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Priority Sustainability Data Requirements of New Zealand's Financial Services Sector

Discussion paper

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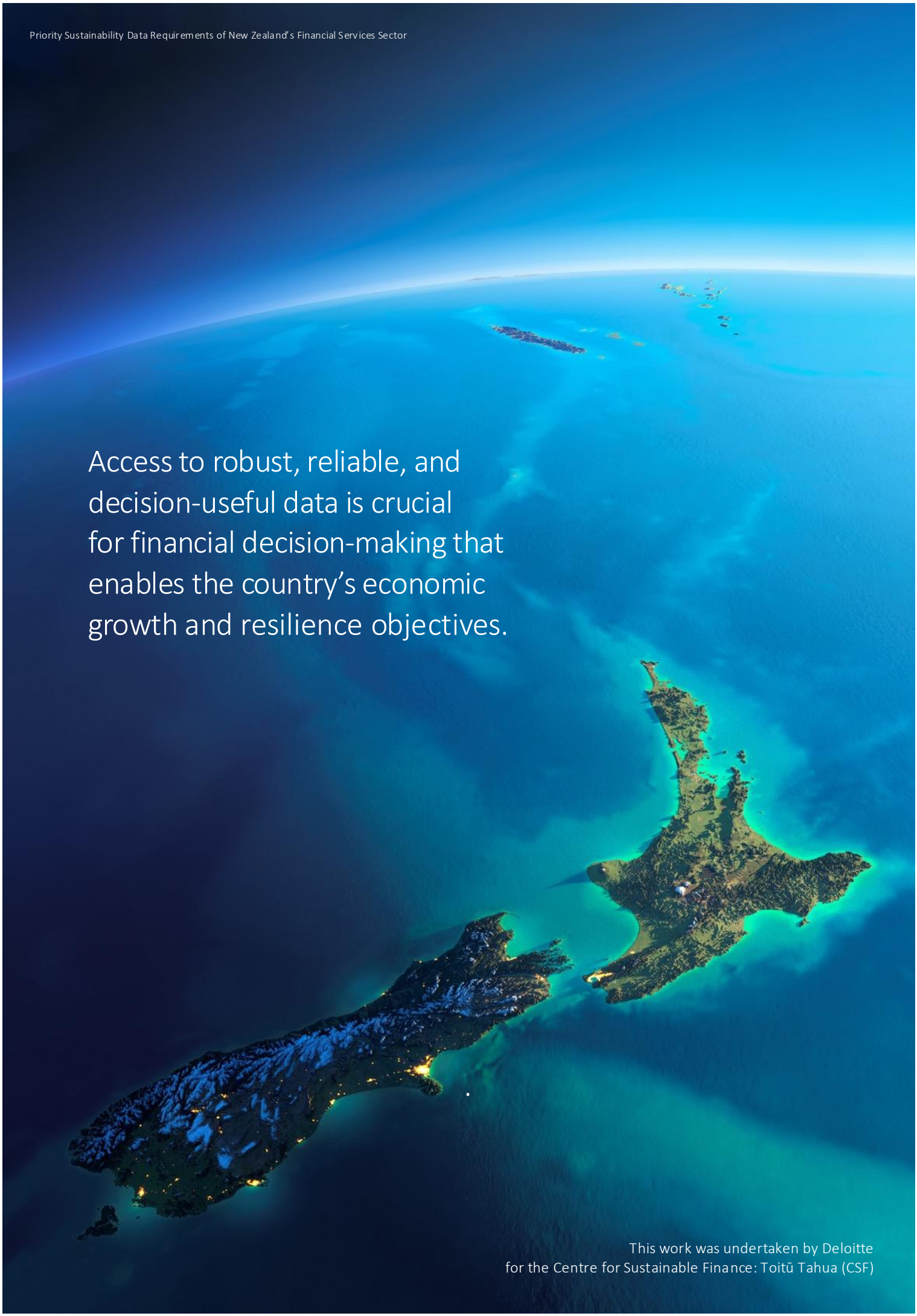

Access to robust, reliable, and decision-useful data is crucial for financial decision-making that enables the country's economic growth and resilience objectives.

This work was undertaken by Deloitte
for the Centre for Sustainable Finance: Toitū Tahua (CSF)

Background

Innovation and enablers

Globally and in New Zealand, data and technology are key enablers for financial decision-making that prioritises and drives the country's economic growth and resilience objectives. As financial institutions strive to mitigate portfolio risk and adapt to evolving customer expectations, the market for digital solutions and providers is expanding rapidly. This surge offers a growing array of tools that enable institutions to customise financial products, supporting competition, decarbonisation and portfolio risk reduction.

Examples of such solutions include digital disclosures portals such as the Net Zero Data Public Utility and ESGenome to streamline the reporting of physical risk and environmental performance data by listed entities; and non-profit initiatives like Climate TRACE, which uses satellite data and artificial intelligence to track greenhouse gas emissions globally in near real-time.

In New Zealand, MethaneSAT is a satellite mission developed in partnership with the Environmental Defense Fund and supported by the New Zealand Space Agency. It aims to monitor and measure global methane emissions with high precision. The Trust Alliance New Zealand (TANZ) is another non-profit industry consortium designed to help the food and fibre industry in New Zealand meet global standards for data verification, enhancing New Zealand producers' ability to provide chain-of-custody proof of their products environmental and sustainable attributes.

Barriers to progress

Despite such cutting-edge initiatives, access to decision-useful data—particularly data on the physical impacts of climate change—remains a key barrier for New Zealand's financial institutions and businesses. This challenge hampers robust sustainability reporting, limits the scaling of financial products and incentives, and restricts informed decision-making.

This paper shares key findings from a series of interviews, conducted with financial institutions between October and November 2024, to determine financial sector data needs and the barriers to advancing sustainability- and climate-related financial decision-making. The findings validate the recommendations outlined in the Sustainable Finance Forum's 2030 Roadmap – in particular, that a transformation of the financial system will occur through the use of Fintech and data infrastructure.

The purpose of this paper is to shine a light on the data issues faced by New Zealand's financial institutions and to provide recommendations on the way forward. This paper is intended to guide data providers, policymakers, and solutions developers toward critical gaps that must be bridged, and by doing so, more effectively direct capital flows toward sustainable and climate-resilient outcomes.

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Access to the right data is pivotal to Aotearoa's future

For New Zealand financial institutions to enable the country's economic growth and resilience objectives, robust, reliable, data is essential. The issues and recommendations presented in this report are based on Deloitte's interviews with industry leaders, highlighting the critical role of data in these efforts. Deloitte engaged with practitioners across New Zealand's Financial Services Industry, including insurance, asset management, and banking during October and November 2024.

Key findings

5 main challenges

This report presents the key findings from our interviews with Centre for Sustainable Finance: Toitū Tahua (CSF) Partners and Associates, highlighting the critical issues and recommendations based on their insights.

Data quality

Data management is fraught with challenges, including variability in data format and quality, exacerbated by a lack of standardisation across platforms and inconsistent data quality due to disaggregation and missing data. The absence of verified data further diminishes trust, while insufficient connections between biodiversity data and climate risk frameworks limits assessments. Scope 3 emissions calculations suffer from reliance on spend-based data and outdated emissions factors, leading to potential inaccuracies.

Data availability

Disparity in the availability and resolution of climate hazard data across sectors and regions in New Zealand hampers understanding of climate vulnerability, both at the local and regional levels. This is further compounded by low quality and availability of specific data, such as biodiversity, waste, and socioeconomic data.

Tools and resources

The capability of existing tools and resources is often insufficient to support disclosure requirements, particularly for Scope 3 value chain emissions. Enhancing tools and resources to measure and account for financed emissions is a priority but presents challenges relating to primary data availability, paywalls, and dependence on third-party data providers.

Platforms used

The growing number of climate data platform vendors complicates efforts to maintain a clear overview, delaying technology adoption due to concerns over obsolescence. Financial institutions are also facing challenges in sharing and using these platforms while weighing the potential risks to consumer data privacy.

Frameworks, guidance and accountable leadership

Significant barriers exist in integrating and standardising climate risk and biodiversity data, leading to patchy, inconsistent datasets and a fragmented market. This may result in a sub-optimal climate change response. The absence of centralised data and standardised methodologies threatens to hamper New Zealand's economic growth potential.

Snapshot (continued)

Where to from here?

Recommendations to enable change

Establish national data hub

Establish a national data hub to streamline management of, and access to, climate hazard and natural capital data. Consolidating data source would ensure universal accessibility, while reduce data coverage inconsistency. Starting with existing New Zealand data sources would build trust in the system before expanding to include additional datasets to improve data coverage and reliability for decision-making and policy development.

Government support

Central government could consider taking an active role or a public-private partnership in data collection and provision such as farm emissions and consumption (lifecycle) emissions data, to enhance reliability and access.

Centralised data platform

A centralised data platform enables investors and data users to upload and download self-reported sustainability data. New Zealand can draw insights from international examples, such as Norway's KBN platform and the Net Zero Data Public Utility.

Benefits of a centralised data platform include:

1. **Unified access** and increased transparency and accountability. A national data platform allows government agencies, businesses, researchers, and the public, access to the same data. This would provide transparency and accountability through equal access to vital information.
2. **Improved efficiency** through elimination of data silos and streamlined operations would duplication of resource and effort within and across sectors.
3. **Enhanced national and regional planning** and resource allocation, whether for disaster response or infrastructure planning.
4. **Innovation** supported by access to diverse datasets. Robust data encourages research, innovation, and the development of new solutions to national challenges.
5. **Enhanced security and compliance.** A single platform allows for better control over data security, ensuring that sensitive information is protected, and regulatory compliance is easier to manage.

Executive summary

Introduction

Access to the right data is pivotal to Aotearoa New Zealand's future

In driving New Zealand's economic growth and resilience objectives, robust, reliable, and decision-useful data is essential for financial institutions. The issues and recommendations presented in this report are based on Deloitte's interviews with industry leaders, highlighting the critical role of data in these efforts. Deloitte engaged with leaders across New Zealand's Financial Services Industry, including insurance, asset management, and banking sectors, interviewing representatives from ANZ (2), BNZ (2), ASB(3), Westpac (4), Rabobank (1), Tower Insurance (2), LGFA (1), and NZ Superfund (1) during October and November 2024.

The issues identified

Challenges arise in five key areas

Robust data quality, availability, and accessibility are fundamental for New Zealand's financial institutions to effectively support the country's economic growth agenda.

This report presents the key findings from our interviews with CSF Partners and Associates, highlighting the critical issues and recommendations based on their insights.

The overarching finding regarding data quality across all sectors reveals a fragmented, inconsistent, and often inaccessible data landscape. Fragmentation related to data sources, ownership, and accessibility was flagged in several areas, including on-farm emissions, industrial emissions, climate hazard data, biodiversity, and waste management. This fragmentation leads to serious challenges in data integration and impedes comparability. The five key challenges are explored in further detail below.

1. Data quality

Interviewees identified wide-ranging variability in both data format and quality as a major issue. The large volume of data and numerous data providers exacerbate these challenges. Despite the abundance of data, the lack of standardisation across platforms and sources creates significant barriers to accessibility. Inconsistent data quality, due to disaggregation and missing data, further complicates deriving consistent or comparable insights across sectors.

The absence of verified or assured data undermines trust and reliability, making it difficult to draw actionable conclusions.

Scope 3 emissions calculations are particularly problematic, due to their heavy reliance on spend-based data and outdated emissions factors, leading to potential inaccuracies.

Moreover, while data is abundant, its true value emerges only when interpreted by experts capable of translating complex datasets into meaningful outputs. This process often involves significant reliance on assumptions, which can skew results if not carefully managed.

2. Data availability

In terms of physical climate hazard data, while national-level data is available from sources like NIWA, local and regional data vary greatly in quality, age, and availability. Many local councils hold bespoke datasets that are not publicly accessible, exacerbating data fragmentation. This inconsistency hampers understanding of climate vulnerability at the local and regional levels, making it harder for communities to prepare for climate risks.

The lack of comprehensive biodiversity data poses a significant hurdle in natural capital accounting, crucial for environmental decision-making. This absence impedes informed, nature-based decisions. Integrating biodiversity data with climate risk frameworks is necessary for transitioning to a sustainable, nature-based economy, addressing interconnected challenges of climate change and biodiversity loss.

A pressing issue is the absence of a national waste database. Without comprehensive data on waste generation and management, assessing national performance and creating effective waste-related policies is challenging. Similarly, social data acquisition is hindered by a lack of consensus on objectives and KPIs, resulting in fragmented and inconsistent efforts to track and improve social outcomes.

Key findings

The key findings from our interviews with CSF Partners and Associates highlight significant issues relating to the variability in data formats, quality, and the proliferation of data providers.

Disparities in data availability across different sectors and regions in New Zealand contribute to gaps in understanding climate vulnerability.

Existing tools for measuring and accounting for financed emissions are inadequate, and the growing number of climate data vendors complicates efforts to maintain a clear view of leading practice, which serves to delay technology adoption.

Furthermore, the absence of centralised coordination for standardised methodologies and guidance hinders New Zealand's growth potential.

Executive summary (continued)

Physical climate risk vulnerability across value chains is another critical concern. Many tier 1 and tier 2 suppliers are unaware of their climate-related risks and unable to report on their exposure or vulnerability, presenting a significant blind spot for banks, insurers, and other entities reliant on accurate climate data. Data from third-party aggregators often fails to reflect the true extent of climate risks, leading to an incomplete understanding of risk exposure within value chains, hindering resilience to climate-related disruptions.

3. Tools and resources

In the financial services industry, improving tools for accurately measuring and accounting for financed emissions is a priority. However, data variability across platforms creates inconsistencies in data and outputs. Paywalls further impact accessibility, creating barriers to data usage and contributing to these inconsistencies. Financed emissions data quality often depends on the maturity of third-party data providers. Missing, incomplete, or unverified data from suppliers and fund managers complicates accurate emissions tracking, leading to calls for increased transparency, such as through System and Organisation Controls (SOC) 2 audits. While SOC 2 audits provide some assurance, underlying issues of data quality and integrity remain significant challenges.

4. Platforms used

As data transparency increases, so do concerns about data privacy and security. Industry leaders highlight that potential loss of consumer privacy could hinder increase data sharing. The growing number of climate data platform vendors complicates efforts to maintain a clear overview, delaying technology adoption due to concerns over obsolescence. Balancing the need for accurate, comprehensive data with protecting individuals' privacy rights is crucial as transparency efforts advanced.

5. Frameworks, guidance and accountable leadership

For climate risk data to biodiversity metrics, significant barriers exist in integrating and standardising data. The absence of coordinated collection and provision of environmental data via standardised formats, across local government, has resulted in patchy datasets and variability in data accessibility, quality and formatting. The result is market fragmentation, inconsistent data quality, and data accessibility challenges, which risks leading to a sub-optimal climate change response.

An absence of centralised coordination of standardised methodologies and guidance for sector-relevant internal emissions pricing mechanisms; modern slavery disclosure, management and mitigation; supply chain monitoring; and qualitative vulnerability assessments, is similarly hampering New Zealand's economic growth and resilience objectives.

Where to from here? Recommendations

Solving the issues noted will require a coordinated response by multiple stakeholders across the public and private sector. Based on the interview responses, three key recommendations emerged:

1. The establishment of a national, centrally administered data hub to streamline and improve the management of, and access to, sustainability data. This centralised hub would consolidate data from multiple sources, standardise formats, and ensure universal accessibility, addressing issues related to fragmentation and inconsistency. The data centre is envisaged to house a wide range of information, including all council-owned data, as well as national datasets on waste, biodiversity, and other sustainability metrics. To build confidence in the system, it is proposed to start with a targeted approach by first housing existing New Zealand data sources in the central repository, ensuring that the data is both verifiable and assurable. Once the foundation is established, the system can be expanded to include additional datasets, ultimately leading to improved data coverage, consistency, and reliability for decision-making and policy development.

2. Central government to consider taking an active role or a public-private partnership in the collection and provision of data. With government as the data custodian, the level of reliability and access would be greatly enhanced. An example of where government can play a role is ensuring transparency in the collection and provision of farm emissions data; and consumption lifecycle emissions data. Currently, Auckland Council provides a free-to-use consumption emissions factor table, however the dataset is already out-of-date. Despite this fact, it continues to be a primary source of scope 3 emissions factors applied by New Zealand entities, which in future may result in inaccurate calculations.

3. Functionality on the centralised data platform that allows investors and users of data to upload and download relevant and decision-useful sustainability data that is self-reported by organisations. New Zealand can leverage examples from other countries. Of note is Norway's KBN platform, which links emissions performance, climate hazard exposure, and green finance. Another leading example, Net Zero Data Public Utility is available for free to all users and designed to be integrated with the United Nations Framework Convention on Climate Change (UNFCCC)'s Global Climate Action Portal.

Banks

Financial institutions note that despite an abundance of data sources, the inaccessibility and uncoordinated data sources for central waste, natural hazard, and geospatial databases is resulting in inconsistent outputs. A large number of tools has resulted in inconsistencies, while unverified data is hampering banks' ability to effectively decarbonise and de-risk portfolios. The sector calls for a unified data point, and government-led standardisation to improve data reliability and decision-making.

Data quality

Issues relating to on-farm primary greenhouse gas emissions (GHG) data reside predominantly with SMEs and private dairy farmers. Consistency was observed in data gathered from large dairy, beef and sheep farmers participating in cooperative schemes; however, SMEs and private dairy farmers commonly exhibit apprehension and reluctance in sharing data. Most banks interviewed expressed a lack of confidence in the data provided, particularly with regard to on-farm emissions and the lack of consistency in data capture processes and controls.

With regard to natural capital accounting, which is a key requirement for environmental decision-making, a lack of robust and reliable biodiversity data is hampering banks' ability to make informed, nature-based decisions. Marine datasets were singled out, where outdated or inadequate monitoring methods and equipment has compromised the reliability of marine data. This presents difficulties for stakeholders trying to track the health of marine ecosystems and respond to issues such as ocean pollution and overfishing.

Banks also highlighted the need for biodiversity data to be integrated with climate risk frameworks to address the interconnected challenges of climate change and biodiversity loss.

Finally, banks noted that procurement of social data is hindered by a lack of consensus on objectives and key performance indicators (KPIs). Until agreement is reached on social KPIs and metrics, efforts to track and improve social outcomes will remain fragmented and inconsistent, noted one interviewee.

The banking sector has expressed concerns relating to data accuracy due to the prevalence of unverified data.

Data availability

Despite waste reduction being a commonly adopted sustainability performance target in the context of sustainability linked loans, the absence of a national waste database and a lack of peer data makes it difficult for banks and borrowers to compare and benchmark overall performance.

In terms of physical climate hazard data, while there is some national-level data available from sources like NIWA, local and regional data can vary greatly in terms of quality, age, and availability. Many local councils hold bespoke datasets, but these are often not publicly available, further exacerbating data fragmentation. This lack of consistent, accessible climate hazard data creates gaps in understanding climate vulnerability at the local and regional levels, making it difficult for communities to adequately measure, manage and report climate risk exposure.This lack of reporting results in a significant gap in climate data that is available for banks to effectively manage risk at the portfolio level.

Similarly, within the agriculture industry, sheep and beef sectors have considerably less data compared to the dairy industry. One bank noted difficulties in accessing high-quality geospatial data for physical risks. The bank explained that the issue is not data availability, but rather the customers' capability to comprehend the data to make risk-based decisions.

Banks are finding it challenging to communicate effectively with customers and clients who are often unaware of their exposure to physical and transition risks, making data collection difficult. Additionally, some banks see benefit in establishing a climate hazard data platform that provides a common, level playing field from which to develop modelling.

Tools/resources

Within the banking sector, a wide variety of tools is used to record, capture, and monitor data. Sector leaders have expressed concerns about the numerous tools and resources producing inconsistent outputs.

Frameworks & guidance

Banks consistently highlight the need for consistent methodologies that yield for comparable and decision-useful data. The current lack of standardisation in data sources leaves institutions struggling to make informed decisions regarding risk, insurance, and finance.

Banks are also calling for a national framework to coordinate adaptation efforts, currently slowed by incomplete datasets, inconsistent data formats, and variable accessibility provided by local government.

Another area where guidance is needed relates to social KPI examples, and standardised methodologies for establishing, measuring, and tracking social performance targets.

Insurers

The insurance sector in New Zealand faces challenges with data quality, particularly relating to national climate hazard data, such as coastal erosion maps, landslip data, up-to-date high intensity rainfall event datasets, and on-farm emissions data. Despite there being a substantial amount of data, data access due to pay walls, barriers to accessing council-owned data, and customer data privacy were frequently cited issues. Insurers generally use GHG emissions inventory tools, but they noted that navigating the burgeoning and rapidly evolving market for GHG management tools and platforms can be overwhelming. The insurance sector sees benefit in centrally managed nationwide datasets and clearer government guidance on climate data frameworks.

Data quality

The insurance sector in New Zealand has identified concerns regarding data quality and has expressed doubts about its sufficiency. Currently, the insurance sector relies on purchased hazard data, but sees benefits in central government providing a comprehensive, actively managed database. The existing publicly available data is viewed as inconsistent, incomplete and presents difficulties in interpretation. Insurance companies find that data is valuable only when handled by those with the expertise to translate it into meaningful outputs.

In the context of GHG emissions data, there is a notable deficiency in quality for performing Scope 3 emissions calculations in particular. This is because users rely heavily on spend-based data and out-of-date emissions factors. While there are sources providing specific Scope 3 emissions factors, these have yet to receive external validation.

Data availability

Supply chain shocks and surge pricing are a persistent issue in New Zealand's insurance sector, which ultimately leads to claims inflation over time. Given that central government is the leading purchaser of reinsurance in New Zealand, insurance providers suggest that it is in tax-payers' interest for government to play a role in price smoothing, keeping insurance affordable and manageable by managing the risk of components and parts availability through forward-planning. Greater visibility of resource availability would support more effective climate resilience and transition planning.

Insurance companies are keen to see local council climate hazard datasets, such as Auckland Council's coastal erosion line GIS shape files, expanded to a national level, and made publicly available. Currently, Auckland Council offers a consumption emissions factor table for free use, but it is now outdated, yet it remains a key source of Scope 3 emissions factors used by New Zealand entities, potentially leading to inaccurate calculations in the future.

Insurers also face challenges with the climate-related data they procure and own. Key issues include overcoming the barriers to making data publicly accessible while protecting data privacy.

Finally, insurers operating in the South Pacific region face a dearth of climate hazard data.

Tools/resources

Significant uncertainty relating to population migration, demographics, power supply, generation type and energy costs, consumer purchasing behaviour, uptake of EVs, transition to public transport, carbon taxes and incentives, all make it challenging for climate reporting entities to effectively assess transition risk and to determine appropriate transition strategies. Tools that support more effective forecasting of these variables would be useful.

The insurance sector is calling for bipartisan agreement on the climate change response, to provide greater certainty and to de-risk transition planning. Centralised economic trends analysis into the variables mentioned above, such as resource availability and social demographics, would be useful in this regard.

While insurers possess a substantial level of detail relating to specific assets that are insured, they lack information about asset owners' behaviour. Vehicle insurance, for example is an area where there is little information available relating to vehicle use.

Telematics is an area that holds significant potential as a means of monitoring and incentivising low emissions behaviours, however the use-case is hampered by data privacy issues.

Platforms used

An influx of sustainability and climate data platform vendors complicates efforts to maintain a comprehensive overview of best available services and methodologies. The result is that technology adoption is often delayed due to technology obsolesce concerns.

The insurance sector requires detailed climate data, prompting entities to invest in data acquisition for improved future solutions. It was suggested that a designated body should be created to establish, manage, and maintain a centralised dataset, similar to the claims map provided by the Natural Hazards Commission Toka Tū Ake (formerly the Earthquake Commission). However, concerns were expressed that a central dataset may not be ready or sufficiently mature within a reasonable timeframe to be effectively utilised as compared to the data platforms already available in the market.

Frameworks and guidance

Insurance sector entities are advocating for central government to establish a standardised methodology for internal emissions pricing setting and guidance relating to sector-specific application.

Guidance is needed on carbon offsetting, in terms of appropriate carbon offset options, voluntary carbon markets, appropriate registries, carbon credit vintages, and double counting in the context of New Zealand's Nationally Determined Contribution and transition planning disclosures.

Asset managers

Asset managers in New Zealand face data quality issues, citing an over-reliance on assumptions and a lack of consistent, centralised monitoring. While there is an abundance of data, the quality and verification of data requires attention. Investors rely on aggregated sustainability data, but robust monitoring tools and platforms are lacking. There is a need for a New Zealand-specific approach to address emissions, compliance, and modern slavery. The sector calls for government-led initiatives and guidelines to support sustainable investment transitions.

Data quality

Although investors heavily rely on third-party GHG data, there is a significant shortfall in consistent monitoring and verification. Stakeholders within the asset management sector are concerned that GHG emissions data is excessively reliant on assumptions and is fraught with uncertainty. Asset managers note that aggregated data is often fragmented, lacks a clear baseline status, and is often unverified.

Where publicly disclosed data is unavailable, physical climate risk data from third-party aggregators often fails to accurately reflect the true extent of entities' exposure and vulnerability to climate risks due to a reliance on assumptions-based calculations.

Furthermore, many tier 1 and tier 2 suppliers remain unaware of their exposure to climate-related risks and are therefore unable to report on their exposure or vulnerability. This presents a significant blind spot for asset managers, as well as banks, insurers, and other entities reliant on third-party climate data, leading to an incomplete understanding of risk exposure throughout value chains. However, while SOC 2 audits can provide some level of assurance, they do not address the underlying issues of data quality and integrity, which remain significant challenges.

Data availability

Asset managers note a lack of nature-related and environmental data is hindering meaningful disclosure and management of natural capital, suggesting that central government should consider the provision of actively managed and monitored environmental databases, and the provision and tracking of common metrics similar to those provided in the UK and EU. This will ensure that natural capital accounting is anchored in environmental science and that it provides consistent, robust outputs, to enable forward planning that conserves New Zealand's natural capital base and 100% Pure NZ brand.

Asset managers are calling for the centralised provision of comprehensive baseline environmental and nature-related data, and a common set of natural capital metrics that are actively tracked – similar to those provided by agencies in the UK and EU. The sector is also calling for GHG data aggregators to be held accountable for the verification of the data they provide.

Tools/resources

In the financial services industry, a priority is improving tools for accurately accounting for financed emissions. However, data variability and the presence of paywalls across platforms have resulted in inconsistencies, in terms of data quality, assumptions and calculations, and completeness of data.

Financed emissions data quality often hinges on the maturity of third-party data providers. Many suppliers and fund managers face missing incomplete, or unverified data, which complicates accurate emissions tracking. This has led to calls for increased accountability, and transparency from data providers, particularly in the form of a System and Organisation Controls (SOC) 2 audit, which ensures data security, privacy, and integrity. However, while SOC 2 audits can provide some level of assurance, they do not address the underlying issues of data quality and integrity, which remain significant challenges.

Platforms used

As data transparency increases, so do concerns about data privacy and security. Many industry leaders have pointed out that the potential loss of consumer privacy could present a barrier to increased data sharing.

To address the issue of climate data inconsistency, fund managers advocate for the provision of a centrally administered, publicly available sustainability hub akin to Norway's KBN portal, which enables users to quickly see entities and municipalities emissions profile, as well as their exposure physical climate hazards.

Frameworks and guidance

Developing a New Zealand-specific taxonomy and formal, coordinated support for addressing scope 3 emissions, compliance costs, and modern slavery disclosures would drive meaningful change and would better support the transition to sustainable, climate resilient investment portfolios, say asset managers.

CENTRE FOR Sustainable Finance TOITŪ TAHUA

The Centre for Sustainable Finance: Toitū Tahua (CSF) is an independently governed charitable trust. CSF partners with the New Zealand Government, philanthropies and financial institutions to catalyse and accelerate finance for the long-term prosperity and resilience of Aotearoa New Zealand.

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