

## Wise Response Society Inc.

# SUBMISSION TO TREASURY on the LIVING STANDARD SERIES

## Discussion Paper 18/05.

### *Resilience and Future Wellbeing: The start of a conversation on improving the risk management and resilience of the Living Standards Capitals.*

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**October 21, 2018.**

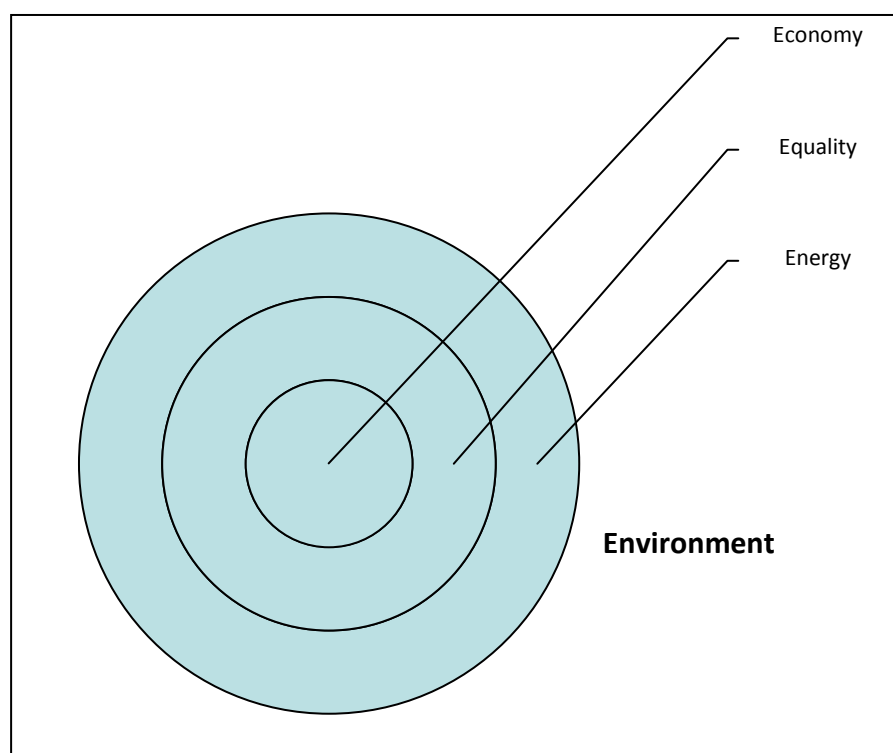
### **A. SUBMISSION**

1. The Society strongly endorses the substance and importance of the Treasury's Resilience and Future Wellbeing, Living Standards Series: Discussion Paper 18/05. This paper is generally consistent with the purpose and philosophy that has been promoted by our Society since its establishment in 2013, and it represents the first time we have seen risk and resilience addressed directly by a Government department. We therefore appreciate the opportunity to formally comment on it.
2. We note in the Disclaimer that the paper is "not the Treasury's position on measuring intergenerational wellbeing and its sustainability in New Zealand."
3. We also note the paper's statement (Executive summary) that, to date, much of New Zealand's risk management has been decentralized and siloed, and consequently insufficient attention has been paid to the interconnectedness and cascading nature of risk factors. We concur with this assessment, which was apparent in the Treasury response to our original submission to the Finance & Expenditure Select Committee (Petition 2011/106 of Sir Alan Mark 2015), which pointed to various activities of the branches of government.
4. That Treasury response, however, failed entirely to identify a strategic, coordinated approach to identification and management of risk, which could provide consistency in the data used, and the strategic analysis relied upon. It is therefore most heartening to see this type of approach integral to this discussion paper.
5. Further, we note that the paper recognizes that "[a] more proactive, coordinated and evidence-based approach to risk management and resilience building is required to maintain societal resilience and sustainability in the face of the complex risks we are facing domestically and globally." We certainly endorse this statement.

6. We note, and strongly endorse the statement that “Because of the cross-cutting nature of risks, cross-government coordination is key to strengthening our overall resilience.” We endorse a sense of cohesion and widespread capacity to talk across the usual divides and believe shared principles are crucial to dealing with almost every aspect of resilience.

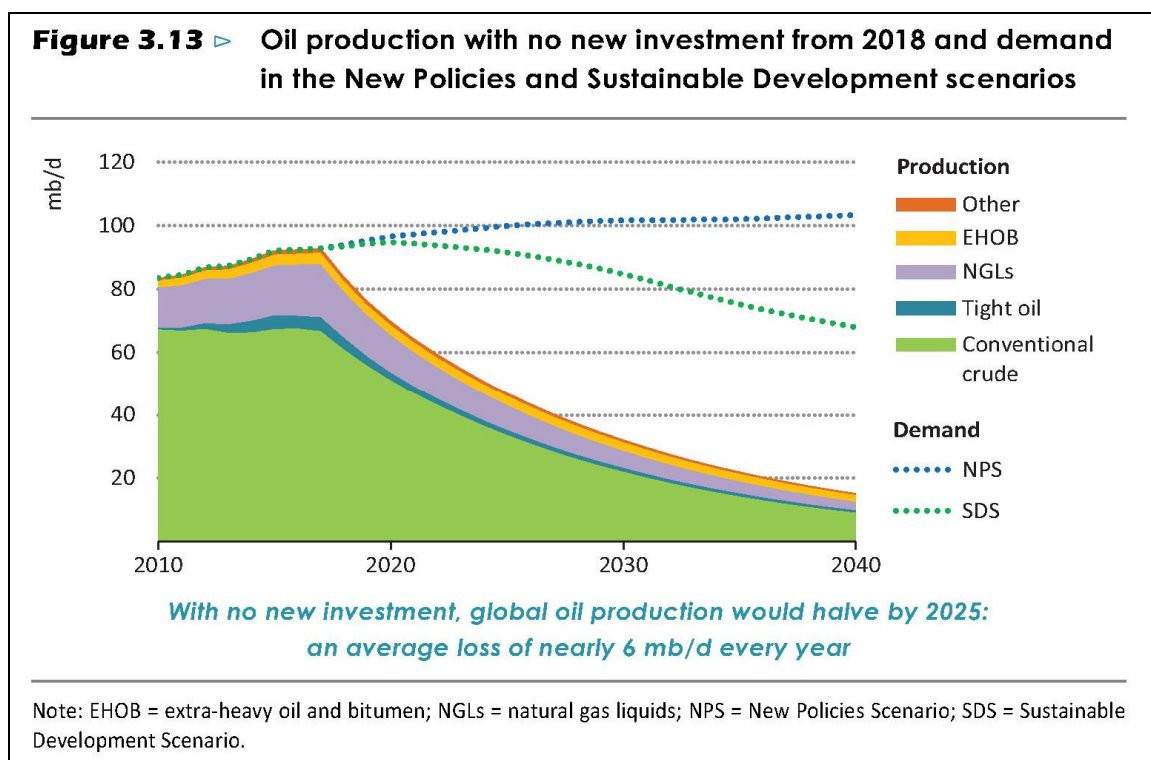
7. We support the Treasury’s proposed “Living Standards Framework and its stated objective: “to maximize intergenerational wellbeing.” We also endorse the proposed “Four Capitals” framework of interdependent Natural Capital, Social Capital, Human Capital and Financial/Physical Capital, as described, and as the basis for policy development to improve wellbeing for New Zealanders, in both improved risk management and resilience building.

- a. A caveat to this support comes from the ecological-economics perspective, and consideration of ‘4 E’s’ – Economy, Equality, Energy and Environment. This perspective relies on the insight that, in order for the economy to serve the needs of the people engaged in it, it requires a number of other matters to be considered and accounted for.
- b. Furthermore, those considerations are not of equal weight, as the ECONOMY sits within a society whose EQUALITY allows it to continue functioning peacefully. Within this is the ENERGY that enables GDP activity, all of which is derived from and dependent on the ENVIRONMENT - specifically, both functioning ecosystems and resources at a price that the market can bear.



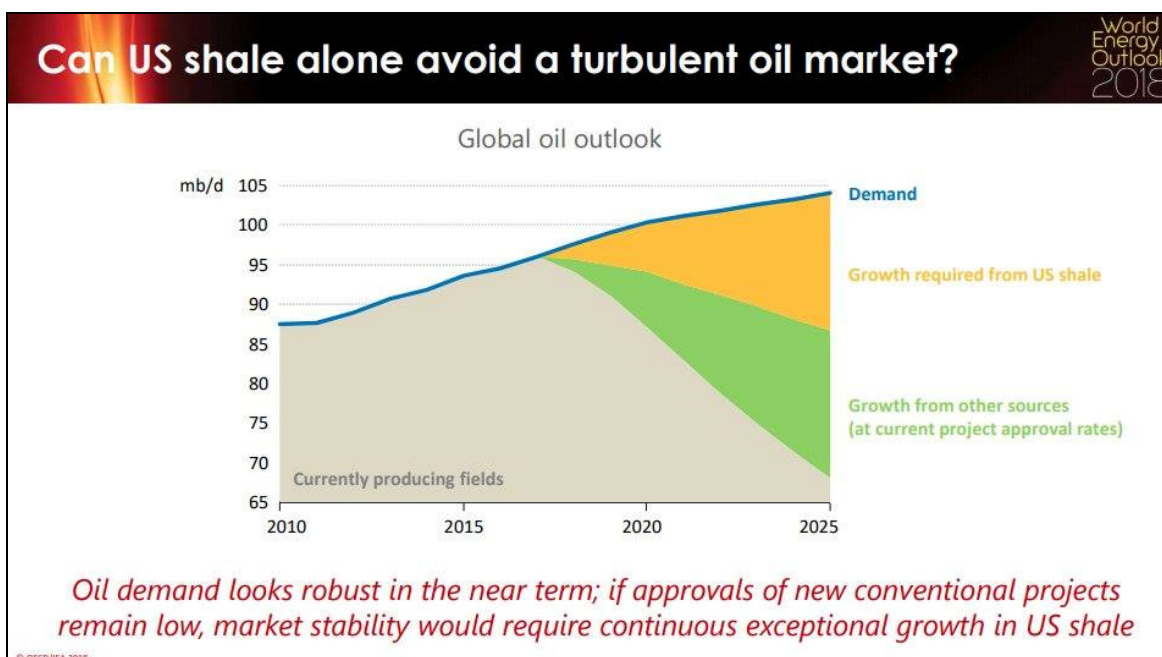
- c. Growing in-equality has led historically to a decline in living standards for the majority, and ultimately to conflict and revolution.

- d. A further caveat concerns that supply-side of fossil energy to our global society and hence, NZ as inextricable part of that society:
- i. Changes in the energy supply situation. The economy shows a tight correlation between GDP levels and the energy available to it. The International Energy Association (IEA), in the just-released World Energy Outlook 2018, is forecasting strong demand growth for energy following historical trends (Figure 3.13). At the same time, it is saying that it is very uncertain from just where the investment, that would enable the supply increase necessary to realise that growth will come.



- ii. In particular, it is saying that without a pick-up in investment, global supply will start to decline in total volume from around 2020, and HALVE by 2025, based on the decline rates of existing production assets. The second figure below shows that if approvals of new conventional oil prospects remain low, market stability would require "continuous exceptional growth in US shale". Yet experience to date with shale wells is that their useful life is typically limited to a few years.
- iii. Even if only partially realised, **the grim implications of this energy scenario, for the Risk and Resilience of society generally, can not be overstated.**
- iv. Indeed, it is seeking redress for our refusal to consider as yet the probability and implications of supply side limits to fossil carbon on both the economy and GHG emissions that is the primary objective of our Society and the reason why we have worked so determinedly for a national assessment of risk. This article

by Dr Tim Morgan<sup>1</sup> is a helpful summary, in financial language, of the issues regarding energy: <http://bit.ly/2BnRMvC>



- v. There is a growing understanding of the environmental issues we face, concerning climate change and the local environmental impacts of industrial activity (including farming). But there is also the 'Planetary Boundaries' framework, that speaks to other critical factors in the broader risk environment as described by science  
<<https://www.stockholmresilience.org/research/planetary-boundaries.html>>.

8. We are impressed by the future strategic planning described for both Finland and Singapore (pp. 36-7), both countries renowned for their successful governance. In this context, New Zealand had a successful Commission for the Future (CFF) in 1979-82, which was dismissed by the Muldoon Government in 1982, and further to this, I was invited, in February, 2017, by the Ministry for the Environment, together with Sir Geoffrey Palmer QC, and Mr Bryce Johnson (in his capacity as Chief Executive of Fish & Game NZ), to present a case for "planning for the future", when we all recommended a Futures Commission or equivalent, be proposed for the then Government's consideration. But we heard no more!

- a. The Wise Response Society has discussed whether this would be most effective as a separate legal entity to the Climate Change Commission (CCC). Whilst this would appear logical, we consider it will be politically difficult enough simply to get cross-party agreement for an effective CCC.
- b. Accordingly, we recommend that a broad enough remit is given to the CCC that it can take a wider view of the risk environment as we have outlined (including fossil

<sup>1</sup> Cambridge educated Dr Tim Morgan is an energy industry and economics specialist, having worked at investment house UBS Drew Phillips as an oil analyst and then as Head of Research at Tullett Prebon from 2009 to 2013.

carbon supply, which is clearly highly relevant to GHG emissions), and how this pertains to discussions around Climate Change mitigation and adaptation.

- c. With this perspective, climate warming and destabilisation can be helpfully framed as a 'risk multiplier', as the Pentagon has described it in the past.

9. We support the overall substance of this discussion paper and endorse the stated intent of classifying the risks by their likelihood and impact and encouraging further thinking and discussion as to how to strengthen risk management and resilience building through public policy.

10. We also endorse the recognition of the importance of a multi-stakeholder (whole-of-government plus whole-of-society) coordinated approach to risk management and resilience building among the four interrelated capitals that have been identified.

- a. When this issue was discussed with our Patron, Sir Geoffrey Palmer QC, last year, he suggested that we needed to advocate for an approach that integrated deeply with the various branches of government to improve consistency.
- b. He suggested that the analysis should be done by an independent body similar to the PCE, and disseminated through the ministries and executive / legislative branches of government via a network of specialists located within the various bodies.

11. Finally, we anticipate and strongly support the stated intent of building on this discussion paper to formulate the basis for a formal government policy in the general field of risk management and resilience, directed at planning for a much more sustainable future for this country.

12. Fundamental to seeing the importance of this is that you 'don't know what you don't know'... We have a situation where our predominant analytical frameworks are almost completely blind to resource depletion and largely unable to properly account for climate change mitigation and adaptation costs. This situation is unacceptable, and must change, if our children are to have any hope of a safe and fulfilling life within a liveable climate.

13. Our review of risk assessments undertaken by other states is that a robust, objective outcome that is ultimately useful for effective policy development, is not always achieved. We of Wise Response therefore request active participation in the process of defining the scope / terms of reference for any body assembled to address Risk and Resilience for New Zealand.

## B. BACKGROUND: Wise Response Society's Appeal to Parliament

Details of the Society's Appeal to Parliament in 2015 are relevant to our response to the Treasury's current Discussion Paper 18/05, so we present it here:

### THE APPEAL

#### **Symptoms too serious to ignore: a call to face up to NZ's critical risks. Appeal to Parliament for a NZ Risk Assessment. Petition Presented April 10, 2014.**

As demand for growth exceeds earth's physical limits, causing unprecedented risks, what knowledge and changes do we need to secure New Zealand's future wellbeing?

*To the House of Representatives: We the undersigned, request that the House:*  
*(1) urge Government to undertake a National Risk Assessment of: Economic Security, Energy and Climate Security, Business Continuity, Ecological/ Environmental Security and Genuine Well-being, and:*  
*(2) that from that Risk Assessment, develop and implement cross-party policies to avert any confirmed threats to future generations of New Zealanders.*

We live on a biologically complex and exquisite planet, home to 7 billion people and a myriad of other unique life forms. We believe it is our human responsibility to maintain the integrity of life support systems and the natural processes which sustain and renew them.

We believe it is also our responsibility to fervently defend the basic right of humans to live secure and fulfilling lives consistent with the UN Declaration of Human Rights. It follows that our generation must satisfy our present material needs in ways that do not diminish the prospect of their realisation for present and future generations.

We are deeply concerned about the links between global climate change, fossil fuel extraction and combustion, and the economy. We consider the evidence is now overwhelming (refer Urgency below) for accepting that human-induced climate change, (including extreme weather events) and impending oil constraints threaten our ability to meet those environmental and social obligations. There are also numerous other unprecedented trends and threats of the present era which, individually or in combination, could destabilise New Zealand's wellbeing.

So far, New Zealand has failed to truly face up to such unprecedented threats to its collective security. Indeed, some policies exacerbate the situation. There appears to be an unwavering faith that technological fixes will be found in time. Yet with scientists saying critical "thresholds" are upon us, the odds of such solutions being found diminish by the day and the consequences of this faith being ill-founded will, in all probability, be disastrous and irreversible.

Therefore, in the name of all our children and grandchildren we, the undersigned, call on the New Zealand Parliament to face up to this situation now by dispassionately assessing risk levels in the following five areas. Then, if found necessary, and with public input, design coherent, robust cross-party strategies and policies to avert these risks and give future generations the very best chance of security, peace, social justice and opportunity for all.

**1. Economic security: the risk of a sudden, deepening, or prolonged financial crisis.** Such a crisis could adversely impact upon our society's ability to provide for the essentials, including local access to resources, reliable supply chains, and a resilient infrastructure.

**2. Energy and climate security: the risk of continuing our heavy dependence on fossil fuels.** Progressively restricting their extraction, importation and use could promote a switch to genuine renewables and encourage smarter use of existing energy and energy systems while creating better public transportation. Such responses would simultaneously lower GHG emissions.

**3. Business continuity: the risk exposure of all New Zealand business, including farming, to a lower carbon economy.** To mitigate this risk, all businesses could explore both market and job opportunities in reducing the human ecological footprint, finding substitutes for petroleum-based goods and services, increasing efficiencies and reducing waste in food and resources. This would position New Zealand as a market leader in low-carbon technologies and living arrangements.

**4. Ecological security: the risks associated with failing to genuinely protect both land-based and marine ecosystems and their natural processes.** We believe that such protection is essential for both the maintenance of indigenous biodiversity and ultimately, all human welfare.

**5. Genuine well-being: the risk of persisting with a subsidised, debt-based economy, preoccupied with maximising consumption and GDP.** An alternative is to measure progress by means of indicators of community sustainability, human well-being, more equitable wealth-sharing and environmental resilience, and to incorporate full-cost pricing of harmful environmental impacts.

A risk assessment is the first step in determining the scale, timeframe and interactivity of the risks faced by New Zealand. It would build on international risk assessments such as the World Economic Forum's Global Risks 2013 report. Such a report for New Zealand should then be used as the basis for engaging the public and businesses of New Zealand in informed discussion as to what choices need to be made to buffer New Zealand from such risks and to work towards genuine well-being.

Thirty years ago, widespread public concern about nuclear proliferation led to cross-party support for New Zealand's anti-nuclear legislation. This was a defining moment in New Zealand's history, and was in response to just one single risk. The Land and Water Forum is another example of where New Zealanders have come together to acknowledge, work through and address the risks of deteriorating water quality. Today New Zealand faces numerous additional risks, which are all the more risky for being largely unacknowledged. We believe Parliament should build on its proud tradition of foresighted collective response to risks, and initiate a risk assessment as the first step in achieving a more secure future.

## Urgency

The International Energy Agency (IEA) warned in 2013 that less than one-third of proven reserves of coal, oil, and gas could be burnt by 2050 to avoid exceeding 2degC of global warming. Put another way it also states that "If current trends continue, and we go on building high-carbon energy generation, then by 2015 at least 90% of the available "carbon

budget” will be swallowed up by our energy and industrial infrastructure. By 2017, there will be no room to move at all”. (<http://www.guardian.co.uk/environment/2011/nov/09/fossil-fuel-infrastructure-climate-change>, IEA (2011) *World Energy Outlook*). The IPCCs latest assessment details impacts and vulnerability associated with climate change predicts future food and water supply insecurities, and calls for both urgent mitigation and adaptation (IPCC 5th WG 2 Adaptation report April 2014).

- The American Association for the Advancement of Science provides an update summary on climate change in "What we know: the reality, risks and responses to climate change" 2014. International negotiations to combat human-induced climate change (Rio 1992, Kyoto 1997, Copenhagen 2009, Durban 2011) reveal that the course of climate diplomacy has increasingly lost touch with the scientific evidence (New Scientist 3843: p3. We can still avoid a ‘lost decade’ on climate change. Dec 2011). Not only is the widely used target, based on the 4<sup>th</sup> IPCC assessment report (450 ppm atmospheric CO<sub>2</sub> equivalent) now very difficult to achieve, but this limit may be far too high. Scientists such as Jim Hansen argue that the maximum safe level for atmospheric CO<sub>2</sub> concentration is 350 ppm (Hansen, J. 2012. Scientific Case for Avoiding Dangerous Climate Change to Protect Young People and Nature. <http://pubs.giss.nasa.gov/abs/ha08510t.html>).
- Fatih Birol from the IEA (2011) has also stated that maximum global conventional crude oil production (“peak oil”) occurred in 2006. This means that “all liquids” supply will likely steadily decline after an undulating plateau with a growing gap between demand and supply occurring from around 2015. The economic implications of this decline are likely to be serious. See Hirsch, R. L., Bezdek, R. & Wendling, R. 2005. Peaking of World Oil Production: Impacts, Mitigation, & Risk Management, US Department of Energy, and Hirsh R.L, ASPO presentation Vienna. 2012). Only by moving away from fossil fuels can we both ensure a more robust economic outlook and address the challenges of climate change. This process will be a “decades-long transformation that needs to start immediately” (see Murray, J. & King, D. 2012. Climate policy: oil’s tipping point has passed, Nature 481: 433–435.).
- Financial inequity is increasing and the world financial system is unable to deliver security; social cohesion is at risk both nationally and globally (see Jackson, T. 2009. Prosperity without Growth. Earthscan. London, UK). In 1998, more than 45% of the globe’s people had to live on incomes averaging US\$2 a day or less while the richest one-fifth of the world’s population has 85% of the global GNP. The gap between rich and poor is widening (see Meadows, D., Randers, J., Meadows, D. 2004. Limits to Growth: the 30 Year Update, Chelsea Green, USA.). The perpetual exponential growth myth is enthusiastically embraced by politicians and economists as an excuse to avoid tough decisions facing humanity (see The Asahi Glass Foundation. February 2012. Environment and Development Challenges: the Imperative to Act, and Lloyd, B. 2009. The Growth Delusion, Sustainability1: 516-536). The impossibility of this goal in a finite system has been outlined by Albert Bartlett. [http://www.albartlett.org/books/essential\\_exponential.html](http://www.albartlett.org/books/essential_exponential.html)
- For a readable and integrated summaries of limits and the reasons why we face some difficult decisions and how we might respond see Richard Heinberg's 'The End of Growth' (<http://www.postcarbon.org/end-of-growth-chapters>) and the Tullett Prebon report 'The Perfect Storm' ([http://www.tullettprebon.com/Documents/strategyinsights/TPSI\\_009\\_Perfect\\_Storm\\_009.pdf](http://www.tullettprebon.com/Documents/strategyinsights/TPSI_009_Perfect_Storm_009.pdf)) An Emerging Issues paper by the Royal Society of NZ presents evidence



from local and global trends suggesting that New Zealand should carefully review its direction of development examines a "green economy" for NZ - low carbon, resource efficient and socially inclusive (Facing the future: towards a green economy for New Zealand March 2014).

## APPENDIX: Background to the Wise Response Society Inc:

### Purpose of the Society:

1. The purpose of this Dunedin-based but New Zealand-wide Society is to persuade the New Zealand Parliament, Government and New Zealand's civil society in general, to confront and respond effectively to any confirmed threats arising from the question: "As demand for growth exceeds earth's physical limits, causing unprecedented risks, what knowledge and changes do we need to secure New Zealand's future well-being?" Our website: [www.wiseresponse.org.nz](http://www.wiseresponse.org.nz) contains a relatively comprehensive record of the Society's activities since its establishment in March, 2013.

2. During the establishment phase of the Society I gave a series of 12 presentations in the main centres from Auckland to Invercargill. This included details and endorsement of Forgie and McDonald's (2013) proposal for a Genuine Progress Indicator (GPI) for New Zealand, "to provide a measure of national well-being that can be used to complement economic indicators", as a substitute for the traditional GDP measure of the economy (see Forgie, V.E & McDonald, G.W. 2013. Towards a genuine progress indicator for New Zealand. In: Dymond, J.R. ed. *Ecosystem Services in New Zealand: Conditions and trends.* Lincoln. Manaaki Whenua Press. Pp. 474-94.).

3. The Society lodged a petition to Parliament in April 2014 requesting it undertake a New Zealand-wide Risk Assessment in five key inter-related subject areas - economic security, energy and climate security, business continuity, ecological-environmental security, and genuine human wellbeing. It presented its case to the Finance and Expenditure Select Committee on July 1, 2014<sup>2</sup>. Its case was dismissed by the Government members with a supporting statement from Treasury, which claimed the Society's concerns were being adequately addressed by Government. All three Minority parties on the Select Committee, however, each accepted the Society's case. In this context it is reassuring to now witness their sincerity as members of the present Coalition Government, and also the notable change in the Treasury's current response from that we witnessed in their response to our submission in 2014, under the previous Government.

4. The Society has continued to promote its purpose through submissions on several relevant issues, including resource consent applications and also press releases and several presentations: most recently, in 2018, these were a video presentation to the Engineers for Social Responsibility on: "High expectations for the proposed Climate Change Commission: Will the Government's action plan push us fast enough"; a session on: "Climate Change:

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<sup>2</sup> Petition 2011/106 of Sir Alan Mark

Why, when and how do we respond”, at Otago University’s International Science Festival, and a U3A course on: “Finding a sustainable transition path to zero net carbon emissions for New Zealand.”

5. In 2016, the Society appealed the Otago Regional Council’s draft revised Regional Policy Statement (RPS) Review to the Environment Court, with the assistance of Dr Royden Somerville QC and barrister William Anglin, to seek strengthened recognition in the Statement of the importance of resilience, ecosystem function, risk assessment and precaution, as well as addressing renewable energy and the causes of climate change, not just adaptation to it.

6. We also submitted on the Emissions Trading Scheme (twice), the Resource Legislation Amendment Bill, the Conservation and Environment Science Roadmap, the Productivity Commission (twice), the Child Poverty Reduction Bill, the Zero Carbon Bill, the Taxation Working Group, the Crown Minerals (Petroleum) Amendment Bill, the IPCC 2018 Report, and the Paris UN Negotiations – NZ Priorities. We also facilitated the development a Position Statement and Action Plan for NGOs and civil society, under the name Climate Consensus Coalition Aotearoa (CCCA), which proposed a goal and a process by which to effectively meet the spirit and intent of the Paris Accord of December, 2015. The total of individuals and the membership of organisations which formally endorsed the CCCA statement numbers approximately 330,000 from about 100 organisations.

7. On 16 August, Wise Response Chair, Sir Alan Mark led presentations of the CCCA Position Statement and Action Plan to MPs at Parliament on behalf of its creators and supporters. There were two presentations - one to GLOBE-NZ members (chaired by Dr Kennedy Graham) and the second to an invited audience of all MPs in the Beehive Theatre, hosted by GLOBE-NZ.

8. Professor Jonathan Boston and our Patron, Sir Geoffrey Palmer QC, as well as representatives of five other NGOs, who helped develop the CCCA statement, spoke in support. These included James Drew-Young (GenZero), Adelia Hallett (Forest & Bird), Dr Roger Blakeley and Sue Kedgley (Wellington R.C. & Local Govt NZ), Gay Keating (Ora Taiao) and Katherine Peet (Network Waitangi Otautahi/One Voice Te Reo Kotahi). Concluding remarks were provided by Sir Geoffrey Palmer QC (for WR), and Tracey Martin (NZ First), David Parker (Labour) and Kennedy Graham (Greens), for GLOBE-NZ.