore.
- Met representatives from the International Code Council, a US-based international organisation that produces codes, standards and building safety solutions, to discuss product assurance, off-site manufacturing, remote virtual inspections, sponsored standards, standards in regulatory systems, tiny homes standards, and so on.

By participating in these international meetings and activities, Standards NZ is contributing to the development of global standards and promoting New Zealand's profile in the global standardisation community.

**Figure 2 - International standards development committees New Zealand participated in during 2023/24**

New Zealand is actively participating in **77** international standards development committees across multiple sectors. There are another 990 international committees that we do not have representatives on.



**Figure 3 - New Zealand votes on international standards development committees during 2023/24**

This year New Zealand (via Standards NZ) voted **1,485 times** on international standards development committees.



# Our 2024/25 work programme

## Standards development

Over the next 12 months, Standards NZ will continue to develop and update standards that support the needs of New Zealand industries and the wider economy.

Standards NZ and Standards Australia have a long-standing and valuable partnership, publishing joint standards that support the one-economic market objectives between our nations, including the interoperability of products and services transacting across the Tasman. Over time, this work is transitioning towards greater numbers of joint adoptions of international standards, ensuring trans-Tasman as well as international alignment and market access. Our two standards bodies are aligned in our drive for international standards adoption.

We anticipate publishing about 200 standards in the coming year.

## New Zealand standards

Building and construction standards remain at the core of the New Zealand standards work programme each year. In the coming year, this work includes standards on steel structures, timber-framed buildings, earth buildings, contracts for building and civil engineering, and earthquake actions. A specific building and construction related New Zealand standards development committee has also been established to progress the New Zealand adoption of nine Australian standards (previous versions were joint standards that had dejointed).

We are also working with other regulators and industry to identify which dejointed Australian New Zealand standards may be a priority to realign and maintain to better support trans-Tasman market access and trade opportunities.

### SNZ TS 1170.5 to provide an alternative solution for earthquake resilience



Commissioned by MBIE Building System Performance, the first draft of the hotly anticipated technical specification SNZ TS 1170.5, *Structural design actions – Part 5: Earthquake actions* was released for public comment in early 2024.

In October 2022, GNS Science published the updated National Seismic Hazard Model (NSHM), which calculates the likelihood and strength of earthquake shaking that may occur in different parts of Aotearoa New Zealand over specified periods. It is used to improve our resilience and manage risks to safety, security and the economy from seismic events.

SNZ TS 1170.5 looks to expand on learnings gained since the publication of the updated NSHM. While NZS 1170.5:2004 remains the referenced standard for compliance with the New Zealand Building Code, SNZ TS 1170.5 offers an alternative solution and aims to provide a means for engineers to voluntarily test, and put into practice, new technical specifications within the context of the updated NSHM.

Technical specifications developed through Standards New Zealand follow international good practice in developing consensus-agreed, industry-led guidance. Here, a technical specification provides a quicker solution in a rapidly changing environment, allowing for ‘road testing’ before potential integration in a subsequent development of a standard.

To support the adoption of hydrogen as a renewable energy source, work will commence on Phase 2 of the revision of the interim standard NZS 5442(Int), *Specification for reticulated natural gas* to accommodate hydrogen into the distribution leg of the gas network. We also intend to process the modified adoption of up to 10 international standards to complete the suite of adoptions necessary to support the production and refuelling equipment supply chain for hydrogen.

Other New Zealand standards development work this year will support environmental sustainability (for example, a Publicly Available Specification for residential solar photovoltaics (PV) and battery storage systems), the efficiency and effectiveness of our primary sector (through a new dairy herd testing standard), and pool safety (through the adoption of relevant Australian standards).

## Joint adoption of international standards

Australia and New Zealand have agreed a significant joint work programme to adopt international standards. Over the next 12 months, the majority of these adoptions will be in the areas of occupational health and safety (face and eye protection, machinery safety), environmental sustainability (air quality and climate action), consumer safety (lights on bicycles, and playgrounds), information technology (records management, information security, cybersecurity and privacy protection) and quality management systems.

Neither New Zealand industry nor government agencies here are proactively commissioning the joint adoption of international standards. New Zealand's international standards adoptions are being largely driven by the needs of Australian industry and funded by Standards Australia.

## Australian-led joint standards

Standards NZ and Standards Australia also have an ongoing work programme to revise joint standards. Many of these relate to our unique Australasian electrical settings. Over the next 12 months, revisions of joint standards will span topics such as lighting for roads and public spaces, flameproof enclosures and electrical protection devices for mines and quarries, electrical installations on marinas and boats, and safety of household appliances.

## New Zealand-led joint standards

EL-002, *Safety of Household and Similar Electrical Appliances and Small Power Transformers* is one of the joint standards development committee led by Standards NZ. Joint standards for review by this committee will focus on the safety of electrical appliances, including washing machines, dryers, towel rails, rangehoods, fume extractors, pumps, air filters, heaters, garage doors, heating and service water installations, baths and spas, window coverings, humidifiers, UV water treatment, commercial refrigerating appliances and ice-makers.

## Development of international standards

New Zealand is actively participating in 77 international standards development committees across multiple sectors. While this participation adds significant value for New Zealand, there are 990 additional current ISO and IEC technical committees and subcommittees that we are not participating in. We will continue to promote the benefits of participating on international standards and facilitate this involvement by interested and qualified industry experts.

For example, recognising that there is growing concern in New Zealand about the barriers to accessing menstrual products, Standards NZ is currently working with MBIE Consumer Services to test market interest in joining [ISO technical committee 338](#) Menstrual Products. This ISO committee is relatively new and has not yet produced any standards but aims to provide a global definition of quality, encompassing both safety and performance, and to make menstrual products more accessible and available globally and improve consumer access to information about menstrual products. New Zealand has joined the committee as an Observing member with the objective of becoming a Participating Member once sufficient New Zealand members are found.

## Strategic projects

Standards NZ also has a series of more strategic initiatives under way to improve the sustainability of our business within a tighter financial environment so that we can continue to meet our customers' needs and deliver prosperity and protection through standards for New Zealanders. These include:

- **Exploring different ways to deliver our business activities.** We are exploring ways to centralise and consolidate where possible and re-align our resources and effort to meet our strategic objectives. This has resulted in a greater use of wider MBIE capability and functions (on a user-pays basis) and the implementation of a 'resource to demand' model with a mix of in-house and on-tap external resources for standards development project management functions. We have critically considered what functions we will need in the Standards NZ of the future and have taken steps to move towards this.
- **Making our products and services more attractive by improving the self-help functionality of our website and web shop.** This work will improve customers' and employees' experience by reducing web shop errors, fixing broken reporting functionality, and responding to customer feedback on what is currently not working in our e-commerce platform and service. We will also update the content on our website and restructure existing content so that it better connects different audiences to the information most suitable to them.
- **Driving diversity and industry committee participation initiatives.** Balanced and representative standards development committees are central to the creation of standards that are relevant and fit for purpose. As part of MBIE, Standards NZ has a responsibility to ensure that Māori interests and needs are represented and catered to in the standards and conformance system. Actively recruiting Māori to committees is crucial to ensuring that all New Zealanders are represented and that the standards developed are cross-culturally relevant. With Māori representation, standards development committees can take culture-specific requirements into account and consider the challenges and opportunities unique to Māori (in terms of culture, people and the land).



# Appendix One: Strategic plan summary

## Strategic direction 2023–2027

For 91 years Standards New Zealand has been New Zealand's national standards body, and is responsible for managing the development, publication and access of standards. Due to changes occurring globally, we need to ensure that our standards continue to be accurate, accessible, affordable and relevant, meeting the needs of New Zealanders now and into the future. Our strategy, with its focus on customer service, sustainability,

climate change, and the digital economy, will help to make sure that our national standards body is best placed to support New Zealand's industries and government agencies by adapting to changes in these areas. Globally, climate change is rapidly affecting the lives of many around the world and standards are an important means of helping deliver new regulatory requirements and good industry practice. Digital economy developments are

a core driver of global economic transformation, and standards can help ensure that this takes place responsibly across all facets of this transformation. Within the context of rapid changes in these areas, standards can help continue to keep New Zealanders safe and support businesses to make better business decisions, access new markets, and create new, value-added products and services.

Our vision	Our mission	Our goals	Our principles	Our functions	Our values	The way we work	Our products and services	Our benefits
Prosperity and protection through trusted standards.	Bringing leading experts together to develop high quality accessible standards to support New Zealand's economic growth and keep New Zealanders safe.	Contribute to New Zealand's efforts to address climate change and New Zealand's digital economy and improve the sustainability and growth of our business.	Consensus decision making, balanced representation, international first, and independence.	To develop, review, and sell standards. To adopt international standards. To represent New Zealand on an international stage.	Māia – Bold & brave Mahi tahi – Better together Pae kahurangi – Build our future Pono me te tika – Own it	Independently Representatively By consensus Globally connected	Trusted High quality Good practice	Trade Productivity Innovation Protection

## Strategic Priorities

### Customer service



#### Goals

Having services and products that meet market needs – timely, relevant, affordable, accurate and accessible.

#### Key initiatives

- Diversify products and services to meet market needs more effectively, e.g. developing codes of practice, technical specifications, guidelines, webinars, explanatory videos.
- Gain a deeper understanding of our customers, so that we can make our services easier to use. Provide our customers with the information they are searching for, meeting their diverse needs.

- Use plain language that customers can easily understand, so they can more confidently use standards.
- Maintain our existing, and build new, strategic partnerships with Government regulators and other organisations.
- Reduce cost barriers to market access by increasing sponsorship (pre-funded access) arrangements.
- Make our standards development service more attractive by identifying ways to speed up the process, without compromising quality, consensus and representation.
- Improve self-help functionality of our e-commerce business for our customers on our website.
- Digitalise Standards NZ catalogue to improve accessibility and functionality for customers.

#### What does success look like?

- We provide a high-quality customer experience to deliver value to New Zealand.
- Our services and products achieve strong customer satisfaction, with a large customer base, due to:
  - high levels of trust and confidence in the standards development process and the standards themselves
  - services and products that meet the needs of a diverse customer base, delivered in a timely manner, and which are relevant, affordable and easily accessible
  - increasing our online self-help services and range of products
  - effective marketing and communications that highlight the value of using standards.

#### Impact

- Our products and services offer greater value to what matters the most to New Zealand.
- Standards are easily understood by more customers and can be more readily used to support businesses.
- Greater international influence to support New Zealand economic interests.

### Climate change



#### Goals

To make a valuable contribution to New Zealand's efforts to address climate change and to reduce our carbon footprint.

#### Key initiatives

- Develop standards that help deliver on Government priorities, e.g. renewable energies, carbon emissions reduction, waste minimisation, climate resilience and energy efficiency.
- Promote and market standards products and services which support climate change action.
- Share specialist knowledge and expertise on climate change standards domestically and internationally.

#### What does success look like?

- Widespread use of our existing products and services relating to climate change regulation, industry practice and performance requirements.
- Strong demand for new products and services relating to climate change regulation and best practice.
- Participation and influence on climate change issues on international standards development committees.
- Recognition of Māori as equal partners in the development of standards promoting Māori cultural and spiritual values.

#### Impact

- Reduced carbon footprint due to greater use of renewable energy sources, reduced waste, and more sustainable land management and business practices.
- Improved climate resilience in our built environment.

## Digital economy



### Goals

To make an active contribution to New Zealand's evolving digital economy by helping define good practice, performance and protection requirements.

### Key initiatives

- Support through standards NZ Government and industry digital services and ambitions e.g. data interoperability, cybersecurity, digital trade, AI application, information security.

- Digitalise Standards NZ catalogue to improve accessibility and functionality for customers.
- Continue to develop and evolve Standards NZ's web-shop and website to meet changing market needs e.g. customised collections, feeds to international standards, multiple digital formats, increased subscription services.
- Make better use of Standards NZ's data and information holdings to generate more targeted business insights and operational intelligence.

### What does success look like?

- Standards NZ's products and services are digitalised (e.g. in web browser and app-accessible formats), making access easy for our customers.
- As the digital economy continues to be regulated, Standards NZ partners with a range of Government regulators to develop required standards and performance requirements.
- Standards NZ keeps pace with digital economy changes, achieving agility and speed to market, and is recognised as a preferred provider of standards.

### Impact

- Increased public trust and confidence in the digital economy due to standards that support ethical practices in this area e.g. privacy, security, and data protection.
- Increased accessibility and protection within the digital economy as a result of standards that specify website accessibility, digital literacy, and digital inclusion for underserved communities.
- Recognition and protection of Māori cultural and intellectual property rights in the digital space.

## Business sustainability



### Goals

To improve the sustainability and growth of our business by focusing on our services and products, operating and funding model, partnerships and business efficiencies.

To develop our people, including committee members, so that we have the right skills, capabilities, diversity and cultural awareness to serve the needs of our customers and stakeholders.

### Key initiatives

#### Our operating model

- Explore opportunities for establishing new and sustainable funding models/sources.
- Explore and implement different ways for Standards NZ to deliver its business activities to improve the efficiency and effectiveness of existing business resources, systems and processes.
- Explore options, then take steps, to reduce the over-reliance of specialist knowledge and expertise held in one place, including with vendors.
- Develop and adopt disciplined quality assurance systems, practices and processes, underpinned by ISO 9001 certification.

### Our services and products

- Continue to implement necessary pricing adjustments to our products and services to recover our business costs.
- Build brand and value recognition, and increase understanding with industry of our products and services, and the value they can add, positioning Standards NZ as go-to organisation for standards.

### Our partnerships

- Strengthen our iwi/Crown partnership capabilities, relationships and activities.
- Establish stronger domestic and international networks and partnerships.
- Strengthen Standards NZ's relationship with and contribution to Standards Australia so that both organisations benefit equitably and contribute fairly to the development of standards.
- Identify current commercial arrangements that are detrimental to the business and resolve these.

### Our people

- Provide greater recognition and acknowledgement of committee members, their work and contribution to New Zealand and international standards.
- Actively recruit, retain and plan succession for committee members, with a focus on growing diversity within committees.

- Take a stronger relationship management approach with committee members.
- Attract the right talent. Train and upskill staff with a particular focus on sharing knowledge and expertise across our people and fostering collaborative and people-centric leadership.
- Focus on health, well-being and safety by creating a safe, inclusive environment.
- Grow our Māori cultural and linguistic knowledge and capability.

### What does success look like?

- Standards NZ's role as the national standards body is well-recognised, and we are widely regarded as the leading authority on standards in New Zealand, in both national and international settings.
- We are financially sustainable, with sufficient funding to fulfil our functions as defined by the Standards and Accreditation Act 2015. This means that we are appropriately resourced in the right areas to respond to a changing business environment.
  - Our partnerships are wide-ranging and enduring, due to successful stakeholder engagement and improved standards development processes and support Māori to achieve their economic, employment and well-being aspirations.

- Through these partnerships, we are able to incorporate diverse perspectives into the development of standards and more readily adopt international standards to support trade and market access.
- Committee participation is seen as an attractive and valuable role resulting in high retention and easy resourcing of committees, with a high degree of diversity and inclusion of committee membership, resulting in innovative and representative standards. Strong relationship management practices are in place with committee members to support high levels of business efficiency.
- Standards NZ people are motivated, productive and skilled, and feel their work and voice matters.
- We have the skills and expertise needed to ensure our products and services meet the needs for Māori (e.g. by representation on committees and applicable customs and protocols included).

### Impact

- Standards better reflect, and deliver tangible benefits to, more of the businesses and communities that they serve by:
1. Contributing to improved personal safety and protection outcomes for New Zealanders and
  2. Supporting more of New Zealand's international trade endeavours.

### Standards New Zealand

Prosperity and protection through standards

Climate change // Digital economy // Sustainability // Customer service

### Market Integrity

Delivering world-leading regulation to protect fairness and integrity of markets in New Zealand

Self-help // Smart regulation // Sharp connections // Sustainable model

### Te Whakatairanga Service Delivery

Fair markets that thrive

Impactful // Accessible // Data-driven // Sustainable // Encouraged // Safe and well // World-class stewards of our systems // People and communities at the centre of what we do // Fairness and respect // Best-possible value from our services and regulatory systems

### Ministry of Business, Innovation & Employment

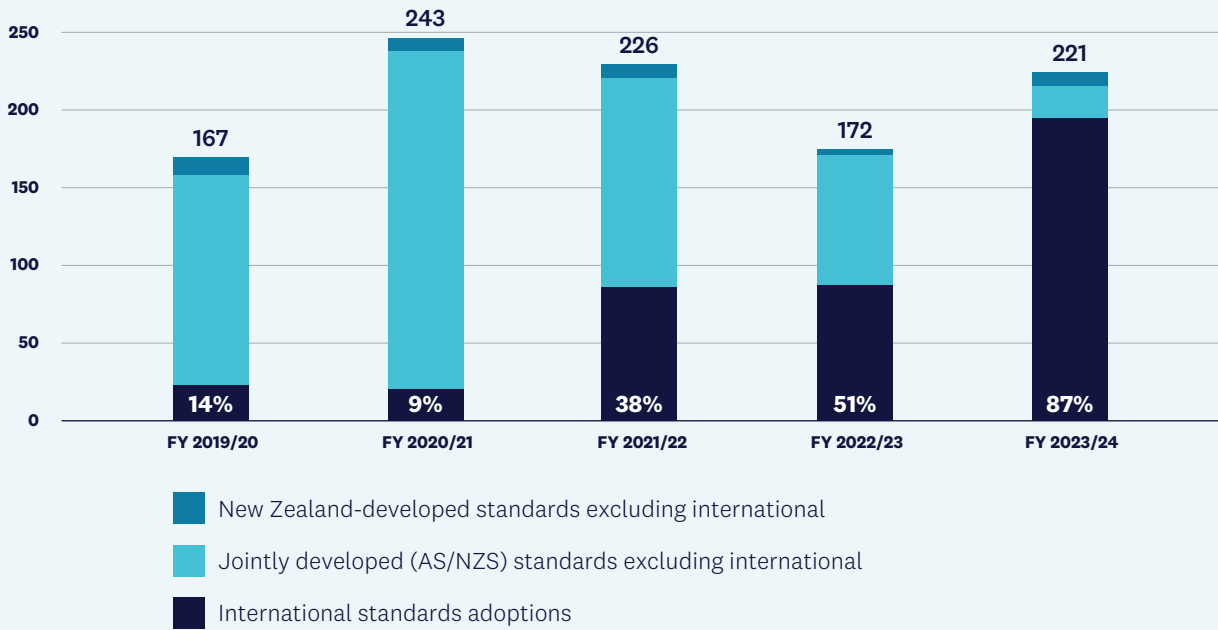
To grow Aotearoa New Zealand for all

Digitally enabled // Partnering with Māori // Thought leadership // Regulatory stewardship // Empowered by data // Financially sustainable // Our people // People-centred // Transition pathways

# Appendix Two: Our publications and how they are accessed

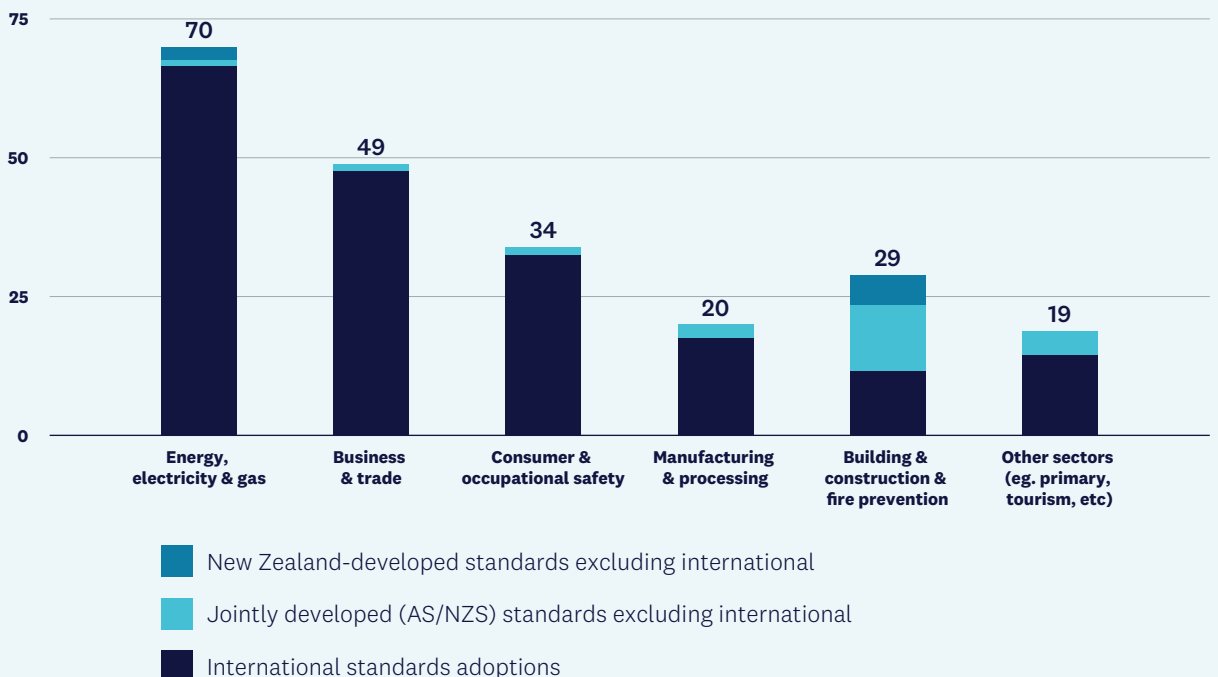
**Figure 4 - Makeup of our annual publications, FY 2019/20 - 2023/24**

This year we added **221** publications to the Standards NZ catalogue, of which **87%** are international standards adoptions.



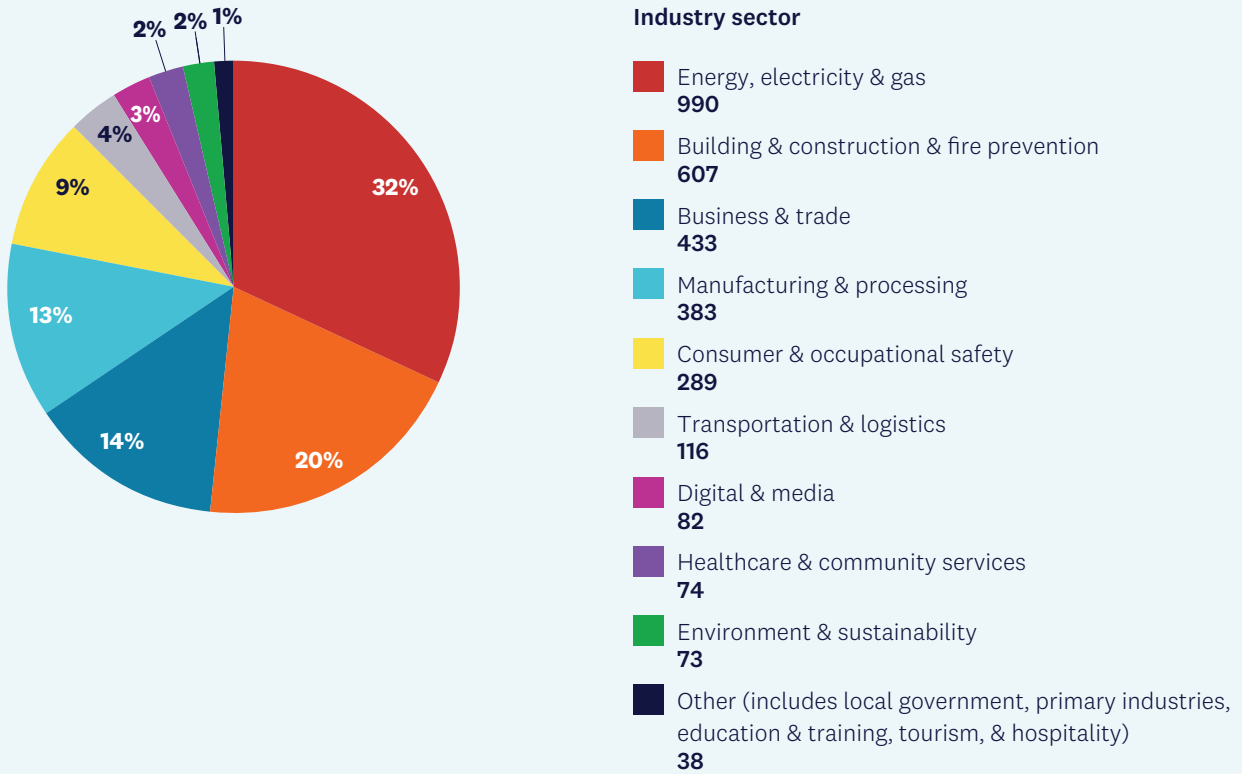
**Figure 5 - Our latest publications, FY 2023/24**

These new publications relate to multiple sectors.



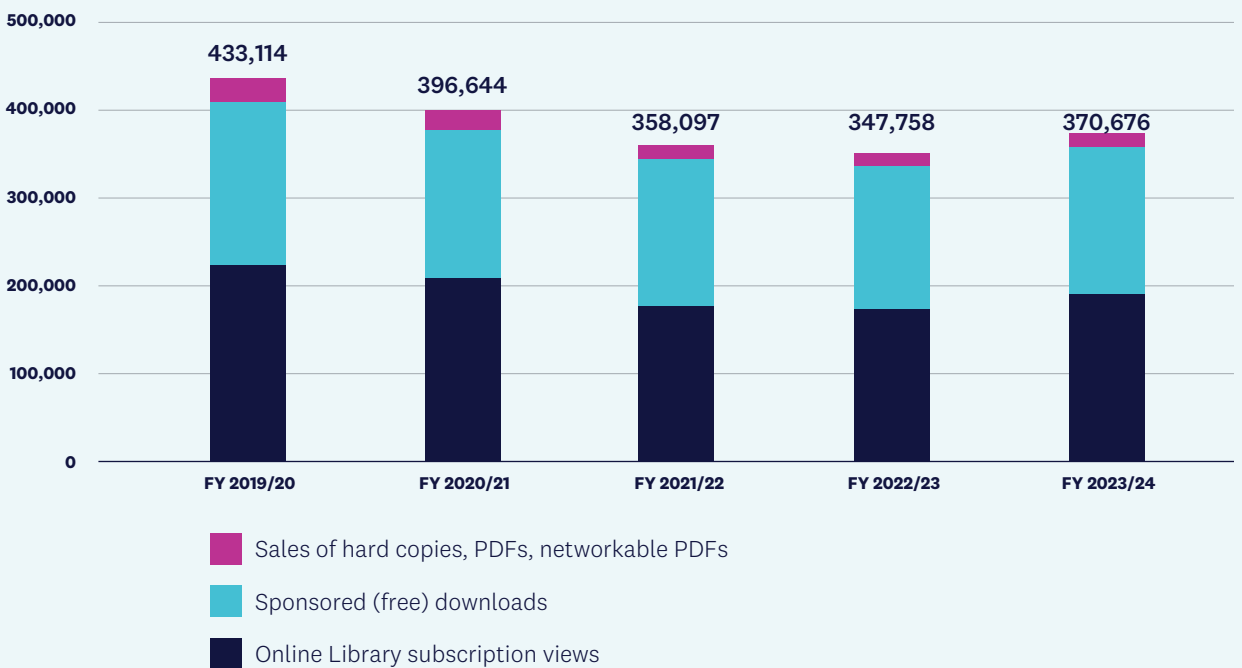
**Figure 6 - Our standards catalogue by sector**

The energy & building sectors make up more than half of our current catalogue.



**Figure 7 - Annual number of standards publications accessed, FY 2019/20 - 2023/24**

This year, users accessed our publications more than **370,000** times.



## Appendix Three: The New Zealand Standards Approval Board 2023/24

The New Zealand Standards Approval Board has seven members with a mix of skills and expertise drawn from the technology, science, engineering, design, health, construction, building and gas sectors. The Board is an independent, statutory, decision-making body appointed by the Minister for Commerce and Consumer Affairs, with administration and secretariat support provided by Standards NZ. It is not a Crown entity and does not have a governance role.

The Board's main functions are to:

- approve or decline proposed New Zealand standards, joint New Zealand and Australian standards, chairmanship and membership of standard development committee
- adopt or decline other standards organisations' standards as New Zealand standards, for example ISO and IEC international standards
- approve or decline modifications to New Zealand standards
- revoke and archive New Zealand standards
- advise the Minister on any matter referred to the Board by the Minister
- advise the Minister on the currency of New Zealand standards, and on priority areas for the development and review of New Zealand standards.

In addition to its statutory functions, the Board engages with key stakeholders including industry bodies to support the value of Standards New Zealand's products and services.

### Board members 2023/24



**Victoria MacLennan** – *Chair*

Victoria MacLennan is a technology entrepreneur and champion of New Zealand digital innovation and growth and has been a ministerial advisor. An experienced CEO, managing director and chair, she has been actively involved in community engagement, supporting start-ups and chairing the charity Digital Future Aotearoa which provide free digital education with a focus on rural, Māori and Pacifica.

Victoria is passionate about growing great companies, raising digital literacy, growing New Zealand's economy, and brings an equity and inclusion lens championing equality for women. She has won numerous awards including a lifetime achievement award for her contribution to business and technology.

Victoria's professional vision is to help change the face of the digital industry to collectively embrace manaakitanga, focus on diversity, create new pathways into the workforce, support reskilling and upskilling and help the digital technology industry solve large complex challenges like equity, sustainability and climate change.



**Brian Watson** – *Member*

Brian is an experienced business leader having held CEO and other senior leadership roles in New Zealand, Australia and Asia over the last 30 years. His science and management qualifications together with more than 40 years of experience in the science sector (including the global 'Testing, Inspection and Certification (TIC)' sector) give him an excellent understanding of the benefits and needs of standardisation.

He is an experienced company director and board chair and graduate director of the Australian Institute of Company Directors and Member of the Institute of Directors in New Zealand who has had extensive Board interactions and held more than 12 directorships in Australia, NZ and Singapore.

Brian has a pragmatic and consultative approach which together with his knowledge and experience with science and technology has enabled him to find win-win solutions to complex business challenges and value diversity of thought. He is now a professional consultant, mentor and company director.

**Susan Iversen** – *Member*



Susan Iversen is the ex-director of Karo Data Management and has over 30 years of experience in digital health and data analytics. This included participation in the development of several health information standards. Earlier in her career Susan trained as a civil engineer and worked in roles related to workplace health and safety.

Her board experience includes Age Concern Wellington Region (member and past president) and Hutt Union and Community Health Service and a representative of Healthcare Aotearoa on PHO Services Agreement Amendment Protocol.

**Fa’asalele Simona Malo** – *Member*



Fa’asalele Malo is of Samoan heritage and grew up in the community of Cannons Creek in Porirua, Wellington, which fostered his passion for providing culturally appropriate quality architecture.

He is a registered architect with 20 years’ experience practising in Wellington, nationally and in the Pacific including Samoa, Fiji and Vanuatu. He is a co-director and co-owner of Malo Architecture Ltd, an architecture, design, project management, construction, and cultural consultancy based in Wellington, where he lives with his family.

Fa’asalele has public sector, construction and building compliance and quality assurance experience. He sits on a number of boards and leadership teams based locally and abroad, that have an ethnical approach for business, educational and leadership development, including Victoria University of Wellington’s Komiti Pasifika board.

**Fiona van Petegem** – *Member*



Fiona has spent over 20 years working in manufacturing and product development in New Zealand, China, the Netherlands and Germany both as a design and industrialisation engineer and in areas including lean management, effective process improvement, global product compliance, efficient product development, improved product safety & quality and risk assessment procedures.

Fiona is a mechanical engineer with a B.E (Hons) from Canterbury University and a M.B.A in International Industrial Management from Germany. She has been part of AS/NZS and DIN (Deutsches Institut für Normung, the German Institute for Standardisation) standards committees and works with New Zealand manufacturers and other organisations looking to improve their practices to secure future resilience.



**Richard Merrifield** – Member

Richard is a building consultant based in Mahana, rural Nelson, undertaking project management and consulting work on housing projects. Richard is a Trade Qualified Builder and a Licensed Building Practitioner. He is a former Deputy Chairman of the Building Practitioners Board and a former member of the Plumbers, Gasfitters and Drainlayers Board.

Richard’s previous roles include, Director of the Building Research Association New Zealand and Chairman of the Building Research Advisory Council. He is a Life Member and former Chairman of the New Zealand Certified Builders Association, he was a member of the Construction Strategy Group which has now been disestablished. He was a member of the Minister of Building and Housing Task Force on productivity and the Building Act Review Advisory Group.

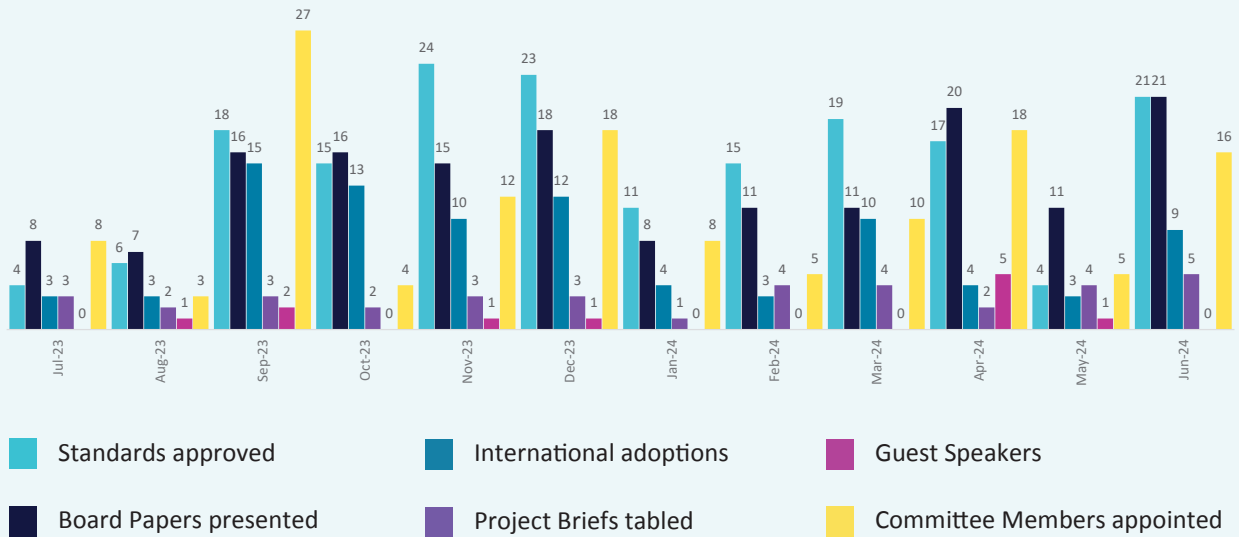


**Peter Gilbert** – Member

Peter Gilbert has over 40 years’ experience in the natural gas and LPG industries. He has been Executive Director of the LPG Association of New Zealand and Executive Officer of the Gas Association of New Zealand. He is also Chair of the Standards New Zealand Gas Sector Board and a member of various Australian/New Zealand standards committees.

He has considerable experience in the regulatory system and the use and development of standards in the energy sector.

**Figure 8 – Snapshot of the Board’s key activities**



## Appendix Four: The Standards New Zealand management team



**Malcolm MacMillan** – *National Manager, Standards New Zealand*

Malcolm leads Standards New Zealand’s team of 30 staff, including carrying delegated authority for the statutory officer role of New Zealand Standards Executive, under the Standards and Accreditation Act 2015. He brings a background in strategic and operational leadership across the Government sector, including design and delivery of regulatory reform initiatives and programme delivery across a range of sectors. He is very familiar with the standards and conformation world having working experience with New Zealand Standards, accreditation, certification, licensing, registration, audit, performance review, and quality management and assurance schemes during his career.

Relationship management, engagement and collaboration with stakeholders is at the heart of Malcolm’s role and he has seen first-hand how standards benefit those in the diverse sectors he has worked in, including building and construction, health and safety, primary industries, housing, COVID-19 response, emergency response and recovery, aviation, and central and local government building and planning functions.

Malcolm has worked across a range of government agencies, often working closely with leading industry organisations both domestic and international, represented New Zealand and our interests at international forums and general assemblies, fronted select committees and cabinet meetings, and been on an advisory oversight committee for an independent accreditation body. Malcolm also leads the strategy for this 92-year-old organisation, as it continues its important role as the national standards body, within the Ministry of Business, Innovation and Employment, and as a member of the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC) via the IEC National Committee of New Zealand (NCNZ), Pacific Area Standards Congress (PASC), and Pacific Islands Standards Committee (PISC).



**Danielle Aberdeen** – *Manager, Commercial and Sectors*

Danielle and her team deliver key initiatives within the Standards New Zealand business strategy and support its day-to-day operations. The team is responsible for increasing the prominence, relevance, visibility and protection of standards in New Zealand within a financially sustainable business model.

The team is focused on understanding and pursuing opportunities for standards to play a greater role in New Zealand’s priority sectors. They also pursue connections with the international standards development work of the ISO and IEC, champion new digital content models and technologies to make standards more accessible, and drive Standards NZ’s new approach to working with third parties on value-added products and services.

This work maximises the impact of standards on the New Zealand economy and grows and diversifies Standards NZ’s products and services.

Danielle has both private and public sector experience, which spans business development, stakeholder engagement, commercial, digital solutions, account management and client relationships. She brings valuable experience from her 13 years at PwC, where she developed effective growth and client development strategies across multiple market segments and service lines.





**JT Schutte** – *Manager, Business Systems and Operations*

JT leads our front facing Business Systems and Operations business unit, incorporating customer services, our e-commerce platform, ICT business systems, finance, data analytics, quality management systems and business administration.

JT's previous experience includes various operations, business support, stakeholder engagement and programme and product management roles with Xero, Wellington City Council, MBIE and Capitec Bank in South Africa. He holds a Bachelor of Commerce and recently completed his MBA at Victoria University.

JT brings a wealth of experience in strategic thinking, project, and commercial management, honed across diverse sectors including government, finance, and technology. Outside the professional realm, JT is dedicated to environmental sustainability, actively taking steps to minimise his family's carbon footprint and champion a more sustainable future.



**Stanil Stanilov** – *Manager, Standards Development*

Stanil and his Standards Development team are responsible for the development, revision and updates of New Zealand, Joint Australia and New Zealand standards, and adoption of international standards. He also manages a range of relationships with commissioning organisations, Standards Australia and other national standards bodies, and standards development committee members.

Stanil joined Standards New Zealand in 2016 from the Licensed Building Practitioners team within MBIE, where he guided a nationwide network of building and construction assessors and played a leading role in development and implementation of regulatory policy, including the LBP Skills Maintenance Scheme. He is a Certified Microsoft Office Professional.



**Clare Francis** – *Principal Advisor, Standards New Zealand*

Clare joined Standards New Zealand after a long career with the Ministry for Primary Industries where she held a number of roles in the areas of animal welfare and biosecurity. Clare brings a background in policy development, business analysis and improvement, performance reporting, and relationship management. She has led the development of joint government and industry resources and has represented government on multiple forums. Clare also holds a post graduate Hons. Degree in Science.

Clare's role spans all the business teams within Standards New Zealand. Delivering operational policy, strategic and business planning, business and organisational development and performance and reporting responsibilities.

# Appendix Five: New Zealand’s standards and conformance quality infrastructure

An effective standards and conformance system enables the government, consumers, and businesses to maintain domestic and foreign confidence in the production, sale and use of products and services.

The standards and conformance system is designed to support the efficient and timely development of product and process standards and of conformity assessment procedures that safeguard public, economic and national interests.

Standards produced or adopted by Standards NZ are at the heart of this system. Standards are agreed specifications for products, processes, services, systems and performance. Standards provide technical solutions to issues, a means of meeting regulatory compliance, recognition of good industry practice, and the creation of commercial benefits and opportunities for industry.

If cited by reference in an Act, regulation or other statutory instrument, standards become part of the relevant regulatory framework, and demonstrating evidence of conformance may be necessary.

Conformance with standards provides assurance about the quality, reliability and interoperability of products and services. This in turn helps to minimise health, safety, and environmental risks, allows consumers to make informed purchasing decisions, enhances productivity and global competitiveness, and facilitates international trade. Accreditation also plays an important role in the system, providing for the consistent, robust, and reliable use of conformity assessments in keeping with international best practice.

Key: → Users of Standards New Zealand’s products and services

