

## Submission on New Zealand's Second Emissions Reduction Plan (2026-2030): Discussion Document

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### SUBMITTER DETAILS

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### Introduction

1. This is a submission by the Environmental Defence Society (**EDS**) on New Zealand's Second Emissions Reduction Plan (2026-2030): Discussion Document (**ERP2**).
2. EDS is an apolitical, not-for-profit organisation dedicated to achieving improved environmental outcomes for all New Zealanders. It is active as a litigator, policy think tank, and conference organiser. It has dedicated considerable resource over the past few decades to examining climate change issues, including having hosted multiple Climate Change and Business Conferences<sup>1</sup> and recently reporting on options for a new Climate Change Adaptation Act.<sup>2</sup>
3. EDS submits that ERP2 is not ambitious enough to set New Zealand on the right pathway to reduce emissions and deliver our net-zero target by 2050, nor does it give confidence that we are contributing to our fair-share in the global efforts to reduce global warming.
4. This submission is structured by topic, rather than following each chapter or responding to the provided set of questions. Our overall view of ERP2 is that it:
  - a. Fails to provide the right policies and strategies for meeting our emission reduction budgets and targets.
  - b. Does not adequately assist in meeting our Nationally Determined Contribution (**NDC**).
  - c. Prioritises removals over gross emissions reductions in an unbalanced manner.
  - d. Over-relies on the use of technology that is not ready to be deployed and may not materialise to offset greenhouse gas (**GHG**) emissions.
  - e. Fails to adequately strengthen the New Zealand Emissions Trading Scheme (**ETS**).
  - f. Perpetuates afforestation of exotics on highly erodible land.
  - g. Creates intergenerational inequity by leaving future generations exposed to climate change costs and impacts.

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<sup>1</sup> <https://eds.org.nz/our-work/events/#events>

<sup>2</sup> <https://eds.org.nz/our-work/policy/projects/climate-change-adaptation/>

- h. Is inconsistent with our environmental and climate change commitments under our Free Trade Agreements (**FTAs**) (in particular with the EU and the UK).
- i. Creates significant economic liabilities including the purchase of offshore credits.
- j. Slows down New Zealand's transition to a low-emissions future.
- k. Fails to adopt the Climate Change Commission's (**CCC**) advice despite the technical reasoning provided.

### Legal context

- 5. Emissions reduction plans are legally required by the Climate Change Response Act 2002 (**CCRA**) and must set out the policies and strategies for meeting the relevant emissions budget.
- 6. They must also be aligned with New Zealand's obligation under the Paris Agreement to contribute to the global effort to limit the global average temperature increase to 1.5°C above pre-industrial levels.<sup>3</sup>

### Decade of action

- 7. Global temperatures have already risen above 1°C<sup>4</sup> and it is *highly likely* that we will not meet the Paris Agreement long-term goals of limiting global temperature increase during the 21<sup>st</sup> century to below 2°C above pre-industrial levels.<sup>5</sup>
- 8. The Intergovernmental Panel on Climate Change<sup>6</sup> (**IPCC**) has stated with *high confidence* that to achieve 1.5°C and 2°C limits, emissions pathways need rapid, deep and, in most cases, immediate emission reductions in all sectors.<sup>7</sup>
- 9. The IPCC estimates that will require humanity to almost halve its carbon footprint *by 2030*.
- 10. The CCC has echoed the need for prompt action to reduce gross emissions from all sources as much as possible, emphasising that delayed action can lead to higher cumulative emissions and costs.<sup>8</sup>
- 11. The 2020s are therefore a critical decade for climate action. The UN has declared it the "Decade of Action".<sup>9</sup>
- 12. As ERP2 relates to New Zealand's second emissions budget period of 2026 – 2030, it represents our highest ambition to reduce net emissions this decade.
- 13. Disappointingly, it underwhelms.

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<sup>3</sup> The purpose of the CCRA includes to provide a framework by which New Zealand can contribute to the global effort under the Paris Agreement to limit the global average temperature increase to 1.5°C above pre-industrial levels. ERP2 sits within the legal framework of the CCRA and therefore must be 1.5°C aligned

<sup>4</sup> *Our atmosphere and climate 2020* New Zealand's Environmental Reporting Series, p 59

<sup>5</sup> <https://environment.govt.nz/assets/publications/Environmental-Reporting/Our-atmosphere-and-climate-2023.pdf> p 41

<sup>6</sup> The IPCC is the United Nations' body for assessing the science related to climate change: <https://www.ipcc.ch>

<sup>7</sup> IPCC 6<sup>th</sup> assessment, p 46

<sup>8</sup> Climate Change Commission, *2023 Draft advice to inform the strategic direction of the Government's second emissions reduction plan*, April 2023 (**Climate Change Commission Draft Advice 2023**), at 37

<sup>9</sup> <https://www.un.org/sustainabledevelopment/decade-of-action/>

## Net-based approach

14. New Zealand's 2050 target is a 'net' emissions target. Similarly, under the Paris Agreement, New Zealand is free to determine how it accounts for emissions, including through the use of removals from forestry.<sup>10</sup>
15. Just because removals are part of the equation does not mean that we should rely on them almost entirely. As Wilson et al note, large-scale, unfettered deployment of carbon offsets enabling ongoing exploitation of fossil fuels severely jeopardises the 1.5°C temperature limit.<sup>11</sup>
16. ERP2 should place greater emphasis on gross emissions reductions.
17. Based on advice from the CCC, ERP1 prioritised gross emissions reductions and only maintained support for removals. Reducing gross emissions now has the benefit of reducing cost in the long term, increasing the speed at which we transition to a low-emissions economy, and it gives us the best chance at sustaining net zero beyond 2050. ERP2 should follow suit.
18. New Zealand is only one of two countries *in the world* that allows for unlimited removals in its ETS. The other is Kazakhstan.<sup>12</sup> ERP2 needs to cap forestry removals.
19. The CCC has pointed out that not setting a gross emission reduction target and unconstrained use of removals creates risks for the transition to a low-emissions economy. Investments in low-emissions technologies, which depend on the economic viability provided by an emissions price, may not eventuate if businesses are uncertain about the extent to which removals can be substituted for gross reductions.<sup>13</sup>
20. New Zealand has the fourth-highest total emissions per capita of advanced economies.<sup>14</sup> If we took all of our agricultural emissions out of our emissions profile, and left all of China's manufacturing emissions in their profile, our emissions would still be twice theirs, per capita.<sup>15</sup>
21. While other developed countries are focusing on making steeper cuts to gross emissions, we need to play our part in reducing emissions to support the global efforts. We not only have an obligation to meet our international climate commitments and commercial responsibilities but also an ethical duty to accelerate our transition to a low-emissions future alongside the global community.

## Least-cost approach

22. ERP2 states that "'least cost' refers to minimising the overall cost to the nation, by 2050, of reducing emissions and shifting to a net zero 2050."<sup>16</sup> This assertion is inconsistent with the economic, environmental and social implications of many of its proposed strategies.

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<sup>10</sup> Paris Climate Change Agreement - Report back to Cabinet and Approval for Signature, para 14  
[https://environment.govt.nz/assets/Publications/paris-signing-cabinet-paper\\_redacted.pdf](https://environment.govt.nz/assets/Publications/paris-signing-cabinet-paper_redacted.pdf) at para 16

<sup>11</sup> Climate Analytics, 2023, 'Why offsets are not a viable alternative to cutting emissions', at 19

<sup>12</sup> MC, undated, *Planting out our rural communities? What is wrong with forestry offsets in the ETS and what needs to be done*, MC

<sup>13</sup> Climate Change Commission Draft Advice 2023, at 165

<sup>14</sup> Climate Change Commission, 2024, *Monitoring report: Emissions Reduction, assessing progress towards meeting Aotearoa New Zealand's emissions budgets and the 2050 target*, July 2024 (**Climate Change Commission monitoring report**), at 71

<sup>15</sup> Dr Rod Carr, speaking at Climate Change and Business Conference 2023

<sup>16</sup> Discussion Document, at 24

23. ERP2 leaves us with an estimated gap in our 2030 NDC of just over 100Mt CO<sub>2</sub>-e which, at approximately \$100 per tonne, equates to a \$10 billion liability. That's about 5 percent of New Zealand's current economy and is a cost not currently accounted for in the Government's books. Weak ambition in ERP2 will also leave emissions higher in 2030, increasing the gap in our next NDC for 2031-35.
24. According to Climate Action Tracker, offsetting of this significance would set an alarming precedent for meeting an NDC, making New Zealand the OECD country achieving the highest proportion of its target through buying international offsets.<sup>17</sup>
25. Treasury notes that domestic policy decisions significantly impact the volume of offshore mitigation New Zealand may need to procure to meet its NDC.<sup>18</sup> Recent decisions to delay agricultural pricing, remove clean car policies, and stop support for co-investment in industry collectively mean that more international purchase is needed under this Government.
26. The significance of this cost to the New Zealand public is not sufficiently acknowledged or addressed in ERP2's least-cost approach.
27. ERP2's dependence on research and new technologies to reduce emissions, including methane from agriculture and carbon capture utilisation and storage (**CCUS**), is a high-risk strategy. The uncertainty surrounding the development and commercial viability of these technologies is significant, as it might take years if not decades to make them available even if they work. In this context, there is a high risk that 'least-cost' will actually eventuate as 'deferred cost'.
28. ERP2 intends to use the ETS as the main mechanism to support its net 'least cost' approach. The ETS currently incentivises exotic afforestation which has the potential to impose significant burdens on future generations, including:
  - a. The substantial costs of managing exotic forests, that are more susceptible to pests and disease and less resilient to climate change impacts.
  - b. The burden of decarbonisation and continued need to compensate for ongoing gross emissions.
  - c. The adverse impacts on rural communities, landscapes and biodiversity.
29. While acknowledging that significant exotic afforestation can present environmental risks,<sup>19</sup> these costs could be significant and do not seem to factor into ERP2. Nor do lost opportunity costs appear to feature, for example the opportunity cost of delaying incentivisation of native afforestation in terms of addressing hard to abate emissions post 2050 and increased biodiversity co-benefits.
30. The CCC's first monitoring report concludes that policy to support carbon removals by forests does not currently explicitly account for the risks and impacts of climate change. Concerns have been expressed about mitigation at the expense of adaptation. The report highlights that the ETS, in its current form, does not support or consider adaptation, nor its relationship to the durability of carbon removals.<sup>20</sup>

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<sup>17</sup> <https://climateactiontracker.org/countries/new-zealand/>

<sup>18</sup> Treasury, Climate Economic and Fiscal Assessment 2023, at 80

<sup>19</sup> Discussion Document, at 40

<sup>20</sup> Climate Change Commission monitoring report, July 2024, at 260

31. Furthermore, ERP2 lacks sufficient detail to support the development of policies that would require changes to the ETS, for example planting native forests on Crown land or incorporating non-forestry removals in the ETS. There is insufficient information to clarify how these proposals align with the overall strategy for achieving emissions budgets and the 2050 target.
32. Limiting conversions of productive farms also overlooks the significant risks associated with leaving Land Use Capability 7 exposed to further planting of exotic forests. This is particularly concerning given the significant adverse environmental and social impacts of exotic plantation forestry activities that have been experienced in many regions with this land class,<sup>21</sup> which is usually very steep and/or prone to erosion.<sup>22</sup>
33. The Government’s least-cost approach is primarily beneficial for high emitters who will continue to buy carbon credits to offset their emissions. After all, it is currently cheaper to remove one tonne of carbon through forestry than to avoid emitting one tonne of carbon by investing in low-emissions technology.
34. The least-cost approach is also arguably contrary to the CCRA which includes a wider range of relevant considerations and does not prioritise least-cost abatement.

**Risk of not meeting our emissions budgets**

35. There is considerable uncertainty as to whether New Zealand will be able to achieve its first, second and third emissions budgets. ERP2 and the CCC monitoring report’s projections underscore the risk.
36. ERP2 states New Zealand is on track to meet the first and second emissions budgets.<sup>23</sup> However, the interim projections indicate there is a range of uncertainty regarding meeting the second and third emissions budgets, potentially exceeding the second budget by almost 17 Mt CO<sub>2</sub>-e and exceeding the third budget by between 17Mt CO<sub>2</sub>-e and 46 Mt CO<sub>2</sub>-e.

| Emissions budget                                     | Interim projections (central estimate*) | Uncertainty for interim projections (central estimate) |
|--|---|--|
| First emissions budget<br>290 Mt CO <sub>2</sub> -e  | 284.0 Mt CO <sub>2</sub> -e             | ±4 Mt CO <sub>2</sub> -e                               |
| Second emissions budget<br>305 Mt CO <sub>2</sub> -e | 303.3 Mt CO <sub>2</sub> -e             | ±18 Mt CO <sub>2</sub> -e                              |
| Third emissions budget<br>240 Mt CO <sub>2</sub> -e  | 257.4 Mt CO <sub>2</sub> -e             | ±29 Mt CO <sub>2</sub> -e                              |

Interim ERP2 net emissions projections<sup>24</sup>

37. The CCC has reported varying estimates for the different emissions budgets. For the first budget, it highlighted that while the central estimate of 286.8 Mt CO<sub>2</sub>-e falls within the range, several risk factors could result in net emissions being higher, potentially reaching up to 292.4 Mt CO<sub>2</sub>-e. These risk factors include the possibility of underestimating actual emissions trends (such as an

<sup>21</sup> For instance, post-harvest landslides and debris flows have been recorded in Gisborne/East Coast, Nelson-Marlborough, Bay of Plenty, Northland and Coromandel. See Visser, R., “Best practices for reducing harvest residues and mitigating mobilisation of harvest residues in steep-land plantation forests”, 2018, prepared for Gisborne District Council, at 26

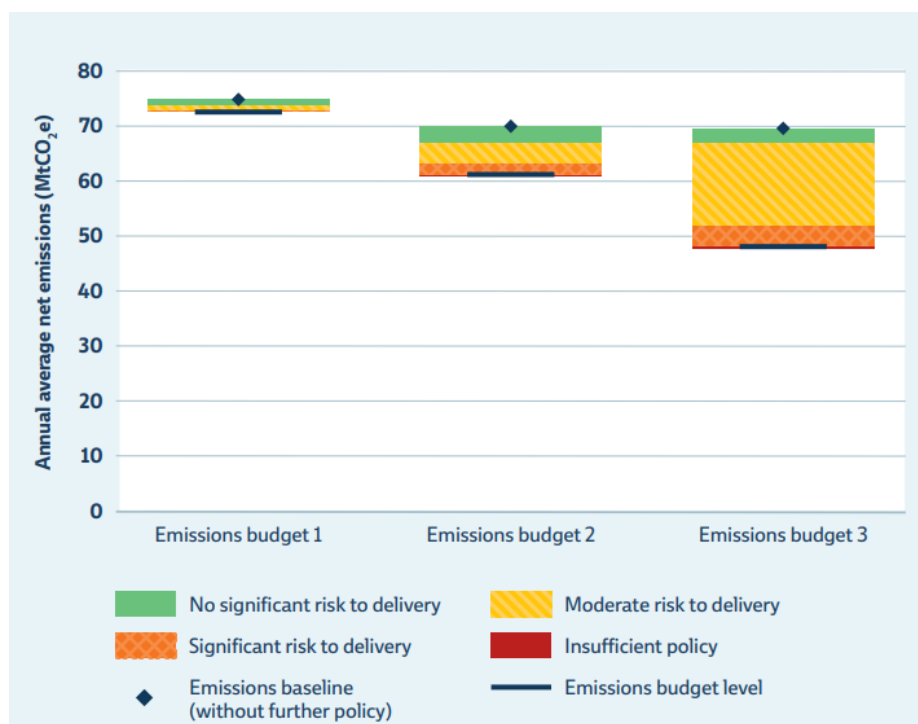
<sup>22</sup> <https://whenuaviz.landcareresearch.co.nz/explanation>

<sup>23</sup> Discussion Document, at 30

<sup>24</sup> Discussion Document, at 31

increase in transport emissions), uncertainties quantified within the projection range (emissions from the largest contributors near the upper limit of the assumed range) and discontinued or delayed policies (such as the Clean Car Discount).<sup>25</sup>

38. Furthermore, the CCC reported there are significant risks to meeting the second and third emissions budgets.<sup>26</sup>



Overall assessment of risk to meeting the emissions budgets under current policies and plans<sup>27</sup>

39. While the CCC monitoring report does not consider all the policies proposed in ERP2, it assesses the changes driven by policies most likely to affect the second and third emissions budgets. These include:<sup>28</sup>

- Agriculture*: The risks related to the absence of a confirmed emissions pricing system or alternative policy measures for reducing emissions.
- Transport*: Current policy tools on their own are unlikely to drive a shift to lower-emissions modes of transport and to decarbonise freight and aviation. There is also a risk that uptake of low and zero-emissions light vehicles will fall behind benchmark levels due to reduced policy support.
- ETS*: It cannot be relied on to drive emissions reductions required to meet the second and third emissions budgets. It does not provide certainty over the quantity of emissions from the sectors and sources it covers.

40. The above matters are of concern given that ERP2 was partly structured around such policies that have now been discontinued, including:

<sup>25</sup> Climate Change Commission monitoring report, at 53

<sup>26</sup> Climate Change Commission monitoring report, at 52-54

<sup>27</sup> Discussion Document, at 55

<sup>28</sup> Climate Change Commission monitoring report, at 58

- a. The removal of agricultural emissions from the ETS, without the implementation of any alternative pricing system.
  - b. The discontinuation of the Clean Car Discount.
  - c. The discontinuation of the ETS review.
41. Furthermore, the CCC emphasises that if there are insufficient reductions in gross emissions for the second emissions budget, this cannot be made up by increased removals of carbon dioxide through forestry.<sup>29</sup> This is contrary to the approach that ERP2 seems to be taking.
42. Considering the above, it is not clear how the Government will meet emissions budgets when ERP2 proposed policies (and the discontinuation of others) present a significant risk of deviating from them.

### **Strengthening the ETS**

43. Pillar 2 of the Government’s Climate Change Strategy is that credible markets support the climate transition. In order to do so ERP2 seeks to provide stability and certainty to the ETS, New Zealand’s primary market tool, so that it is credible.<sup>30</sup>
44. ERP2 states that stability and certainty, and therefore credibility, of the ETS relies on the long-term value of New Zealand Units (**NZUs**).<sup>31</sup> Reductions in the future value of NZUs could “substantially dampen investment today”.<sup>32</sup>
45. *The current framing of the ETS does not provide certainty of long term value of NZUs.*
46. New exotic planting is currently proceeding well above earlier expectations, with 64,000ha estimated to be planted in 2022, compared with the Government’s baseline of an average of 32,000ha per year between 2022 and 2030.
47. This current afforestation trajectory being driven by the ETS could lead to an oversupply of NZUs in the 2030s which might depress the carbon price.<sup>33</sup>
48. The CCC’s demonstration path has modelled that the ETS will reach net zero in supply and demand terms by 3037, before net zero GHG emissions are indeed achieved in the economy. In this scenario, the ETS will lose its ability to drive further decarbonisation and will also be unable to incentivise the additional afforestation and removals needed to offset long-live GHG emissions that remain outside the ETS.<sup>34</sup>
49. *It’s a lose – lose situation.*
50. While ERP2 partially acknowledges these risks, it avoids addressing the fundamental issue of the ETS design.
51. Further, the *ETS is not currently designed to drive gross emissions reductions*. Its unlimited and ambivalent approach allows emitters to meet their obligations through either carbon removals

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<sup>29</sup> Climate Change Commission monitoring report, at 21

<sup>30</sup> Pg 26 and Chapter 3

<sup>31</sup> Discussion Document, at 38

<sup>32</sup> Discussion Document, at 38

<sup>33</sup> Climate Change Commission Advice on ERP2, at 175

<sup>34</sup> Climate Change Commission Advice on ERP2, at 179

or gross emissions reductions, enabling participants to choose the most cost-effective abatement strategy. This net emissions approach favours removals through extensive exotic afforestation.

52. This simplistic incentive design focuses narrowly on short-term cost minimisations, overlooking factors that are critical for its long-term effectiveness. A robust and reliable scheme should prioritise gross emissions reductions at source, foster innovation in low-emissions technology, and signal to businesses the need to bear more of the climate costs of their carbon emissions.
53. This approach is central to the EU ETS, which applies the polluter's pay principle – meaning that costs of pollution should be borne by those who create it.<sup>35</sup> More importantly, the EU ETS does not allow for (forestry) offsets, as its primary goal is to reduce emissions.<sup>36</sup>
54. Conversely, the design of the New Zealand ETS remains far from being a credible tool for driving emissions reductions. If the Government is genuinely committed to meeting our domestic and international climate targets, it should prioritise decoupling and recalibrating the incentives for forestry removals vis-à-vis gross reductions. This would ensure that the extent of gross reductions driven by the ETS is no longer contingent on the amount of removals achieved by forests.
55. Finally, *the ETS does not distinguish between carbon removals by forests and gross emissions reductions*. Unlike any other emission trading scheme, the NZ ETS fully incorporates forestry for both removals and emissions, treating them as equivalent.<sup>37</sup> This approach is inherently flawed.
56. The release of fossil carbon is fundamentally different from the release or storage of carbon on land from human activities. While fossil carbon adds to the active carbon cycle and remains in the atmosphere for long periods of time, effectively permanent on human timescales, land-based carbon does not contribute to the active carbon cycle and can often be reversed within years to centuries. Additionally, carbon removals by forests could be undone if those forests are harvested and not replanted. Both natural factors (i.e. climate change, pests, fires and weather events) and human activities pose risks that could render land-based carbon removals non-permanent.<sup>38</sup>
57. This is a critical consideration when assessing the quality and durability of carbon removals, particularly comparing the permanence of exotic versus indigenous forests and the imperative to continue a durable net-zero pathway beyond 2050.
58. To give stability and certainty, and therefore credibility, to the ETS, ERP2 should implement the recommendations made by the CCC in its ERP2 final advice:<sup>39</sup>
  - a. Amend the ETS to separate the incentives for gross emissions reductions from those applying to forests.
  - b. Provide durable incentives for net carbon emissions by forests through to and beyond 2050.

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<sup>35</sup> <https://carbonmarketwatch.org/2024/02/29/faq-what-is-the-eu-emissions-trading-system-eu-ets/>

<sup>36</sup> [https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets/use-international-credits\\_en](https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets/use-international-credits_en)

<sup>37</sup> Climate Change Commissions Strategic Draft advice, at 53

<sup>38</sup> Climate Change Commission Strategic Draft advice at 47- 48

<sup>39</sup> Climate Change Commission Advice on ERP2, at 61



## Forestry role in reducing GHG emissions

59. Addressing the complexity of climate change requires a long-term vision for forestry's role in carbon removal and overarching benefits. ERP2 prioritises exotic forestry over native forestry removals.
60. Well managed and properly located exotic plantation forests – provided they meet ecological objectives and bottom lines<sup>40</sup> – play an important role in meeting our climate change targets. New exotic plantation forests are also crucial for sustaining a low-emissions bioeconomy.
61. However, over-reliance on exotic forests for carbon removals is an inadequate short-term strategy.
62. The CCC advises that it is important to consider the principles of *additionality* and *permanence*, and include them as criteria for any removal activities, along with other key characteristics including removal capacity, measurability, cost and acceptability.<sup>41</sup>
63. That is because the need to draw down and store carbon is not temporary. It is enduring. To fully compensate for the warming impact of long-lived carbon GHG emissions, carbon removals require storage over millennial timeframes.
64. Native forests provide the advantage of being self-sustaining, climate-resilient sinks that maximise long-term carbon sequestration. Additionally, they enhance indigenous biodiversity, improve soil health and stability, support conservation and contribute to air quality and local climate regulation.<sup>42</sup>
65. There is, therefore, an urgent need to establish new native forests.

### *Native afforestation incentives*

66. Native trees can be expensive and difficult to establish, and their slow rate of carbon sequestration in early years mean they lack an immediate financial return. Incentives are required.<sup>43</sup>
67. To that end, it is essential that ERP2 enables the development of incentives and financial support (for instance, through biodiversity payments) to ensure indigenous forests are planted as soon as possible so that they are well established by 2050.

### *Afforestation on Crown land*

68. The Government is proposing to explore opportunities to partner with the private sector for native and exotic afforestation on Crown land, acknowledging that further analysis will be required to confirm land suitability.<sup>44</sup>

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<sup>40</sup> Ecological objectives and bottom lines outlined in the National Policy Statement for Freshwater Management, New Zealand Coastal Policy Statement and the National Policy Statement for Indigenous Biodiversity

<sup>41</sup> Climate Change Commission Advice on ERP2, at 308

<sup>42</sup> Climate Change Commission: Ināia tonu nei, at 66

<sup>43</sup> Climate Change Commission monitoring report, at 252

<sup>44</sup> Discussion Document, at 80

69. The Crown estate includes High Country pastoral leases in the South Island, land with high ecological and landscape inherent values. Protecting threatened indigenous species, and enhancing the land through regeneration of natural areas with indigenous species, are relevant considerations when assessing the effects of a proposed activity on those values.<sup>45</sup> Only native afforestation would align with this goal and should in any event not replace high value tussock grasslands that are endemic to an area.

### Nature-based Solutions

70. Pillar 5 of the Government’s Climate Change Strategy includes nature-based solutions (**NbS**) to address climate change. ERP2 outlines how the Government plans to encourage non-forestry removals and aims to incorporate them in the ETS. Examples include:<sup>46</sup>
- a. On-farm vegetation
  - b. Wetlands and peatlands
  - c. Coastal vegetation management
  - d. Other categories include pest control, carbon capture and storage (**CCS**) technologies, enhanced rock weathering and biochar
71. We support NbS which offer a range of benefits, including enhanced climate resilience, enhanced climate change mitigation, biodiversity habitat, water filtration, soil health and amenity values.<sup>47</sup> NbS also increase the adaptive capacity of urban settlements and cities, contributing to climate resilient development.<sup>48</sup>
72. However, the effective implementation of NbS requires designs that support the complex biological chemical processes on which these solutions rely on, while also being resilient to a changing climate.<sup>49</sup> This is crucial for ensuring sustained gains in the future.
73. The IPCC has cautioned that poorly conceived and designed nature-based mitigation efforts have the potential for multiple negative impacts, such as competing for land and water with other sectors and failing to provide mitigation that is sustainable in the long term.<sup>50</sup>
74. NbS are undercapitalised, with limited investment and finance being one of the main barriers to their implementation and monitoring. The IPCC emphasises the need to develop finance and business models for NbS, for instance, through utilising financial instruments (such as equity, loans, bonds and insurance), and creating standard metrics and baselines to promote the creation of a new asset class.<sup>51</sup>
75. We strongly encourage exploring models to incentivise the financing of NbS at scale. While private financing is essential, public funding should not be overlooked. In fact, significant benefits have been achieved through previous public funding initiatives that enable the implementation of NbS. A clear example is *Jobs for Nature*, which supported 450 projects across the country, some of which included NbS efforts (i.e. weed and pest projects, freshwater projects, planting projects and restoration projects).

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<sup>45</sup> Land Information New Zealand, “Crown Pastoral Land Inherent Values Framework”, 2022, at 7-14

<sup>46</sup> Discussion Document, at 84-85

<sup>47</sup> IPCC 6<sup>th</sup> report WGIII, at 1608

<sup>48</sup> IPCC 6<sup>th</sup> report WGII, at 93

<sup>49</sup> [https://www.waternz.org.nz/Story?Action=View&Story\\_id=1999](https://www.waternz.org.nz/Story?Action=View&Story_id=1999)

<sup>50</sup> IPCC 6<sup>th</sup> report WGII, at 303

<sup>51</sup> IPCC 6<sup>th</sup> report WGIII, at 1608

76. EDS encourages the Government to continue resourcing and supporting the *Jobs for Nature Transition Strategy* to ensure that the environmental outcomes are sustained in the long term.
77. While the NbS initiative is promising for reducing emissions and adapting to climate change, it is important that the Government remains consistent in its commitment to these solutions. Recent proposed environmental policy changes risk undermining protections for areas with high conservation and biodiversity values (i.e. wetlands and Significant Natural Areas). These established ecological areas are inherently self-sustaining NbS, making it contradictory to weaken their protection while promoting NbS elsewhere.
78. We urge the Government to reassess its approach to environmental protection and conservation efforts, ensuring alignment with its own proposals. The climate and biodiversity crises should be addressed to produce positive outcomes for both.

### **Risks of not pricing agricultural emissions**

79. Agricultural emissions make up half of New Zealand's total greenhouse gas emissions. Approximately 91 percent of our biogenic methane emissions and 94 percent of our N<sub>2</sub>O emissions come from agriculture.<sup>52</sup>
80. Reducing agricultural emissions is required to meet our climate change commitments.<sup>53</sup> There are potential trade and legal risks of not reducing agricultural emissions.<sup>54</sup>
81. ERP2 interim baseline projections for biogenic methane suggest that emissions will just meet the 2030 target of 34.3 Mt CO<sub>2</sub>-e. However, there is a possibility of exceeding this by up to 1.9Mt CO<sub>2</sub>-e, as indicated by the uncertainty range. The projections for the 2050 target are even more concerning, with the central projection placing emissions close to 3Mt CO<sub>2</sub>-e above the target range and potentially exceeding by around 10 Mt CO<sub>2</sub> -e (high baseline).<sup>55</sup>
82. Pricing agricultural emissions is required to incentivise emitters to adopt cost-effective mitigation measures and to accelerate emissions reductions.<sup>56</sup> Nevertheless, agricultural pricing has been delayed from 2025, and although the Government has committed to implementing it by 2030, no policies have been fully designed or implemented to date.
83. The CCC has recently reported that the absence of a confirmed emissions pricing system, or alternative measures to incentivise agricultural emissions reductions, poses a risk to meeting the second and the third emissions budgets and achieving the 2030 and 2050 biogenic methane components of the 2050 target.<sup>57</sup>
84. These risks are not fanciful. They jeopardise New Zealand's reputation in global markets. The international marketplace, particularly, the EU, is increasingly concerned about the emissions profile of products.<sup>58</sup>

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<sup>52</sup> Ministry for the Environment, 2022, *Aotearoa New Zealand's First Emissions Reduction Plan*, at 249

<sup>53</sup> Regulatory Impact Statement: Amending the Climate Change Response Act to repeal New Zealand Emission Trading Scheme agricultural obligations (RIS), at p 1

<sup>54</sup> RIS, at p 7

<sup>55</sup> Technical annex to the discussion document, at 32

<sup>56</sup> RIS, para 10

<sup>57</sup> Climate Change Commission monitoring report, at 232

<sup>58</sup> <https://www.nzagrc.org.nz/news-and-events/race-on-to-reduce-emissions-from-new-zealand-livestock/>

85. The Government has stated its commitment to ensure producers have the tools and technologies to reduce emissions while maintaining productivity and profitability. Some proposals include accelerating the development and commercialisation of emissions reduction tools, standardising the estimation of farm-level emissions and recognising on-farm carbon sequestration.<sup>59</sup>
86. The CCC monitoring report policy assessment of the agricultural sector<sup>60</sup> identified significant risks both in reducing emissions from farming and in transitioning to lower emissions land uses.<sup>61</sup>
87. While we recognise the importance of supporting research and development of mitigation technologies, this action should by no means serve as a substitute for implementing an agricultural pricing mechanism, nor should it justify delaying the sector's accountability for its fair share of emissions. Mitigation obligations should be shared equitably amongst sectors.

### **Over-reliance on technology**

88. As proposed, ERP2 heavily relies on undeveloped and not yet commercially available technologies to reduce emissions. The Government appears to be banking on the hope that domestic or international technologies will eventually emerge to meet the climate change targets. This is an ill-considered and risky approach to such a critical issue.
89. ERP2 outlines policies for reducing emissions for the second and third emissions budgets. According to the interim projected abatement for these emissions budgets, two main policies are expected to reduce the most amount of total carbon emissions throughout both emissions budgets:<sup>62</sup>
  - a. Investigate CCUS
  - b. Agricultural mitigation technologies and emissions pricing
90. We see significant risks in centring emissions reductions on technologies that are neither fully developed nor proven in the New Zealand context, and that are not ready to be rolled out at the speed required to meet emissions budgets.

### *Carbon capture utilisation and storage*

91. ERP2 proposes consulting on options to remove barriers to utilising CCUS in order to improve the security of (producing and using) gas.
92. The analysis of the IPCC 1.5°C scenarios suggest that no new oil and gas development is possible if the world is to stay within the Paris Agreement limits. Governments should enable the redirection for both public and private capital flows towards the clean energy transition, including the deployment of additional solar and wind capacity.<sup>63</sup>
93. While the IPCC recognises CCS as an option to reduce emissions from large scale fossil-based energy and industry sources, it also advises that the implementation of CCS currently faces technological, economic, institutional, ecological-environmental and socio-cultural barriers, with

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<sup>59</sup> Discussion Document, at 70-71

<sup>60</sup> While the CCC monitoring report does not include actions that did not have formal government decision by date, as part of its assessment it does consider the introduction of legislation to keep agriculture out of the ETS

<sup>61</sup> Climate Change Commission monitoring report, at 231

<sup>62</sup> Discussion Document, at 16

<sup>63</sup> International Institute for Sustainable Development, *Navigating Energy Transitions, Mapping the road to 1.5°C*, 2022, at iv

global rates of deployment far below those modelled pathways limiting global warming to 1.5°C.<sup>64</sup>

94. Furthermore, the costs of CCS remain high compared with other low-carbon alternatives.<sup>65</sup>
95. It is important to distinguish between the potential benefits of CCUS and CCS and the need for stringent regulation if implemented. Current legal frameworks are inadequate and must be reformed to ensure responsible use. This type of technology should not be broadly adopted without careful consideration, especially in New Zealand, where conditions differ from those in countries with established CCS programmes.
96. In any event, CCS and CCUS should not be used as an excuse to delay reducing emissions at source, despite its potential role in decarbonisation, particularly in the energy sector. The priority must remain on reducing gross emissions directly, with CCS and CCUS as a potential supplementary tool rather than a primary solution for emissions reductions.

#### *Agricultural mitigation technologies*

97. ERP2 outlines several agricultural mitigation tools that are currently in development. While it is acknowledged that these tools are not yet commercially available, there are expectations that some will be ready in the coming years. However, others, such as methane inhibitors and vaccines, are still several years away from use or remain in the early stage of research.<sup>66</sup>
98. There are significant uncertainties about whether these tools will be ready for deployment, adopted by farmers, and ultimately capable of achieving emissions reductions necessary to meet our emissions budgets and targets and the methane component of the 2050 target. Most of them have been under investigation for many years.
99. The CCC has echoed this concern in its latest report:

*“A risk associated with research and development is that there is no guarantee of successfully developing new emissions reduction technologies that are appropriate for Aotearoa New Zealand’s pastoral farming systems. If attempts to develop these technologies fail, it is unclear what other plan would help deliver emissions reductions.”<sup>67</sup>*

100. New Zealand cannot afford to rely on untested solutions to reduce agricultural emissions. This underscores the urgent need for an agricultural pricing mechanism without further delay.

#### **Risks of not meeting international commitments**

101. ERP2, along with other climate change and environmental law and policy changes, are inconsistent with New Zealand’s obligations under its FTAs.
102. Specifically, the NZ-EU FTA requires that countries effectively implement the United Nations Framework Convention on Climate Change and the Paris Agreement, including commitments

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<sup>64</sup> IPCC 6<sup>th</sup> Assessment, at 28

<sup>65</sup> International Institute for Sustainable Development, *Navigating Energy Transitions, Mapping the road to 1.5°C*, 2022, at 9

<sup>66</sup> Discussion Document, at 71

<sup>67</sup> Climate Change Commission monitoring report, at 243

with regard to nationally determined contributions, which includes the obligation to refrain from any action or omission that materially defeats the object and purpose of the Paris Agreement.<sup>68</sup>

103. Failing to meet our domestic and international climate targets would significantly undermine New Zealand's credibility and market access.
104. The absence of a clear pathway for reducing agricultural emissions, a robust emissions trading mechanism, and a solid foundation to transitioning to a low-emissions economy could increase investment risk, leading to significant reputational and economic challenges for the country.

### **Conclusion**

105. ERP2 contains significant narrative around the role of least cost net emissions reduction. It is lacking in substantive gross emissions action and relies too heavily on exotic forestry removals. As currently drafted, it takes New Zealand perilously close to not meeting its emissions budgets. It also does little to help bridge our 2030 NDC gap.
106. More ambition is required. ERP2 needs a substantial rewrite.

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<sup>68</sup> NZ-EU FTA, article 19.6(2)-(3)