



Submission

**Climate Change Response (Zero Carbon) Amendment Bill
Ministry for the Environment**

16 July 2019

About the McGuinness Institute

The McGuinness Institute was founded in 2004 as a non-partisan think tank working towards a sustainable future for New Zealand. *Project 2058* is the Institute's flagship project focusing on New Zealand's long-term future. Because of our observation that foresight drives strategy, strategy requires reporting, and reporting shapes foresight, we developed three interlinking policy projects: *ForesightNZ*, *StrategyNZ* and *ReportingNZ*. Each of these tools must align if we want New Zealand to develop durable, robust and forward-looking public policy. The policy projects frame and feed into our research projects, which address a range of significant issues facing New Zealand. The six research projects are: *CivicsNZ*, *ClimateChangeNZ*, *OneOceanNZ*, *PublicScienceNZ*, *TacklingPovertyNZ* and *TalentNZ*.

About the author

Wendy McGuinness, Chief Executive

Wendy McGuinness wrote the report *Implementation of Accrual Accounting in Government Departments* for the New Zealand Treasury in 1988. She founded McGuinness & Associates, a consultancy firm providing services to the public sector during the transition from cash to accrual accounting from 1988 to 1990. Between 1990 and 2003, she continued consulting part-time while raising children. Over that time she undertook risk management work. In 2002, she was a member of the New Zealand Institute of Chartered Accountants (NZICA) Taskforce, which published the *Report of the Taskforce on Sustainable Development Reporting*. From 2003–2004 she was Chair of the NZICA Sustainable Development Reporting Committee. In 2004 Wendy established the McGuinness Institute in order to contribute to a more integrated discussion on New Zealand's long-term future. In 2009 she became a Fellow Chartered Accountant (FCA).

Contact details:

Wendy McGuinness
Chief Executive
McGuinness Institute
Level 2, 5 Cable Street
PO Box 24-222, Wellington 6142
+64 4 499 8888
wmcg@mcguinnessinstitute.org
www.mcguinnessinstitute.org

To whom it may concern,

Re: Climate Change Response (Zero Carbon) Amendment Bill

The McGuinness Institute welcomes the opportunity to respond to the *Climate Change Response (Zero Carbon) Amendment Bill* consultation. The Institute wishes to make an oral submission to the Committee.

As part of our *Project ClimateChangeNZ*, the Institute has been focusing on strengthening our reporting frameworks – which form the basis of our information infrastructure – to assist in mitigating and adapting to climate change. The key document in this project is *Discussion Paper 2019/01 – The Climate Reporting Emergency: A New Zealand case study*. This document forms the bulk of the McGuinness Institute’s submission. Our submission is also supported by documents from *Project ReportingNZ*, including *Report 17 – Building a Reporting Framework Fit for Purpose* and *Working Paper 2018/03 – Analysis of Climate Change Reporting in the Public and Private Sectors* and *Think Piece 30 – Package of Climate Reporting Recommendations*

These three documents are available on our website (www.mcguinnessinstitute.org/publications) and are also considered part of this submission.

The McGuinness Institute supports the *Climate Change Response (Zero Carbon) Amendment Bill*, in particular:

- The government setting a target to reach net zero emissions across all greenhouse gases by 2050 and embedding the 1.5°C target of the Paris Agreement in New Zealand’s domestic legislation.
- The Bill providing a framework for New Zealand to develop and implement clear and stable climate change policies.
- The establishment of the Interim Climate Change Committee, and its proposed replacement with the permanent Independent Climate Change Commission. It is significant that the independent commission is intended to provide expert advice and introduce a mechanism for holding governments to account outside of party politics.
- The ongoing review and/or revision of any targets set, as flexibility and adaptability will make us more resilient to risk and change.

This is a time of rapid change, exponential risk and uncertainty for the world, and we do not have a clear idea of what lies ahead. A comprehensive and appropriate response to climate change is imperative. The *Climate Change Response (Zero Carbon) Amendment Bill* is an effective start to this urgent response. In this submission, we put forward amendments to the Bill that the McGuinness Institute contends will strengthen New Zealand’s position in mitigating and adapting to climate change.

Please do not hesitate to contact me if you have any questions or would like to discuss any of this research in further detail.

Yours sincerely,



Wendy McGuinness

Chief Executive

wmcg@mcguinnessinstitute.org

+64 4 499 8888

Attachments

The following McGuinness Institute publications should be considered as attachments as part of this McGuinness Institute submission:

1. McGuinness Institute. (2019). *Discussion Paper 2019/01 – The Climate Reporting Emergency: A New Zealand case study*. Wellington: Author. Retrievable from <http://www.mcguinnessinstitute.org/discussion-papers>.
2. McGuinness Institute. (In press). *Report 17 – Building a Reporting Framework Fit For Purpose*. Wellington: Author. Retrievable from <http://www.mcguinnessinstitute.org/wp-content/uploads/2018/11/20181108-Report-17-DRAFT-v2-1.pdf>.
3. McGuinness Institute. (2018). *Working Paper 2018/03 – Analysis of Climate Change Reporting in the Public and Private Sectors*. Wellington: Author. Retrievable from <http://www.mcguinnessinstitute.org/working-papers>.

Recommendation 1 – Development and implementation of a climate strategy for New Zealand

The most significant way that New Zealand can improve strategic thinking about long-term challenges and opportunities in relation to climate change is to develop a whole-of-government climate strategy to report against. A national climate strategy will be part of developing an integrated approach linking foresight, strategy and reporting, allowing us to optimise resources.

The Zero Carbon Bill presents an opportunity to embed into legislation the requirement to produce a whole-of-government climate strategy. This would ensure that the strategy outlasts changes in government and could provide a stable outline of New Zealand's priorities in terms of both climate change mitigation and adaptation. A move such as this would not be unprecedented; there is a provision in s 317 of the Gambling Act 2003 allowing the government to 'allocate responsibility for an integrated problem gambling strategy to a department'.

The fact that New Zealand has historically not had a comprehensive whole-of-government strategy has made it difficult to both analyse the current climate reporting framework and to conceive of an updated framework that is fit for purpose. A strategy is only as good as the information available to inform its development and re-evaluation, leading to a catch-22 situation where we do not have a strategy against which to report and provide data to then inform decision-making and strategy development.

As noted by the Reserve Bank, 'it is essential that all sectors of the economy work within a coherent national strategy on climate change' to ensure that 'decisions about future investment and development [...] factor in long-term climate risks' (Reserve Bank, 2018, p. 15). New Zealand's closest instrument to a climate strategy is a Cabinet paper that provides a policy framework for climate change-related decisions (Shaw, 2018).

A climate strategy should explain the approach that will be taken and how success will be measured, and analyse the benefits, costs or risks it will deliver. The content of the strategy should also be expected to build on the recommendations and research of many other reports mentioned in *Discussion Paper 2019/01 – The Climate Reporting Emergency: A New Zealand case study*, such as the recommendations of the Climate Change Adaptation Technical Working Group (CCATWG), the Local Government New Zealand (LGNZ) report and the Parliamentary Commissioner for the Environment's (PCE) report. The strategy could focus on a time frame of 30 years, linking it to the proposed 30-year infrastructure strategy to be overseen by the Infrastructure Commission.

Incorporating te ao Māori into the strategy presents an invaluable opportunity for New Zealand in forming the basis for long-term, intergenerational thinking and environmental stewardship. Furthermore, te Tiriti o Waitangi provides a legislative and constitutional framework for integrating such thinking into our national instruments.

See section 8.2.1 in the *Discussion Paper 2019/01 – The Climate Reporting Emergency: A New Zealand case study*, Attachment 1 of this submission, for further detail.

Recommendation 2 – Legislate for climate reporting by requiring Statements of Climate Information

A significant way of ensuring that New Zealand's major entities are considering the impact of their operations on the climate is to require them to provide Statements of Climate Information. This could be done by amending s 211 of the Companies Act 1993 and support with a standard issued by XRB under s 17 of the Financial Reporting Act 2013.

Statements of Climate Information are:

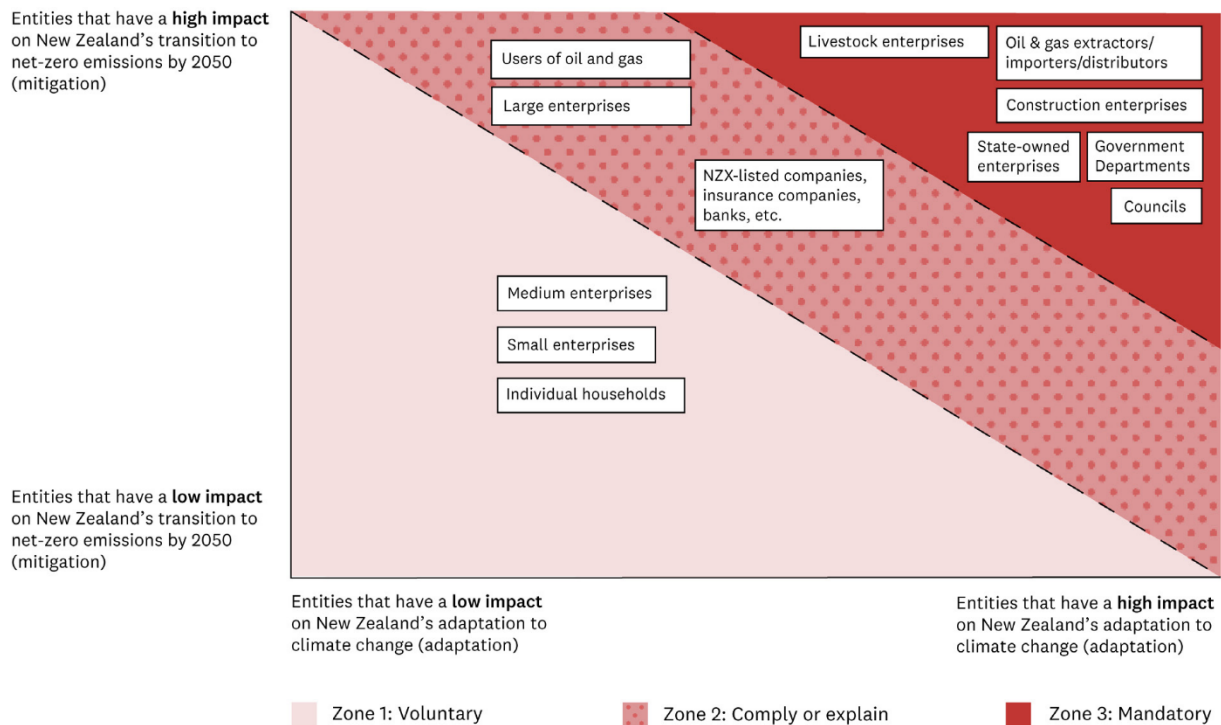
- (a) To be included in the annual report;

- (b) To be a maximum length of four pages;
- (c) To be signed by the Chair of the entity (or equivalent governance position); and
- (d) To include risk identification (i.e. by using scenarios and developing priorities), risk measurement (e.g. GHG Protocol scopes) and risk management (i.e. the entity's strategy).

Given the complexity of the current entity reporting framework and the urgency of the risks posed by climate change, we recommend implementation of a requirement for a category of entity called 'climate change reporting entities' to file a Statement of Climate Information (see Section c below). This instrument is intended as an interim measure to address the urgency of the situation, much like the Interim Climate Change Committee.

Ultimately, the requirement to produce a Statement of Climate Information should apply to all entities. However, such a requirement should be appropriate for entity size and nature of operations, which may result in a tiered requirement of mandatory, comply and explain, or voluntary. The figure below provides an example of a preliminary attempt to make this distinction.

Figure 1: Who should report and why



Because of the speed at which this area of reporting is developing, it is important to retain legislative and regulatory flexibility and to create a responsive policy environment. This is why we also recommend that any reporting requirements in legislation remain high-level, with more specific climate change reporting requirements outlined in separate instruments.

An example of a Statement of Climate Information can be found in Z Energy's 2019 annual report *See You Soon*. This is the first time that Z Energy has chosen to include such a statement (which they have called a 'Climate Change Statement'). It 'gives an overview of [Z Energy's] approach to managing and reporting on climate change risks' (Z Energy, 2019, p. 2). Z Energy supports the McGuinness Institute's belief 'that all listed issuers should report on climate change in a standardised and comparable way' (Z Energy, 2019, p. 2).

a) Structure and content

In terms of the content requirements for a Statement of Climate Information, we recommend that a variety of organisations and stakeholders be involved in its development. These should include the proposed Independent Climate Change Commission, Stats NZ, climate scientists, researchers, LGNZ, XRB and MfE.

As a starting point, the statement should be structured around risk identification, risk measurement and risk management, and these disclosures should consider both the impact of climate change on the entity and the impact of the entity on climate change.

The risk identification section should include use of scenarios and the development of priorities. Within the risk measurement section, entities could be required to disclose their emissions in line with GHG Protocol scopes. MfE's *Measuring emissions: A guide for organisations*, the 2019 update of the 2016 *Guidance for Voluntary Greenhouse Gas Reporting*, is another existing instrument whose use could be strengthened by incorporating it into the content requirements of the Statement of Climate Information. The risk management section should include the entity's strategy.

Disclosures made in line with the different emission 'scopes' of the GHG Protocol should also be included as a requirement for all NZX-listed companies and should also be audited. The GHG Protocol provides standards, guidance, tools and training for a range of public and private sector entities to measure and manage climate-warming emissions by establishing 'comprehensive global standardized frameworks' (GHG Protocol, n.d.).

b) Implementation

The Statement of Climate Information would be supported by an XRB standard on climate information and an accompanying assurance standard issued using provisions under s 17 of the Financial Reporting Act 2013, in line with the Productivity Commission's Recommendation 7.4 (New Zealand Productivity Commission, 2018, p. 199).

Alternatively, the requirement could be introduced for companies by amending existing legislation such as s 211 of the Companies Act 1993. Other legislation would need to be amended to introduce the requirement for other respective entity types, or alternatively, implementation of the statement could be recommended in guidance documents produced by the New Zealand Treasury for the public sector. If other legislation were considered, another option would be to create 'Climate Reporting Regulations' as an additional instrument.

In the short term, the statements could be collected in a simple survey-type format that enables the information to be collated immediately for public release. In the medium to long term, requirements to produce the Statement of Climate Information could be enshrined in the Zero Carbon Bill or an amended Financial Reporting Act 2013/External Reporting Act.

c) Entity categorisation

The category of 'climate change reporting entity' should include all FMC reporting entities, 'large' companies, state sector entities, local governments, registered charities (Tier 1) and other significant entities either connected to vulnerable infrastructure or with significant carbon emissions and pollutions.

d) Audience

The statements should be targeted at a broad range of stakeholders. It may be useful to separate these into primary stakeholders (e.g. investors, shareholders, creditors, insurers, bankers, employees, customers, neighbours and suppliers) and non-primary stakeholders (e.g. local and national government, policy-analysts, NGOs, scientists and engineers and the wider community in which the entity operates).

Many of the issues around climate change reporting are relevant to the needs of non-primary users who have a social licence. They have an interest in the strategic narrative, which also include access to a range of non-financial information and future-focused information. In those situations the current legislation, XRB

reporting and assurance standards, *FMA Handbook* and *NZX Code* (and *NZX ESG Guidance*) are inadequate due to their narrow definition of user. Of the four, the *FMA Handbook* has the broadest definition of report users and may therefore be the most appropriate for climate reporting (see Principles 4, 5 and 8).

In order to meet the needs of non-primary users and to ensure information has a longer time horizon (future-focus), legislation and new standards will be necessary. XRB's project to explore extended external reporting will likely be part of the solution, as illustrated by their 2019 *XRB Position Statement on EER*.

Our research indicates that there are gaps between what information preparers currently provide, the information shareholders and primary users are demanding, and the information more broadly required by stakeholders. The widening gap is the result of increased awareness of the fact that value creation involves many different types of capital, not just financial capital, and that these are linked to corporate citizenship and social licences to operate. This will also entail a shift in our current understanding of directors' duty of care as outlined in s 137 of the Companies Act 1993. These issues are heightened by the fact that climate change affects everyone, not just shareholders and primary users of corporate reporting. Focusing on shareholders and primary users limits and may omit critical and material climate risks, such as those resulting from the impact of primary users and entity behaviours on the external world/environment/climate and therefore on broader stakeholders. This constitutes a defining difference between the traditional emphasis on historical reporting to primary users and what we need our reporting framework to deliver now and in the future

Companies should recognise the need to communicate to a broader audience in order to preserve their social licence to operate. In terms of climate change, this means reporting with care, diligence and skill about the carbon it emits (negative impacts) and the benefits its operations provide (positive impacts). If companies are only required to report on adaptation without mitigation or mitigation without adaptation, the transition will at best be slow, unfair and inefficient.

e) Stewardship

The Climate Change Commission would have the potential to oversee both the Statements of Climate Change and the Emissions Trading Scheme. This would be in line with the agreement of 97% of respondents to MfE's 2018 consultation that the Climate Change Commission advise and monitor progress on climate goals (MfE, 2018a, p. 28). It would also provide an opportunity for further consolidation by providing a resource hub that centralises national and international guidance frameworks/instruments. It could also be responsible for developing the climate strategy discussed in more detail above, in collaboration with central and local government, the private sector and other stakeholders.

The rate of climate change will be exponential, meaning its implications are uncertain and unclear. This means that entities simply reporting on their adaptation efforts will not be sufficient for New Zealand to meet its international commitments. New Zealand needs to ensure that Boards and those who are responsible for governance in the public sector have time to think and act strategically and with consideration of future challenges and opportunities.

f) Streamlining reporting

A significant part of improving the accessibility of entity reporting is reducing its fragmentation into various reports and documents. In order to address this, we recommend emphasising the annual report as the repository of all such information. To support this, all entities that currently file financial statements with the Companies Office should be required to file their full annual reports (including the Statement of Climate Information) instead. This would allow Stats NZ to collate and interpret the data regularly in terms of industries, sectors and other frames of interest.

McGuinness Institute research for *Working Paper 2018/01 – NZX-listed Company Tables* indicates that over 70% of NZX companies already file their full annual report when they file their financial statements.

Corporate governance statements as required by the FMA and the NZX should also be required to be included in the annual report. This could be achieved by amending s 211 of the Companies Act 1993. It should be noted that the FMA requirement is more comprehensive as it includes stakeholder interests in Principle 8 (FMA, 2018, p.3).

See section 8.1.2 and Appendix 2: Z Energy's Statement of Climate Information in *Discussion Paper 2019/01*, attached in Appendix 1 of this submission, for further detail.

Recommendation 3 – Implement robust carbon taxes to ensure the polluter pays

The NZ ETS has not had a measurably positive effect given that New Zealand's emissions have increased since its implementation in 2008. Many business leaders, including Chief Executive of New Zealand Post David Walsh, consider the existing emissions trading scheme's reliance on offsetting to be a 'soft answer' (Stock, 2019). The Climate Change Response (Zero Carbon) Amendment Bill allows the Government to 'purchase reductions from overseas to meet emissions budgets'. As impacts are felt and concerns grow, the likelihood of a carbon tax and mandatory reporting increases.

The Institute believes that a stronger emphasis on carbon taxation within the Bill, rather than relying on offsetting, is a more effective approach to support the transition to a low-emission economy. We believe the government should set an example to the world by achieving the zero target through the reduction of domestic emissions, without relying on international carbon credits.

Economist Tim Harford discussed the idea of a carbon tax in the *Financial Times*:

A broad-based tax on carbon dioxide and other greenhouse gasses [...] could motivate action on a scale that is both grander and more precise [than a Green New Deal]. Every part of the economy and each decision we make would be shaped by such a tax. A carbon tax would pull billions of different levers in an economy that is both complex and saturated in fossil fuels. (Harford, 2019)

In a letter to the *Financial Times*, published 10 July 2019, the former Shell Group chair Sir Mark Moody-Stuart quotes a statement produced by international oil companies calling for "economically meaningful carbon pricing regimes, whether based on tax, trading mechanisms or other market-based measures" to be set at a "level that incentivises businesses and consumer behaviour to accelerate [...] the energy transition" (Moody-Stuart, 2019). The statement also asks for policies 'designed in a way that simultaneously delivers innovation and investment in low carbon solutions while assisting those who are least able to pay' (Moody-Stuart, 2019). Moody-Stuart asserts that carbon tax (as well as coalition between environmental groups and other organisations) could 'shift economies towards Paris goals' (Moody-Stuart, 2019).

The Institute believes that implementing robust carbon taxations that penalise significant emitters will enable New Zealand to reduce emissions quickly and more.

Example: Implement taxation of air transport passengers

A taxation on air transport is an example of the type of carbon tax which the polluter pays. In line with a carbon tax, the Institute recommends the implementation of a tax on airlines flying out of New Zealand. This tax could be levied on tickets, meaning the passenger (i.e. polluter) pays.

French President Emmanuel Macron is imposing a similar tax on air transport. For France, this tax will be an additional cost of about €1.50 for economy flights and up to €18 for business class flights outside of Europe (Keohane, 2019). The UK also has a similar passenger tax, which raised £3.4bn from 2017–2018 (Keohane, 2019). Philippe Martin, head of the independent Council of Economic Analysis, suggests that this approach will show that ‘the financing of the environmental transition is not just going to be borne by the most disadvantaged’ (Keohane, 2019).

Recommendation 4 – Hold the agriculture sector to account

The Institute recommends that the Bill has a stronger stance on reducing the significant emissions produced by the agriculture sector. The discussion of a ‘just’ transition means ensuring that the costs of the transition are not disproportionately borne by those least able to afford them. Much of this conversation has concerned agriculture, and the tension between transitioning to low-carbon economy while ensuring ‘justice’ for farmers.

Arguably, sectors such as beef and sheep farming have already been taking action on climate change for decades. The sheep population has decreased by 52.3%, the non-dairy cattle population has decreased by 23.1% and the sheep and beef sector has already reduced absolute emissions by 30% since 1990 (Beef & Lamb NZ, 2019, p. 1; MfE, 2018b, p. 3). However, the dairy sector has not stepped up to their example and, as a result, directly benefits from sheep and non-dairy reductions when agriculture sector data is aggregated.

While it is necessary to ensure that the agriculture sector does not bear the brunt of the transition, the Institute contends that this ‘just’ conversation has resulted in the Bill being too forgiving of the agriculture sector. The Bill should therefore include a low-emissions roadmap for the agriculture sector, which includes a framework for monitoring their specific emissions. The Bill should also indicate consequences, such as for other high-emitting sectors, when targets are not met.

As with the example given in Recommendation 3, the idea that the polluter pays is paramount. To ensure the ‘just’ transition, the government should continue to invest in low-emissions technology for agriculture production to enable a restructure of the methods and operations of the sector.

Stronger international leadership on how to both engage the agriculture sector in transitioning to a low-carbon economy and ensure New Zealand diversifies its agricultural production is needed.

Recommendation 5 – Ensure reparations are made by non-compliers

Section 5ZJ of the Climate Change Response (Zero Carbon) Amendment Bill eliminates meaningful accountability measures for those who fail to meet 2050 target and emissions budgets. Non-compliance therefore does not lead to reparation. The Institute recommends that the targets of the Bill are legally enforceable in order to drive transformative change. The consequences should reflect the severity of the breach.

Example: Implement financial penalties for non-compliance

An international example of reparations in practice is with England’s private water companies. Some have been implicated in a number of pollution incidents, including sewage spills, and one company is now facing a criminal investigation (Plimmer, 2019). The Environment Agency’s (EA) annual report stated ‘the number of the most serious category 1 and 2 incidents – which damage the environment, threaten wildlife and put the public at risk – rose from 52 in 2017 to 26 in 2018, after six years of decline’ (Plimmer, 2019). The EA has

stated that it would work with the regulator Ofwat (the Water Services Regulation Authority) to ‘increase financial penalties’, which are currently negligible to their financial turnover (Plimmer, 2019). The EA said ‘companies should be reflecting on their “environmental performance and long-term resilience and if this is poor they should be asking themselves whether dividends are justifiable”’ (Plimmer, 2019).

However, water companies in the UK are responsible for monitoring their own pollution levels. According to the Angling Trust ‘the self-reporting regime is not fit for purpose and due to a lack of funding the agency falls a long way short in terms of the robustness and willingness to prosecute polluters’ (Plimmer, 2019).

New Zealand experiences a similar lack of reporting accountability, considering climate reporting is mostly voluntary. New Zealand should implement a similar penalty system to the one being developed by the EA for companies that fail to report environmental damages or fail to take due care in their activities, and ensure that investigations are undertaken when companies are liable for negligence.

Recommendation 6 – Require regular risk measurement updates

Require the national climate change risk assessment and national adaptation plan proposed under the Zero Carbon Bill be prepared every three years, within 12 months of the publication of the atmosphere and climate domain report prepared under the Environmental Reporting Act 2015 (MfE, 2018c, p. 46). Three-yearly reports provide an appropriate frequency of data collection considering the high level of uncertainty over climate-related risks and impacts.

Conclusion

It is beyond dispute that New Zealand requires a considered yet urgent response to the significant and uncertain risks posed by climate change. The Zero Carbon Bill is a crucial building block on which New Zealand will be able to develop this response. As such, it is important that the Bill sufficiently addresses the issue of climate-related disclosures in order to build capability, because we manage what we measure (a preparer’s view) and we need to be able to make decisions based on accurate, timely and useful information (a user’s view). Because climate change will affect everyone, our reporting therefore needs to be addressed to everyone – the full range of stakeholders, rather than just shareholders – more broadly than existing reporting frameworks allow. Reporting requirements will need to cover all entities to different levels, whether mandatory, comply and explain, or voluntary.

Learnings from McGuinness Institute workshops

The McGuinness Institute has recently held two workshops focused on climate change mitigation and adaptation for New Zealand. These two events involved public engagement from citizens from a wide cross-section of New Zealand. The quotes below have provided the Institute with some food for thought.

[A Point of Vanishing Stability](#) – 30 May, 2019

Conal Smith, an experienced economist, addressed the issue of climate change from a wellbeing perspective. Smith discussed the strong connection between wellbeing and resources, which means that the relative gains and losses that result from slowing economic growth in order to improve climate change mitigation and adaptation must be considered. Prioritising mitigating and adapting to climate change over economic growth will have significant effects on both GDP and wellbeing.

Chlöe Swarbrick, Green Party MP, discussed how the current political system is not fit to solve such complex, long-term issues. Swarbrick shared her thoughts on what kind of political system is able to handle such issues. This system would build on four key principles: ecological wisdom (resources are finite), social responsibility (fair and just distribution of resources), appropriate decision making and non-violence (diversity, cultural acceptance, etc.).

Adrian Orr, Governor of the Reserve Bank of New Zealand, provided insight into the ways that climate change both impacts on and creates opportunities for financial markets. Orr stated that we are at a point now where climate change poses a major threat to the stability of financial markets and this has significant impacts that flow throughout the whole economy. Orr discussed how relative prices have been shifting to include the impact that climate change has and will continue to have on investment. We are currently seeing an ‘investor revolution’, where the demand for asset price to accurately consider any and all risks is at an all-time high. By pricing such risks into assets, strong relative price drivers are developed and in turn, will have influence over social behaviour.

[KiMuaNZ: Exploring climate futures](#), workshop for 18–25 year olds – 1–3 July, 2019

Rebecca Shaw: “This [workshop] has re-awakened my passion to make and deliver change in my community and for NZ... New Zealand needs to take leadership of climate change action. We should be setting a very real example of what needs to be done to ensure all our communities are protected. We know agriculture contributes to climate change and that seriously change needs to happen to ensure that our contributions to this issues are mitigated as much as possible. To ensure both the preservation of our Pacific cultures but also ensuring our biggest economy provider is supported through this transition of change.”

Cameron Young: “Thank you again for creating this incredible workshop and conference. I have grown so much as a young Pasifika student because of it - simply being around Pasifika role models, and being given the opportunity to speak on issues affecting us has caused significant growth and maturity of myself.”

References

- Beef & Lamb New Zealand (Beef & Lamb NZ). (2019). *Advice to farmers on the Zero Carbon Bill*. NL: Author. Retrieved 9 July 2019 from <https://beeflambnz.com/sites/default/files/Advice%20to%20farmers%20zero%20carbon%20bill.pdf>.
- Financial Markets Authority (FMA). (2018). *Corporate governance in New Zealand: Principles and guidelines*. NL: Author. Retrieved 24 June 2019 from <https://www.fma.govt.nz/assets/Reports/versions/10539/180228-Corporate-Governance-Handbook-2018.1.pdf>.
- GHG Protocol. (n.d.). What is GHG Protocol? Retrieved 21 June 2019 from <https://ghgprotocol.org/about-us>.
- Harford, T. (2019, 12 April). 'A carbon tax is the nudge the world needs'. *Financial Times*. Retrieved 16 July 2019 from <https://www.ft.com/content/9008ce58-5b9f-11e9-939a-341f5ada9d40>.
- Keohane, D. (2019, 10 July). 'France to impose green tax on departing flights'. *Financial Times*. Retrieved 16 July 2019 from <https://www.ft.com/content/1a2061ac-a252-11e9-974c-ad1c6ab5efd1>.
- Ministry for the Environment (MfE). (2018a). *Our Climate Your Say: Summary of Submissions*. Wellington: Ministry for the Environment. Retrieved 20 March 2019 from <http://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/Zero-Carbon-Bill-Summary-of-Submissions-FINAL.pdf>.
- Ministry for the Environment (MfE). (2018b). *New Zealand's Greenhouse Gas Inventory 1990-2017 Snapshot*. Wellington: Author. Retrieved 9 July 2019 from <https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/snapshot-nzs-greenhouse-gas-inventory-1990-2017.pdf>.
- Ministry for the Environment (MfE). (2018c). *Our Climate Your Say: Consultation on the Zero Carbon Bill*. Wellington: Author. Retrieved 20 March 2019 from <http://www.mfe.govt.nz/sites/default/files/media/consultations/final-%20zero%20carbon%20bill%20-%20discussion%20document.pdf>.
- Moody-Stuart, M. (2019, 10 July). 'Extinction Rebels should leap at a carbon tax'. [Letter to the Editor]. *Financial Times*. Retrieved 16 July 2019 from <https://www.ft.com/content/b2b7a40e-a24b-11e9-974c-ad1c6ab5efd1>.
- New Zealand Productivity Commission. (2018). *Low-emissions Economy*. Wellington: Author. Retrieved 23 April 2019 from http://www.productivity.govt.nz/sites/default/files/Productivity%20Commission_Lowemissions%20economy_Final%20Report_FINAL.pdf.
- Plimmer, G. (2019, 10 July). 'Pollution by utilities "unacceptable", says environment lobby'. *Financial Times*. Retrieved 16 July 2019 from <https://www.ft.com/content/f7b04036-a25d-11e9-a282-2df48f366f7d>
- Reserve Bank of New Zealand (Reserve Bank). (2018). *Financial Stability Report: November 2018*. NL: Author. Retrieved 2 April 2019 from <https://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Financial%20stability%20reports/2018/fsr-nov-2018.pdf?revision=d55c1f94-59ac-4903-a411-5642bf81c096>.
- Shaw, J. (2018). *Framework for Climate Change Policy and Key Upcoming Decisions* [Cabinet paper]. NL: Ministry for the Environment. Retrieved 11 March 2019 from <https://www.mfe.govt.nz/sites/default/files/media/Legislation/Cabinet%20paper/framework-for-climate-change-policy-and-keyupcoming-decisions.pdf>.

Stock, R. (2019, 17 March). 'Climate of change: Big business sets up decarbonisation funds'. *Stuff*. Retrieved 27 March 2019 from <https://www.stuff.co.nz/business/111289662/climate-of-change-big-business-setsup-decarbonisation-funds>.

Z Energy. (2019). *Z Energy Annual Report 2019*. Wellington: Author. Retrieved 26 June 2019 from <https://investors.z.co.nz/static-files/714028f3-d975-4692-a588-f97d558f00f8>.