Submission by

to the

Ministry for the Environment

on the

The Review of the Emissions Trading Scheme (ETS)

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– A BUSINESSNZ AND BUSINESSNZ ENERGY COUNCIL (BEC) SUBMISSION – THE REVIEW OF THE EMISSIONS TRADING SCHEME (ETS)

Introduction

1. BusinessNZ and BusinessNZ Energy Council (BEC)[1] welcomes the opportunity to provide feedback to the Ministry for the Environment (referred to as 'the Ministry') on its consultation document titled the Review of the Emissions Trading Scheme (referred to as the 'Review'). This review outlines some of the benefits, risks, and trade-offs of changing the NZ Emissions Trading Scheme (ETS) to incentivise more gross emission reductions. The paper outlines several options to rebalance the ETS towards more gross reductions.

2. We support New Zealand's net-zero carbon target and sinking budgets to achieve that target. Climate change is a global problem. New Zealand contributes to this problem and has a responsibility to address it. New Zealand's businesses have a crucial role to play in achieving the reductions sought under the Paris Agreement.

3. Change in New Zealand is already well underway, with the government, policymakers, businesses, and individuals taking decisive action to reduce emissions. We would like to acknowledge the remarkable efforts of businesses throughout New Zealand in proactively addressing climate change and striving to become global leaders in sustainability.

4. Significant investments have been made, and numerous changes have been implemented. For instance, the following examples illustrate just a few of the countless projects currently underway within New Zealand's businesses.

    - Methanex has made a significant investment to reduce carbon emissions at its Motunui facility by improving its distillation columns. Emissions at the site will reduce by 50,000 tonnes per annum, the equivalent of taking 20,000 cars off the road.

    - Mercury, Contact Energy, Ngawha Generation, and Eastland Generation have committed to trials of geothermal carbon reinjection and sequestration technology. It may be a common feature of New Zealand's energy network in the future. If successful, carbon reinjection has the potential to reduce emissions from geothermal by 568,000 tonnes per year, equivalent to taking over 236,000 cars off the road.

    - OMV has replaced a gas-turbine driven compressor with an electric-driven compressor (reducing emissions by 3,400 tonnes per annum), replaced a steam-fired water makers with reverse-osmosis units (reducing emissions by 6,000 tonnes per annum), and improved Maui A generator efficiency (reducing emissions by 3,000 tonnes per annum).

    - Contact Energy, with its investment in new renewable energy from geothermal at Tauhara, and Te Huka, Southland wind and the closure of some gas power stations, have reduced their scope 1&2 emissions from 2,213ktCO2e in 2012 to 788ktCO2e in 2023. The company plans to be net zero by 2035.

    - New Zealand Aluminium Smelter (NZAS), one of the lowest carbon intensive smelters globally, has reduced its CO2 emissions by almost half since 1990 through the application of a range of reduction and capture processes.

    - Golden Bay Cement has invested more than $200m since 2004 in decarbonisation projects. Its Whangarei cement plant now substitutes 50% of the coal used to power its cement kiln

[1] More information about BusinessNZ and BEC can be found under appendix one.

with used tyres and construction waste that were once destined for landfills. Emissions from its clinker production are amongst the lowest in the world. The company has a well-developed plan to replace the rest of its coal use with biofuels derived from waste streams.

- Oji Fibre Solutions have invested hundreds of millions of dollars in decarbonisation projects since 2014. The company is investigating a potential $0.5 to $1.6 billion investment on a proposed bio-products hub that would reduce emissions by up to 140,000 tonnes per annum.

- A joint venture between Balance Agri-Nutrients and Hiringa Energy is working to construct four wind turbines to produce green hydrogen to be used to produce low-emission ammonia-urea. The project will reduce the carbon footprint for Balance Agri-Nutrients products and supply electricity to the grid of up to 24,000 homes.

5. The work continues, and New Zealand's businesses remain committed to facing their plans head-on, showcasing their success and competitiveness in a world increasingly prioritising sustainability by actively contributing to the global challenge of reducing emissions.

6. For this momentum to persist, the policy and regulatory environment must foster investment in decarbonisation and align with the efforts to achieve substantial emissions reductions. This includes immigration settings that are open and simple, attracting oversea talent; regulatory regimes that are workable and stable, providing certainty; regulatory intervention with proper scrutiny and debate, providing net benefits and minimising unintended consequences; settings that attract overseas investment, providing the much-needed capital.

7. Policies should communicate clear signals and help eliminate barriers to decarbonisation. The actions and policies of the government must be sensible, evidence-based, and consider all trade-offs while safeguarding our economic growth and living standards.

8. New Zealand's ETS is a significant instrument in our arsenal to help drive decarbonisation decisions. As a potent market tool, it plays a pivotal role in helping the country attain its emissions reduction targets. For the ETS to yield its desired impact, it must be effective, supported by complementary policies that work in synergy to ensure its efficacy.

9. But it must also be allowed to bed-in and do its job, to successfully reduce carbon emissions across industry, energy, and transport. If we want the ETS to remain our key policy tool in achieving New Zealand's net-zero greenhouse gas emissions by 2050, are serious about acting on climate change, and if we comprehend the impacts of climate change, then we cannot afford to debate whether we should focus on reductions, removals, or adaptation. These will all have to work together in harmony.

10. The following submission aims to provide the Ministry with further input, concerns, and other considerations on the proposed ETS review. Overall, the submission balances the broad view of New Zealand's business community. As always, we have encouraged members to provide their submissions on proposed changes outlined in the paper.

Executive summary

11. **Firstly, the ETS review has severely damaged confidence in the carbon market.** One important objective of this review should be for policymakers and the Government to assess and outline options that restore confidence and improve the credibility of the ETS.

12. **We recommend the Government promptly rule out retrospective changes to current NZU rights,** providing more confidence in the stability and predictability of the ETS regime for

businesses and investors. By continuing clear and unambiguous property rights and avoiding continuous alterations, New Zealand can foster a conducive environment for investment. **Any options should be considered as forward-looking**.

13. **We recommend that any changes to the ETS should be guided by key principles: flexibility, stability, cost-effectiveness, simplicity, and optionality.**

14. **Furthermore, we recommend conducting a comprehensive quantitative analysis to determine the level of gross emission reductions intended up to 2050 before any options are decided.** This analysis should guide policy development by providing clarity on the intended gross reductions, which is essential for achieving a balanced approach in the ETS. Outlining targets for gross reductions and afforestation would provide more clarity on the required auction volumes, price corridor, and level of afforestation, enabling a comprehensive economy-wide assessment of the costs and implications associated with pursuing each pathway that deviates from the current pathway.

15. **This should include an assessment of the costs and benefits of each option in rebalancing the ETS towards more gross reductions.** Gathering data on emission reduction elasticities from the market to better understand the price responsiveness of higher emission prices for emission reductions is important. This data will offer valuable insights and contribute to the policy development process.

16. **Alongside the assessment of current options, we recommend assessing non-ETS measures aimed at managing and controlling afforestation,** such as implementing mechanisms and regulatory measures that could address the issue of 'excessive' afforestation and its negative externalities, without changing the current ETS structure and undermining its effective price signal for afforestation and gross reduction. This could include better land-use planning and requirements on forestry management.

17. **We would like to see a comprehensive assessment of all aspects impacting afforestation economics and potential planting.** It should consider factors beyond the carbon price to formulate robust policies and solutions.

18. **This should include undertaking a comprehensive assessment of the potential amount and types of land suitable for afforestation in the permanent exotic forestry category**. This information will be valuable in understanding the extent of the potential problem of 'too much' afforestation.

19. **We recommend to account for constraints beyond the ETS,** such as the speed at which businesses can source and adopt low-carbon technologies and the availability of skilled workers. This includes exploring complementary policies to overcome these constraints and support the transition to low-carbon technologies.

20. **We currently do not support any option at this stage due to the lack of detail and inadequate acknowledgement of non-ETS measures that could address the stated problem.** The options remain broad, simplistic, and not specific. The lack of detail about each option and its implications for New Zealand's business community remains largely unclear. We expect further assessment of each option. Thorough evaluations are necessary to ensure that the chosen approach aligns with the nation's climate goals while also supporting the growth and resilience of New Zealand's business sector. As noted, **we believe further options should be assessed**, which include measures outside the ETS aimed at managing and controlling afforestation that do not weaken the carbon price signal.

Identifying the problem

21. The paper's modelling results, incorporating various exogenous and endogenous input assumptions, including the Climate Change Commission's price path and emissions related to the price, demonstrate that if large quantities of forestry planting shown before the review continues, there will likely be an excess of forestry units compared to the overall NZU demand by the 2030s. While different inputs yield different outcomes, the main finding is that the current ETS settings will likely lead to an 'oversupply' of forestry, resulting in an accumulation of stockpiled units and subsequently weakening the carbon price and the incentive for gross reductions.

22. This modelling-derived conclusion sheds light on the Government's preferred stance to rebalance the NZ ETS, with a specific focus on promoting more substantial gross emission reductions. This preference is reflected in the Government's Emission Reduction Plan (ERP).

23. We recognise that no modelling will ever be completely perfect. It will have inherent limitations, relying on limited information and assumptions, and does not predict future outcomes. Given this, we believe that policymakers should account for supplementary factors alongside the modelling results. This encompasses factors that could potentially impede the envisaged level of afforestation portrayed in the paper's modelling.

24. We note that the land and log prices are fixed. This is sensible from the perspective of modelling. However, in reality, these two variables have a significant impact on the decision-making process for foresters when it comes to planting. It is important to carefully consider the opportunity cost of permanent forestry decisions taken by landowners.

25. Assessing the potential amount of land and the specific types of land that could potentially be afforested and remain in the permanent exotic forestry category would provide a valuable set of information. This might be difficult to undertake, but its clarification would help depict the extent of the possible problem of 'too much' afforestation. As noted, the assumption remains that the price response for afforestation under the period of lower prices will carry through in times of higher emission prices. However, there is considerable uncertainty about whether this will happen.

26. Afforestation decisions made by landowners are not solely influenced by short-term price fluctuations in the secondary market. Instead, they are carefully planned based on price expectations over an extended period, mostly decades ahead. The current model assumes a continuous trend of planting, leading to an oversupply of units and subsequent drop in carbon prices. However, policymakers should also account for the likelihood that forestry participants in reality react to an oversupply by slowing down and reducing planting rates.

27. Foresters' decisions are multifaceted and depend on various factors, including the cost of capital, regulatory risks associated with permanent forestry being in or out of the ETS, and the proximity of planted land to local roads and nearby ports. Additionally, the cost and difficulty of planting and maintaining specific tree species, insurance costs, compliance expenses, rates, pest control, water runoff, and track maintenance all play a significant role in shaping their choices. The land class of potential land also influences decisions, with most foresters choosing to plant on stony, steep, and marginal land with limited land-use options, which tends to have lower value compared to more productive land.

28. A comprehensive ETS review must thoroughly assess all these aspects that impact the economics of planting and, consequently, the probabilities of potentially new afforestation registered within the ETS. This approach would add nuance to the review process, going beyond just considering the carbon price. Understanding these complexities will enable a more robust evaluation and policy formulation that adequately addresses the challenges and opportunities associated with afforestation in the ETS.

29. We recognise that the model does not account for uncertainty, as it relies on historical data and intentions for rational decision-making. However, policymakers must seriously consider the uncertainty in the market and the likelihood of the endogenous supply figure within the modelling coming to fruition. The trust in the tool has been compromised, and the future of forestry in the ETS is fraught with uncertainty. The situation is further exacerbated by risks to current permanent forestry property rights.

30. New Zealand will need additional permanent exotic afforestation to fulfil its Nationally Determined Contribution (NDC) targets. The paper and the Climate Change Commission both emphasise the crucial role of afforestation in achieving these goals. To realise this vision, it is imperative to maintain strong incentives for ongoing afforestation efforts.

31. The key question is how we can ensure the desired level of afforestation and how the ETS review can steer New Zealand back on track, encouraging foresters to resume planting activities. This requires establishing foundational principles in considering potential options for the way forward.

Fundamental principles

32. By setting these principles, we can chart a course that ensures sustainable and consistent afforestation, paving the way for New Zealand to meet its climate targets. The principles below are not ranked by order of importance.

Balances all options

33. We are pleased the document acknowledges the need for both removals, gross reductions, and adaptation. We agree strongly. Meeting net zero requires all options, not one or the other. They must work in harmony. This approach is reflected in meeting net-zero the international commitments made by 194 states, including New Zealand's own commitment under the Climate Change Response Act 2002 (CCRA).

34. The ETS should maintain a regime that incentivises removals and gross reductions. The ETS currently achieves this by determining abatement costs through supply and demand dynamics with decreasing capped units over time, encouraging the market to discover cost-effective options at corresponding price levels.

Allows for cost-effective solutions

35. Another principle should ensure that the ETS is effective in helping to achieve our net-zero commitments in a cost-effective manner, a current capability of the ETS. It is essential not to dismiss the pursuit of the lowest-cost combination. While this may seem obvious, it carries paramount significance. We must emphasise that opting for the lowest-cost options does not equate to compromising on quality.

36. With scarce time, private and human capital, natural resources, and tax revenue, we face choices. While we might prioritise more gross reductions over a combination of gross reductions and sequestration efforts, such decisions incur costs by diverting resources from other urgent societal issues. Identifying the most cost-effective options for achieving net-zero ensures maximum carbon emissions reductions for the value of our investments, benefiting businesses and the country. Climate change policy is about being effective and not expensive. If the costs are too high, and the public turn against those policies because of the cost, then meaningful change will be hard to come by.

Protects flexibility

37. Another guiding principle should be the importance of flexibility in meeting surrender obligations within the ETS. As it currently operates, the ETS grants emitters the freedom to choose the most

cost-effective strategies for fulfilling their surrender obligations, whether through unit purchases or investment in emission reduction projects. The market mechanism ensures that emission reductions occur in the most economically viable areas, prompting emitters to prioritise cost-effective abatements initially. As prices rise or more commercially viable technologies emerge, they can gradually adopt alternative solutions with lower capital and operating costs. Preserving this flexibility allows for a combination of removals and reductions, safeguarding against costly approaches in achieving net zero while ensuring a range of options are available.

Is simple, not complex

38. The ETS should limit complexity and maximise simplicity. Introducing additional layers of complexity with additional restrictions and mechanisms within the tool increases the risks of distorting the carbon price, complicating the signal and inevitably the decision-making undertaken by firms.

39. It is essential to recognise that the ETS serves as a specific tool rather than a comprehensive strategy. Attempting to address all externalities solely through the ETS could be risky and counterproductive. Instead, addressing and mitigating these externalities may require the use of complementary policies that work alongside the ETS. These policies can complement the tool by addressing specific challenges that cannot be adequately tackled within the ETS framework.

40. For instance, overcoming infrastructure lock-in barriers, coordination failures, chicken-and-egg problems, and addressing non-financial obstacles like labour and resource constraints may necessitate additional policy measures beyond the scope of the ETS. By using a combination of tools and complementary policies, we can effectively address various challenges and achieve meaningful emission reductions while maximising the effectiveness of the ETS in its primary role as a market mechanism.

41. Complementary policies extend to addressing forestry risks, which undoubtedly face various challenges like forest fires and diseases. Recent extreme weather events, such as Cyclone Gaberille, have highlighted that forestry investments are not a risk-free. Policies outside of the ETS, that are reasonable and workable, aimed at ensuring well-managed and resilient forests in the face of extreme weather would be beneficial.

Stable over time

42. Another vital principle for the ETS should be to maintain the scheme's stability and the trajectory of settings over time. The framework should exhibit consistency, with the cap gradually reducing in a stable manner. This stability is crucial to provide participants with clear foresight of settings into the future, enabling them to nurture long-term investments confidently. The stability of the ETS framework must endure across political shifts, enjoying robust cross-party support. By doing so, the tool can restore and bolster market confidence, which is an indispensable prerequisite for effectively decarbonising New Zealand's businesses and achieving our targets.

Restoring market confidence

43. After the announcement of the NZ ETS review, the secondary price of NZUs experienced a sharp decline and remained at a low of $36.50 by early July. Since then, market participants have been grappling with significant uncertainty about the future composition of this important tool.

44. The Government's unexpected decision to reverse course and adopt the Commission's advice on unit settings and price controls has provided a boost to NZU prices. But it is essential to recognise that these higher prices, due to tighter settings, do not indicate a resurgence of confidence. On the contrary, market confidence remains shaky, and participants express their apprehension and doubt regarding the future of this tool and how it will inevitably operate.

45. It is not surprising that the market's reaction to the review results in uncertainty about the tool's future. A review that presents several potential options, each with varying functions and mechanisms that are yet to be fully conceptualised, introduces a large element of the unknown.

46. Any concrete decision is highly unlikely to be made until after the general election. The process of fully conceptualising and selecting a specific option is equally hard to predict. If structural changes are deemed necessary, they will require a significant amount of time to be integrated and implemented. This timeframe will depend on the specific option. The Government should carefully consider the time-consuming nature of reform in the assessment of all proposed options.

47. In the interim, as the options are still being conceptualised and remain high-level, it is essential to address the short-term uncertainty prevailing in the market due to the review. The options discussed in the paper include potential restrictions on forestry units and the possible establishment of two separate markets for gross reductions and removals. The paper does not rule out the possibility of retrospective changes to the rights of permanent forestry currently registered in the NZ ETS. This is a **matter of deep concern** with significant implications.

48. Minister Shaw rightly acknowledges the potential consequences arising from retrospective changes. **We firmly believe that the Government must promptly rule out any retrospective changes to provide stability to carbon markets. Any change should be forward-looking.** Delaying the decision will only amplify the negative impact on New Zealand's reputation as an attractive destination for investments in decarbonisation and needed removals.

49. Reforming the ETS structure frequently, disincentivises efforts to decarbonise, at least throughout the period of change, with participants incentivised to wait until more information arises. This must be taken seriously, as the time to achieve New Zealand's targets remains constrained. As the timeframe extends, the level of uncertainty persists, and the impact on foresters and businesses with surrender obligations trying to reduce their emissions becomes more pronounced. The Climate Change Commission highlighted the risks of uncertainty resulting from reforming the regime and the importance of resolving the changes appropriately. This has not been heeded.

    "Ideally, this process would proceed in a timely manner, to avoid prolonged uncertainty about how the NZ ETS will operate. This would risk the perverse outcoming of discouraging investment in the forests that are needed."[2]

50. In a world where inherent uncertainty exists, it is both unreasonable and impossible to offer complete assurance. However, the Government can play a crucial role in reducing uncertainty by establishing relatively stable regulatory regimes. Such regimes instil confidence in businesses and investors that policies will remain consistent and durable over time. Having a stable regulatory backdrop allows businesses to plan and make long-term decisions regarding their investments and the adoption of emission reduction solutions at the right time and price for them.

51. Implementing emission reduction projects and plans, especially for large organisations, is a complex process involving engineering, financing, implementation, and operational considerations. It requires exploring options from overseas and integrating them into New Zealand's context, conducting research, and developing new technologies to ensure their technical and economic feasibility. All these endeavours demand considerable time and resources, and businesses need the confidence that their investments will yield returns. A stable regulatory regime helps safeguard their investments.

[2] *Inaia tonu nei: He Pou a Rangi, a low emissions future for Aotearoa,* The Climate Change Commission (2021)

52. Conversely, when the regulatory landscape is constantly changing and lacks consistency, decision-making becomes difficult. Firms become apprehensive about unexpected risks and liabilities, and hesitate to invest significant capital in emission reduction efforts.

53. In many cases, parent companies operating overseas prefer to invest in countries with favourable policy environments that promote decarbonisation and provide regulatory certainty and long-term stability that underpin this promotion. This was a clear conclusion from our recent research conducted in May 2023. This involved interviews with leaders from across New Zealand's emissions-intensive-trade-exposed (EITE) businesses.[3] They all noted the significant implications upon their businesses resulting from ETS policy uncertainty:

    "When it comes to capital investment, that has been a bit shy over the last 10 years, and it's mainly down to policy uncertainty."

    "We can't make long-term investment decisions because of frequent changes to the ETS. It can absolutely destroy a business case, and we don't know what it will look like."

    "We could be in a situation where something new gets implemented, the ETS gets reset, and we lose the value of what we have implemented."

    "Fiddling with the ETS rules could make our payback of a project look worse. How can we plan long-term when the ETS is so uncertain?"

54. **We <u>recommend</u> one of the primary objectives of the ETS review, and the analysed options, should be to provide certainty regarding future ETS policy,** including the roles of gross reductions, removals, and industrial allocation policy. The International Monetary Fund has recently highlighted the need for climate policy certainty in New Zealand and has called for a 'reduction in policy uncertainty.'[4]

55. The review should be conducted meticulously and accurately, thoughtfully considering the trade-offs and consequences. The chosen option should be allowed to settle without further and continuous changes. Continuously making alterations and adjustments in a state of uncertainty is not conducive to effective decision-making.

56. The constant amendments to the ETS over the past three years have had unintended consequences. The tool's credibility has been damaged, and its future is questionable. To regain confidence, it is essential to establish a clear and consistent long-term trajectory of ETS settings. This will create a stable and attractive environment for investments in decarbonisation efforts, ultimately helping New Zealand achieve its net-zero target.

57. The uncertainty surrounding whether forestry units held by obligated parties will be able to meet future obligations raises questions about their current and future value under any new regulatory framework. It also raises concerns about how many of these units obligated parties will be able to use to fulfil their future obligations and whether any time limits on their use will be imposed. This uncertainty puts into question units worth hundreds of millions of dollars.

58. Making changes to **existing** forestry unit rights without adequately considering the grandparenting of current NZU-F into the new regime would severely erode confidence in the regime, thus hindering medium to long-term decarbonization efforts. Businesses have invested, and will likely continue to invest billions collectively to comply with their surrender obligations as mandated by law.

[3] Future of Work Tripartite Forum Research, *Insights into emissions-intensive, trade-exposed businesses,* May 2023
[4] https://www.energynews.co.nz/news/carbon-credits/140735/reduce-carbon-policy-uncertainty-imf

Diminishing the existing rights of these units would damage New Zealand's international credibility as a country to invest.

59. This damage extends to landowners as well. The lack of clarity regarding retrospective changes has already caused disruptions to forestry planting activities. Those who own suitable land for conversion to forestry, which is essential to achieve our net-zero targets, would understandably question the security of their potential investment.

60. In a market economy, clear and unambiguous property rights are a fundamental cornerstone. These rights must legally be enforceable, and any reduction or removal of property rights through regulatory actions should generally warrant compensation. Without adequate protection against confiscation by the state or other entities, the motivation for individuals and businesses to invest and develop productive assets is significantly diminished. Under the scenario where current rights are not grandparented, foresters operating under the newly reformed regime would understandably question the investment in new planting, as they have no definitive assurance that the investment in developing their asset is protected against unduly takings from further regulatory changes in the future.

61. If retrospective changes were to result in regulatory takings, it would likely lead to prolonged and expensive legal battles, hindering New Zealand's decarbonisation efforts. Such an outcome is unfavourable, as it obstructs our progress towards addressing climate change. **We strongly reiterate that stability and certainty in property rights are essential in maintaining the momentum of our decarbonisation progress.**

Options proposed in the consultation

62. Expressing preferences and commenting on the options presented in the paper is challenging due to its high-level nature. The options lack detailed quantitative assessments, making it imprudent to support any option without a comprehensive analysis of the trade-offs involved. The options presented remain broad and simplistic, and do not encompass regulatory measures beyond the ETS that could constrain afforestation externalities (i.e., oversupply of afforestation, fire, and disease risk), without damaging the market signal for afforestation and gross reduction by changing the market itself (i.e., separate markets for forestry units and auctioned NZUs).

63. While we understand that the modelling and comprehensive assessment of various options' impact on unit supply, demand, and price, as well as the role of forestry and gross reductions, will be conducted after the ETS review feedback stage when the options have been specified in more detail, we believe that such an assessment should have occurred before the consultation was released.

64. The lack of specific details for each option, combined with the uncertainty surrounding the potential for retrospective changes and the need for clarity that any changes will be forward-looking, has contributed to the current market uncertainty mentioned earlier. Restoring complete trust and confidence in the ETS may be challenging, as evidenced by the current rhetoric from ETS participants. Resolving these issues is essential to ensure the effectiveness of our climate policy.

65. To conduct a comprehensive assessment of the costs and benefits associated with potential changes to the ETS and explore different options, it is crucial to ensure that any alterations implemented do not inadvertently lead to worse overall outcomes, failing to achieve the intended benefits envisaged by the Commission and the Government.

66. The paper highlights that other countries are increasingly prioritising gross emission reductions, and not following suit could damage New Zealand's reputation and access to markets, as financial institutions demand specific climate standards for the country's products and services. This is a

legitimate concern, as New Zealand may be viewed less favourably compared to its competitors if it doesn't rebalance the scales towards more gross emission reductions. However, as discussed on the first page, significant investments have been made by businesses to reduce gross emissions across New Zealand.

67. It is also equally important to consider other significant factors, such as the costs of adopting a change in strategy that emphasizes more gross reductions compared to the approach of the current settings, from an economy-wide perspective and its impacts on households.

68. Constraints outside the ETS also play a crucial role. While the ETS effectively signals the cost of carbon, in many cases, businesses may not be able to respond immediately to higher carbon prices due to various limitations. The speed at which businesses can adopt and operate new low-carbon technology and equipment must be taken into account, along with the availability of skilled workers to install and maintain these technologies.

69. Last year, DETA Consulting identified about 1,100 fossil fuel-powered boilers dispersed across 400 organisations and businesses, producing 24PJs of heat, the equivalent of 65% of the South Island's electricity consumption.[5] Replacing these boilers with low-carbon alternatives, such as heat pumps, provides meaningful emission reductions.

70. But despite a strong ETS signal and the best efforts of businesses sourcing alternative boiler technology, supplies remain limited and in many cases investments are capital intensive. Even if they can source available supplies and capital, these businesses also face a tight labour market and a shortage of workers with the required expertise to install and maintain new heat pumps and biomass-powered boilers.

71. Complimentary policies, outside this document and the Ministry's scope, will help address these constraints. For example, New Zealand will need to attract international expertise. To achieve this, the country needs open, simple, responsible, and permissible immigration settings.

72. Considering other aspects of this assessment, there are risks for New Zealand's hard-to-abate businesses and sectors that currently have limited options to switch to alternative technologies, especially if they are unviable or not readily available. Evaluating the risks of higher emission prices for such industries, as well as potential carbon leakage and supply-chain impacts, is crucial, particularly if emissions-intensive-trade-exposed (EITE) firms decide to leave the country.

73. During the Ministry's assessment of the outlined options, **we strongly recommend incorporating a quantitative analysis to determine the desired level of gross emission reductions up to 2050**. This analysis would provide valuable guidance for the policy development of any option(s), and further options not yet identified in this paper, including the status quo.

74. If the core issue is the inadequacy of gross reductions under the current settings over the coming decades, as emphasised throughout this document, it is essential to specify the required number and target of gross reductions. This approach of outlining the intended gross reductions and afforestation targets would facilitate the policy development process for each potential option and allow for a comprehensive economy-wide assessment of the costs and implications associated with pursuing each pathway. Comparing the economically rational pathway with the costs of not meeting New Zealand's NDC is of utmost importance.

75. As mentioned earlier, **we do not support any proposed options at this stage due to the current lack of information and detail. Nevertheless, there are a few considerations**

[5] New Zealand's Process Heat Fuel Future, DETA Consulting, 2022

that policymakers should consider, which do not appear to have been addressed in the paper:

76. Option 1 mentions the possible review and amendment to industrial allocation policy. We strongly question the need and validity of this review. The Ministry for the Environment has already completed its assessment and the Government's proposed amendments resulting from this assessment are currently before Parliament. BEC has submitted to enhance the Bill's provisions and incentivise decarbonisation projects. The Bill's current state contains multiple barriers unintentionally weakening decarbonisation efforts. Further review and assessment to industrial allocation policy appear unnecessary.

77. We express that Option 2 raises concerns about the market's ability to meet surrender obligations due to limited liquidity. The availability of units is currently tight, and liquidity is constrained. Intensifying this tightness by further tightening units and allowing international buyers to purchase NZUs will significantly complicate the task of achieving New Zealand's NDC. This poses a substantial risk to the Government, as it may have to resort to purchasing international credits to meet the 2030 NDC, potentially exacerbating New Zealand's already ballooning balance of payment deficit.

78. Option 3 lacks consideration for existing NZUs rights, which would significantly undermine the value of current offtake contracts. This could lead to legal disputes and litigation, causing a severe blow to the confidence in the tool's effectiveness going forward. Moreover, implementing this option would introduce complexity into the scheme and open doors for further changes to restrictions.

79. Option 4 outlines the risks of additional complexity and possible cost for achieving net zero. It enhances the Government's ability to set carbon prices, thereby introducing further risk of policymakers establishing a price range that is excessively elevated and done in a hastily manner, consequently engendering disruptive economic and social impacts. But again, the release of additional quantitative assessments will provide a clearer picture.

80. We observe that the options presented in the paper primarily focus on amending and reforming the market's structure, with limited consideration of alternative non-ETS measures and mechanisms that could better manage and control afforestation. Addressing the issue of excessive afforestation and its secondary impacts could be accomplished through supplementary regulatory measures. This could include changes to forestry management practices or improved land-use planning through the National Environmental Standards for Plantation Forestry (NES-PF), and mechanisms to reduce the risks associated with fires and disease on surrender obligated parties.

81. **Therefore, we strongly recommend that potential regulatory and non-ETS options aimed at addressing the stated problem of 'excessive afforestation' be thoroughly examined and evaluated alongside the existing proposals presented in the paper. This may highlight a more effective approach that does not undermine the scheme's current ability to send clear price signals.**

Appendix 1: Comments on the paper's modelling

82. Running the model with the exogenous input from the CCC demonstration price path of $260 (2019 prices) to 2050, combined with the central estimate from the afforestation intention survey, highlights the uncertainty about the price responsiveness of higher emission prices on emission reductions. The extent of this response remains uncertain. We acknowledge that the availability of data to construct a price response model is limited, and the Ministry has consequently reproduced the Commission's modelling results well. However, the absence of price elasticity response data gathered from the market emphasises the importance of collecting such data, as it could offer valuable insights. We are aware that the Ministry is currently gathering information on emission

reduction elasticities, which will play a significant role in providing a clearer understanding during the policy development process.

83. The modelling relies on the central estimate derived from the afforestation intention survey conducted by the Ministry of Primary Industries (MPI) in 2023, with these figures being projected into the future. It is worth noting that historically, these surveys have been reasonably accurate in predicting actual planting for the corresponding year. It is also worth noting that this information is highly likely to have changed, particularly considering recent developments.

84. As mentioned earlier in this submission, foresters are currently grappling with substantial uncertainty due to the ongoing review and the political rhetoric surrounding gross or net reductions. This uncertainty has resulted in a halt in planting activities. Extrapolating the intention data from 2021 poses challenges as it assumes certain factors such as land values, alternative land-use options, and foresters' constraints. It is important to understand that the model cannot predict future intentions, and policymakers naturally lack options. Assessing current intentions and likely intentions over the next few years is important, as they will significantly impact the magnitude of the issue and the corresponding potential solutions.

85. The potential annual level of afforestation, derived from the Manley analysis, indicates a considerable range of afforestation between 60,000 and 120,000 hectares per year. This level of afforestation is notably higher than recent pre-ETS review levels. The analysis suggests that as the sector receives more investment due to increased demand, there will be a corresponding increase in nurseries and labour flow. Again, we note that policymakers will likely need to account for recent and current market uncertainty impacting the intention of future investment.

Appendix One - Background information on BusinessNZ and BEC

BusinessNZ is New Zealand's largest business advocacy body, representing:

- Regional business groups EMA, Business Central, Canterbury Employers' Chamber of Commerce, and Employers Otago Southland
- Major Companies Group of New Zealand's largest businesses
- Gold Group of medium sized businesses
- Affiliated Industries Group of national industry associations
- ExportNZ representing New Zealand exporting enterprises
- ManufacturingNZ representing New Zealand manufacturing enterprises
- Sustainable Business Council of enterprises leading sustainable business practice
- BusinessNZ Energy Council of enterprises leading sustainable energy production and use
- Buy NZ Made representing producers, retailers and consumers of New Zealand-made goods

BusinessNZ is able to tap into the views of over 76,000 employers and businesses, ranging from the smallest to the largest and reflecting the make-up of the New Zealand economy.

In addition to advocacy and services for enterprise, BusinessNZ contributes to Government, tripartite working parties and international bodies including the International Labour Organisation (ILO), the International Organisation of Employers (IOE) and the Business and Industry Advisory Council (BIAC) to the Organisation for Economic Cooperation and Development (OECD).

The BusinessNZ Energy Council (BEC) is a group of New Zealand's peak energy sector organisations taking a leading role in creating a sustainable energy future. BEC is a division of BusinessNZ, New Zealand's largest business advocacy group. BEC is a member of the World Energy Council (WEC). BEC members are a cross-section of leading energy sector businesses, government and research organisations. Together with its members BEC is shaping the energy agenda for New Zealand.

Our vision is to support New Zealand's economic wellbeing through the active promotion of the sustainable development and use of energy, domestically and globally. With that goal in mind, BEC is shaping the debate through leadership, influence and advocacy.