

Submissions on the Climate Change Commission¹ 2023 Draft advice² to inform the strategic direction of the Government's second emissions reduction plan April 2023.

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Scope

The Draft is “designed to guide the strategic direction of policies to meet the second emissions budget, which covers 2026-2030”; the emission years commencing 1 January 2026 for which emissions returns are due in the first months of 2027.

The purpose of the CCC and of its policy guides is primarily to achieve net zero emissions by 2050 (the 2050 Net Zero Target³). Every proposal must be evaluated against the 2050 Net Zero Target and whether it best achieves those targets for two reasons:

- (a) The 2050 Net Zero Targets are statutory requirements.
- (b) New Zealand is not presently on course to achieve them.

Guidelines given to Government must therefore be “best in class” to achieve 2050 Net Zero Target.

The thrust of the Draft's forestry draft recommendations as they relate to forestry.

There are three.

- (a) We are going to have an oversupply of forestry NZUs after 2037.

¹ Hereafter “CCC”.

² Hereafter “Draft”.

That is incorrect. We are not going to have enough forests to support proper qualification for inclusion in the ETS. We need to look at excluding forests that cannot prove they will not reverse their removals before 2100.

- (b) This is a terrible thing because it will depress the NZU price and remove incentives to decarbonise.

Even if we left the rules as they are giving, NZUs for phantom removals (which will likely be reversed before 2100), so what if the NZU Price crashes if we still get to 2050 Net Zero Target? Not that this will occur.

- (c) The only way out of this is to diminish the role of the forestry in the ETS and perhaps rely on Complementary Policies for incentives to removal carbon.

That cannot be substantiated, whether the CCC accepts Figure 4.4 is wrong or it does not. Forestry can remain within the ETS, and the “Complementary Policies” suggested by the CCC as alternatives are neither required nor practical.

These submissions

These submissions address only the following:

1. Part A: Get rid of phantom forestry carbon credits before even starting the conversation.

Describes what phantom forestry carbon credits are; how they arise; why they are really a funding line for foresters; why they disadvantage those who are really helping the planet; why they involve a fraud on the planet, and why the CCC should immediately recommend that they no longer be recognized for new plantings, despite the fact the Government uses phantom credits to meet its NDC targets.

2. Part B: Now start the conversation beginning with the role of the CCC.

Examines the statutory functions of the CCC, including the requirement it give expert advice on forestry and its place in the ETS and in meeting 2050 Net Carbon Zero and maintaining net zero carbon thereafter. Points out that there is no apparent evidence of expertise in relation to forestry when there needs to be, giving examples, putting the CCC at risk of judicial review.

3. Part C: The climate crisis requires taking every step that can be to avoid catastrophe.

This part follows on from Part B and points out the profound consequences of climate change for New Zealand and if we do not act as seriously as we can in mitigating those risks. It gives illustrations of those risks and why we should be modelling them (but are not). It notes we can neither wink at defects in measuring the real progress we need to make (which we are doing, including allowing phantom NZUs) nor mistake the consequential question of who should bear the inevitable costs of climate change with primary issue of how to reduce those costs by reducing the impact of climate change.

4. Part D: The rational economic forester.

This part explains how non-production foresters, acting rationally, will approach decisions that the CCC and Minister impose on them, and suggest that they will not act as the CCC supposes they will. It is necessary for the CCC to understand how foresters will react to their decisions to explain why the assumptions made in Figure 4.4 are likely to be wrong. It is also necessary to do so to understand why we are probably stuck with phantom forestry carbon credits for existing forests (Part H), even though we need to stop rewarding them for new forest plantings (Part A).

5. Part E: Why is it a bad thing to tank the ETS by sequestering more carbon than emission?

This part picks up on a fundamental assumption used by the CCC for its forestry recommendations, namely that it is a terrible thing if we have too much forestry as that will drive the price down (it will not if we stop rewarding phantom credits: see Part F). Putting the latter to one side, this part questions why that assumption was made and asks why, by using to ETS to plant forests to remove more emissions that we responsible for is a terrible thing.

6. Part F: Figure 4.4, which is the basis for the Draft's forestry conclusions, is flawed.

This part explains why the model at Figure 4.4, which informs the Draft's recommendations on forestry, is likely overly simplistic, misleading and has no relationship to real life forestry investment decision-making, even if you accept the assumptions on which it informed it (which you should not for reasons given elsewhere).

7. Part G: Draft Chapters 4 (Emissions Pricing) and Chapter 10 (Forestry).

This accepts for arguments sake the modelling at Figure 4.4 but seeks to identify the goals that the CCC should be pursuing for Forestry but are not; the considerations it should be taking into account, but is not, and how, even if the assumptions in Figure 4.4 are correct (they are likely not) the ETS already provides an obvious, if not required, way to ensure there is no boom and bust in forestry prices. Even if one accepts Figure 4.4, the Draft is wrong to conclude there is no alternative than to adopt Complementary Policies.

8. Part H: Why we are probably stuck with phantom forestry carbon credits.

Despite the need to immediately disavow the granting of phantom carbon credits for yet to be planted forests, this part suggests that because of rational economic decisions foresters will take (Part D) if promised NZUs are no longer allowed, it will probably be worse for the planet to deny phantom NZUs than it is to hold one's nose and allow them. It also examines other sound reasons to allow an exception for existing forests.

9. Part I: The NZ\$60 billion hole if we follow the CCC's recommendations on forestry.

This part explains why, if we follow the CCC's recommendations on forestry, and accept its reasoning, there is likely to be a NZ\$60 billion hole to fill by 2050.

10. Part J: Apparent bias against forestry

This part exposes cases of apparent bias against forestry and hopes they are simply mistaken assumptions as to how foresters will act. If the latter, the CCC should correct those assumptions and retract its consequent flawed forestry recommendations. If it does not it points out the CCC has strayed out of the bounds of expert advice and is leaving itself open to judicial review.

11 Part K: What is going on here?

This part follows on from Part J and assumes that the CCC refuses to retract its flawed forestry recommendations. That being the case it seeks possible explanations for why the CCC refuses to retract flawed conclusions. It assumes there is always a hidden reason for inexplicable behaviour, and notes how such a hidden reasons would explain why there is bias against forestry.

12 Part L: Complementary Policies.

This examines the suggested “complementary policies” and explains how the Draft has examples wrong or offered up curious ones that do not appear to have been through by the CCC, and suggests why they will not work, nor necessarily will reliance on overseas credits or VERs. And all this assumes Complementary Policies needed when they are not, because the oversupply of NZUs postulated by the CCC will not occur.

13. Appendix One. Comparing the climate change goals of the IPCC with those of the Act.

14. Appendix Two: Ways to reduce the Stockpile of NZUs.

Submissions (executive summary)

Detailed submissions follow each part, but they are truncated for the purposes of an executive summary to the following:

15. The CCC arrives at two major conclusions. First, there will be an oversupply of NZUs by 2037 due to continued planting of trees. Second, there is no alternative but to reduce the number of forestry supported NZUs being allocated or sold. The assumptions which support each of these conclusions are almost certainly flawed and must be revisited, and the conclusions drawn from them withdrawn.

16. Foresters will not act in the way that the Draft predicts, so no oversupply will occur. It is difficult to know why the CCC is putting up flawed analysis and supporting it with flawed and defensive arguments. If these are not withdrawn, it can be assumed the CCC is working backwards from conclusions it wants to sell to then trying (and failing) to justify them on any economic or logical grounds.
17. The CCC needs to consult “hands on” foresters if it is to provide the “expert” advice it is statutorily required to.
18. The CCC also needs to explain why, if you were to accept its flawed analysis of oversupply, we would not be able to meet 2050 Carbon Zero by planting (we will on its figures), and why it is a terrible thing to do this even if the ETS price falls to the floor. Doesn't that make the ETS a success?
19. All this compounds when the CCC ignores other justifiable options to ensure no oversupply occurs, so giving the lie to its conclusion there is no other option but to diminish the role of forestry in the ETS. These include preventing phantom credits (*i.e.*, those that will be reversed before 2100) from future plantings entering the ETS and reducing the stockpile where dodgy pre 2016 credits have been sold so allow NZU allocations to be stored so they can be used today and in the future. The CCC is yet to address whether, in providing “expert” advice it can ignore these options and arrive at the conclusions it has.
20. The CCC's “Complimentary Policies” analysis is flawed.
21. If the CCC continues to support the flawed conclusions it is advancing it will leave itself open to judicial review on the basis it is not discharging its statutory duty to give expert advice.

General comments

22. The Draft needs to be re-written in relation to issues surrounding forestry. Figure 4.4 needs to be withdrawn and replaced with a model that considers economic choices forestry investors will make and appropriately models available alternatives which will incentivise both emission reductions and carbon removal activities within the ETS.
23. Of particular importance is the assumption that it is necessary to reduce the value of forestry carbon removals relative to the value of emission reductions to prevent the price of both dropping when there are other alternatives to incentivise both removals and reductions which the CCC does not bother to model or analysis. This is a regrettable assumption, not ameliorated in any way by the palliative suggestion that the Government might find a way to incentivise emission removals outside the ETS.

24. There also appears to be a lack of urgency in recognising and modelling risks to assumptions that themselves underpin flawed conclusions as to the future of forestry within the ETS.

Supporting material

The CCC advises on its website “If your responses are supported by any high quality, credible evidence ... please include it in your submissions ...” Such evidence will be added “into the evidence base the Commission considers.”

It is hoped that the CCC will not only consider such evidence that is added “into the evidence base the Commission considers” but also constructive criticism of its approach in general, based on the exposure of lacuna in its modelling and consequent conclusions; examples of apparent bias, and should it not retract its recommendations, the existence of an undisclosed motive in making its forestry recommendations.

Looking at the “evidence” the CCC has relied upon to make its forestry recommendations, as listed at Draft footnotes 22-36 (Chapter 4) and 166-177 (Chapter 10), most footnotes simply state existing statistics and add little to the debate about 2050. Others are projections from Government sources, which themselves appear to have made assumptions that have not been peer-reviewed. Those that remain have little direct application to the quality of modelling at Figure 4.4 and the flawed conclusions that follow from that. None of these can properly be regarded as evidence, let alone expert forestry opinion which would qualify as “evidence,” albeit of opinion not fact.

The CCC does not appear to be relying on any tangible evidence in drawing its conclusions on forestry, but just making assumptions and drawing conclusions based on those assumptions. On that basis there is no tangible evidence base to add to.

Part A: Before even starting the conversation ignore phantom forestry carbon credits.

What is a phantom forestry credit?

1. Most GHG emissions stay in the atmosphere for many years, well beyond the 2100 target end date set by the IPCC.³
2. To meet IPCC end date targets, we must both reduce putting further GHG emissions into the Atmosphere *as well as* removing those that are already there and keeping them removed to at least 2100.
3. Removing GHG from the atmosphere in say 2030 but releasing it back into the atmosphere in say 2070 is not a zero-sum game. Because of negative climate loops, releases of GHG in 2070 are likely to inflict greater harm on the planet than releases in 2030 because the hotter it gets the less the world and its atmosphere can absorb GHG emissions.

How do we create phantom forestry credits?

4. Say an owner of a forest which must be cut down in 30 years (because *e.g.*, it is granted under a time limited lease or registered forestry right) wants to be awarded NZUs for its sequestration. The first question that should be asked is “will the forestry removals you will claim be released into the atmosphere before 2100?”. Clearly not.
5. To suppose that GHG removals reversed before 2100 will compensate for GHG emissions that will persist at least to 2100 is a nonsense and a fraud on the planet.
6. To take a less obvious example, an owner doesn't know whether its forest will be cut down in the next 50 years. If you want to test that, you only need to see how few forests have been registered as permanent forests under the ETS. Let say past evidence indicates that 50% of forests once clear felled are not replanted. On this basis 50% of the NZUs that are being granted represent removal reversals before 2100, which when they occur will do greater harm to the planet than not planting them. True, some forest sequestration will not be reversed, but we don't know which, while some will be. Counting 100 unreal tonnes of removals as a basis for rewarding 100 possibly real tonnes is like counting chickens before they have hatched and including in your wealth the 50% of eggs that will not make it.

The difference between what helps the planet and what doesn't.

7. Planting forests that will be felled before 2100 does not help the planet. This practice has a negative impact on GHG concentrations in the atmosphere. Only permanent removals,

³ The Intergovernmental Panel on Climate Change is a body set up by the United Nations to give advice on climate change under the aegis of the UNFCCC and whose targets and recommendations are reference in the Paris Agreement.

together with emission reductions, will help us meet IPCC goals. Planting forests that may be felled before 2100 only helps the planet when we know they will not be felled (*i.e.*, in 2100). Statistically it may be possible to make out a case that a percentage will not be felled, and that percentage helps the planet, but no rules currently exist to do this, and the stock change (historical) accounting currently used to calculate NDCs harms the planet because it inflates our efforts to meet IPCC targets and prevents informed decision-making as to what is required to be done.

8. Once this appreciated, you can see two types of ETS forestry transactions: those that do not provably help the planet meet IPCC targets and those that do. The former just involve transfers of money or money's worth. The reason for them being in the ETS has nothing to do with combating climate change and are simply government approved funding for foresters who cannot show they are helping the planet.
9. It doesn't help the planet to say a sum of money must be paid to the Government when a forest is cut down before 2100. The climate is not helped by money transfers. It is only helped by reductions and permanent removals.

Why do we create phantom forestry credits?

10. The Government does this to meet its NDC totals under the Paris Agreement. It is allowed to do so. Adding to real emissions (those that will remain until at least 2100) phantom removals that will be reversed before 2100 is like a *Ponzi* scheme. Sooner or later the scheme will be exposed and there will not be enough emissions reductions and real permanent removals to meet our NDC targets and we will have to pay.
11. The CCC was not set up to provide funding for foresters who cannot show they will help get us to IPCC goals by permanent forestry removals. By not calling out phantom forestry credits in the ETS that is what it is doing. It is advising the Government to give funding lines to foresters when doing so will not be help New Zealand reach its 2050 Net Carbon Zero goal and maintain it.
12. The CCC is not required to buy into the NDC accounting rules. It is required to get us to 2050 Net Carbon Zero and keep us there after 2050 (see Part B below). Recognizing phantom forestry removals does not do that and it does not help the planet.

Does it matter the CCC is condoning funding lines for activities that will not help the planet?

13. If the CCC's remit allows it to provide a side business in endorsing funding lines to foresters who will not be helping meet IPCC targets sobeit, subject to one big caveat. The CCC should not count the phantom NZUs granted to provide funding as going towards achieving its long-term goal of keeping New Zealand at zero net carbon after 2050. Emission removals to be reversed before 2100 were never intended to do that and will not. Not only is this a fraud on the planet but also disadvantages those New Zealanders who are

contributing to that goal. To count phantom forestry carbon credits in the mainstream ETS is to use “no integrity credits” to drive down the cost of high integrity credits and to punish those who are helping save the planet by forcing them to share the rewards of doing so with those who are not helping.

Any other reasons for funding line benefits for forests that will not help the planet not remaining part of the ETS?

14. Yes, there are. The first is that the CCC continues to inflate the number of real removals that do help the planet reach its goals with those that do not. It has suggested no mechanism to distinguish the two.
15. Second, a court or regulator sooner or later will find that it is a breach of the Fair Trading and/or Market Conduct Acts to impliedly suggest phantom credits are helping the planet when they are not. That is already happening in the UK and Europe. When that happens the CCC will be in an awkward position.
16. Third, continuing to count phantom removals as other than funding lines with no ability to help the planet is giving a stick to importing countries, we sell into, to beat us with. Once they appreciate, we are using phantom credits to tell them we are meeting IPCC goals, when we are not, and they are, we stand a good chance of trade barriers being raised.
17. Fourth, the CCC is exposing itself to litigation. It is mandated under the Act⁴ to give expert advice to the Government. Counting phantom credits is not expert advice. Judicial review proceedings against the CCC may get significant traction from this.

Are there any other benefits from taking phantom credits out of the ETS?

18. In addition to the above, yes one big one. It stops the CCC recommending we take forestry out of the ETS because all the CCC’s conclusions on forestry are seen as wrong once phantom forestry carbon credits are not recognised under the ETS.
19. By refusing to allow phantom carbon credits from new plantings to qualify for the ETS (in line with the California CARB) all the so-called problems with forestry that the CCC relies upon disappear. In refusing to count phantom credits we will have sufficient forestry credits to meet our goals without depressing NZU prices – at least based on the CCC’s figures. We expand on this below.

How does climate change legislation allow the CCC to count phantom forestry credits (funding lines) as removals that can be counted towards zero net carbon from 2050 to 2100?

⁴ Section 5B Climate Change Response (Zero Carbon) Amendment Act 2019.

20. To meet the IPCC goals, you cannot.
21. The Act however, while pretending to generally follow the IPCC goals, and support them, has a small word inserted into the definition of 2050 Net Zero Carbon and that is “accounting”. So instead of “net zero” carbon in 2050, as with the IPCC, the Act refers to “net accounting zero”.
22. You would have thought that the concepts were the same, “net zero” and “net accounting zero” sound like they are. But they are not. The Act defines “removals”, *i.e.*, those permanent removals that are needed to remain removed until 2100, in a less than permanent way. Nowhere in the definition of “removal” will you see the word “permanent:
- removals,—**
- (a) in relation to a removal activity, means carbon dioxide equivalent greenhouse gases that are, because of the removal activity,—
- (i) removed from the atmosphere; or
- (ii) not released into the atmosphere; or
- (iii) a reduction from emissions reported in—
- (A) New Zealand’s annual inventory report under section 32 as required under the Convention or Protocol for any year; or
- (B) any emissions report from New Zealand under a successor international agreement; and
- (c) in Part 1B and the definitions of net accounting emissions and offshore mitigation, means greenhouse gases removed from the atmosphere.
23. So, the Act encourages the CCC, and the Minister, to account for non-permanent (phantom) removals that will be added back into the atmosphere before 2100 to calculate whether we have achieved “net carbon zero”, even though the counting phantom credits means we have not and will not meet the targets required by the IPCC. In other words, include funding lines to foresters even that we are not helping the planet by doing so.
24. It worse than that, as the CCC and the Minister can also count removals as including GHG “not released into the atmosphere”. This of course was the basis of many frauds in past years *e.g.*, where factories in PRC and other places released highly toxic GHG for a month a year then claimed green credits for shutting the factory down for the other 11 months of the years.
25. A comparison of the IPCC goals and the 2050 Net Zero Target is found at Appendix A.
26. Just because the Government wants to count phantom credits to meets its NDC goals counting phantom credits that do not help the plant, but suggesting they do, is no excuse for the CCC to do so. It is not defence to say that the Paris Agreement allows this: the Government did not feel bound to follow stock change accounting allowed under that Agreement when bring in the averaging accounting regime.

Would formulating rules for recognising (and excluding) phantom credits be difficult?

27. The type of considerations necessary to shape suitable rules already exist in the voluntary carbon market. These include both legal (registered priority encumbrance against felling), as well as silviculture longevity (right species on right site with no carbon negativity before 2100). These requirements are unlikely to be achievable by most *pinus radiata*. This does not take away from district plan requirements but would be additional.
- (a) *Pinus radiata*. It will be difficult, but not impossible, for this species to prove years after planting it will remain alive without going carbon negative before 2100. It is not a long sequestering species. Obviously the later it is planted the easier this will become. However, plantings on high erosion risk sites should probably not be allowed because longevity will be very hard to prove.
 - (b) Fast growing, long lived, erosion stabilising species, such as Douglas Fir and redwoods. These are ideal in sites where they can grow as they will keep sequestering beyond 2100, have root systems that encourage soil stabilisation, and will contribute to significant carbon removals both before and after 2050. The public need to be educated on the fact these are not the same species causing problems as *pinus radiata* currently.
 - (c) Natives. These have many of the attributes of Douglas Fir and redwoods, but they are unlikely to sequester much carbon before 2050, are expensive to plant and have higher immature mortality rates. The public do not understand this, and mainstream media have participated in click bait misinformation.
28. Production forests which will be felled, and timber exported, can still be planted, but they would not qualify for NZUs (which may not occasion any loss as NZUs presently acquired are usually banked to offset deforestation liabilities). However, they could still qualify towards NZ's NDC if phantom credits are not banned from it.

Submissions

- A Declare that emissions that remove CO₂ from the atmosphere are not recognised under the ETS unless it is proved that removals are permanent until at least 2100.
- B Refuse to allow stock change accounting, at least for new plantings, to mislead others into thinking that more is being done to help the planet than really is, unless plantings are provably permanent.

Part B: Now start the conversation with the role of the CCC.

The Chief Executive's message (Draft p3) states:

29. *“At the end of this year, we will deliver our advice to the Government on the urgent actions required to achieve ... [the] second emissions budget and enable climate goals like reaching net zero emissions of long-lived⁵ greenhouse gases and reducing biogenic methane between 24-74% by 2050.”*

What the CC must do and consider

30. The CCC is required (s. 5B Act) to:
- (a) Provide independent, expert advice to the Government on mitigating climate change and adapting to the effects of climate change (meaning by “expert” that it provides objective and informed opinions).
 - (b) Monitor and review the Government's progress towards its emissions reduction and adaptation goals. The target for emission reduction, other than biogenic methane is zero by 2050 **and for each year thereafter**. The target for biogenic methane is 10% less than 2017 by 2030 and 24-47% less by 2050.
31. Section 5M Act lists five matters the CCC must consider when exercising its powers under the Act. There is no need to repeat these, except to point out that the CCC is not *required* to consider future predicted actions of the Government (or any other Government), only past actions (s. 5M(g)). But it is not prevented from doing so if that is required to properly model advice on climate change responses.
32. The CCC is statutorily required to give useful and informed advice on mitigating climate change. That at least requires it to consider what best helps achieve that goal, and to weigh the impact on climate change of any recommendations it makes to the Government. The proposals relating to forestry do not do this by the CCC's own admission. The CCC appears to have largely abrogated responsibility for the negative impacts on climate change of disincentivising forestry carbon removal and does not attempt to analyse and model how incentivising both forestry carbon removals and emission reductions, both within the ETS, can be achieved without compromising incentivisation of emission reductions.

⁵ The reference to long-lived gases is repeated at Draft p 49 (Chapter 3: A path to New Zero). This is intended to differentiate biogenic methane, as the Draft does not model its inclusion in the ETS. Methane does break down relatively quickly, but its effect is so destructive that even over 80 years (beyond 2100 if emitted today) it is still more dangerous than CO₂ (81 times over 20 years and 23 times over 80 years). Recent peer reviewed reports suggest these figures are no longer accurate as the atmosphere is taking longer to absorb methane than it did in the past. Notwithstanding this the Act sets targets for methane reductions below those required by the IPCC to meet 2100 targets.

33. The CCC is also required to monitor progress towards goals of net carbon zero (biogenic methane apart) in 2050 and every year thereafter. Reaching those goals will require reductions in emissions as well as emission removals. This has been acknowledged in past CCC reports and is becoming generally accepted. Indeed, many commentators now confirm that carbon removals are essential to reach IPCC goals.
34. The statutory inclusion of **years after 2050** requires the CCC, in relation to forestry, to analyse the impact of forestry removals in that period and what is likely to happen. Will they go down or up or remains constant? If they go up how can that be mitigated? There is no evidence that the CCC has any appreciation of how different species can be expected to contribute or comprise climate mitigation in the years after 2050.
35. There appears to be a lack of expert forestry analysis in discharging the obligation to give expert advice. One example is unqualified acceptance of the averaging regime. This was built on the myth that harvesting before 2050 would immediately be replanted⁶. However, given that it is a condition of averaging accounting that there be no further NZUs granted for replanted forests it is likely that forests will not be replanted if the deforestation costs (the price of NZUs) is low (or non-existent). The Drafts' assumption that NZUs will be repaid if land is not replanted, thereby incentivising replanting, is increasingly questionable if the price of forestry carbon removals falls, as the Draft suggests it will if its recommendation to take forestry out of the ETS was ever acted on. If foresters do not simply walk away from their forests, they may alternatively buy out their position by paying deforestation costs if it costs little to do so. Much depends on species. Some long-lived species will not generate sufficient returns if felled at 30 years to contribute to the cost of deforestation charges. *Pinus radiata* may do so. It depends on age classes, and future lumber prices for each species. That analysis requires expert forestry input and there is no evidence in the Draft it has been sought.
36. Another example is the way the Draft supposes the risk NZUs issued under averaging accounting could be "hot air" (p 59) because they could be sold. Why this is a risk is not explained. It needs to be to discharge the CCC's statutory obligations.⁷
37. The Draft also suggests the "evidence" is that high NZU prices are encouraging foresters to walk away from production forestry (pp 59-60). It is true that many forests are now being planted solely because of the NZU price, but in other cases decisions about future felling are simply being deferred. Production foresters are looking at deferring some harvesting but are not committed to permanently sterilising forests unless required to.
38. Other examples of lack of forestry knowledge are referred to below.

⁶ Averaging accounting is unhinged from IPCC goals. There is no analysis of existing age classes and how each of these perform relative to the IPCC goals for 2050 and 2100 or even to the targets in the Act.

⁷ If a planted forest cannot be proved to maintain carbon removals until 2100 it should not be allowed to be planted, or if it is it should not qualify for NZUs, which is probably the same thing because without NZUs non-production forests are unlikely to be planted. Trees that may be felled before 2100 are not demonstrably helping achieve IPCC goals. This may be what the Draft is driving at with its reference to "hot air" (p 59 Draft) but that is unclear.

39. The CCC needs expert advice on how species perform after 2050 (as well as before). Because modelling shows that planting the right species and leaving it in the ground until 2100 will always better help the planet meet IPCC goals, than other alternatives, the inquiry must be what species achieve that? Some *pinus radiata* might do this but site and other factors will need to be considered. This is considered further in the following Part G.
40. Where the Draft suggests guidelines, it must formulate them based on expert and informed analysis. Not to do so is to breach the requirement that it give expert evidence to the Minister. The question is always whether the CCC has discharged its obligations to act in an informed and unbiased way, as anyone offering expert evidence must.

Submissions

- C The CCC must discard any draft recommendations that are shown to be misinformed or subject to apparent bias unless the latter can be disproved.
- D The CCC should seek expert independent forestry advice if it cannot improve the quality of the forestry analysis in the Draft.

DRAFT

Part C: The climate crisis requires taking every step that can be to avoid catastrophe.

41. The Draft points out several times that the ETS is a mechanism not a policy. In that vein the Act is also a partly a mechanism. The reason New Zealand needs to get to 2050 net carbon zero is international commitments made to do so under the Paris Agreement. The Paris Agreement confirms rules each signatory may adopt in determining carbon emissions and reductions in them.
42. The Act sets out how we propose to achieve the reductions required under the Paris Agreement, although inserting the word “accounting” in the 2050 Net Zero Carbon goal (see Part A) gives the CCC and the Minister the ability to recognise phantom credits, thus separating the IPCC and Paris Agreement goals from the lesser goals under the Act.

Climate Change is a national emergency: it must be treated accordingly.

43. The current Government has declared climate change a national emergency. That brings risks we are only beginning to appreciate. Eventually we will all be poorer because of climate change. We cannot avoid its costs. Some of those costs are more obvious than others. The Draft's Figure 4.4. suggests that if we take forestry out of the mix in calculating our required emissions reductions, we will have a significant shortfall in our international obligations. At the current EU ETS price (which will rise), and the CCC's predictions at Figure 4.4, that equates to something around NZ\$60 billion. This is expanded on in Part I below.
44. Forestry obviously has an important role to play here, not just in minimising the impacts of climate change but in minimising financial costs that will be otherwise incurred.
45. Other climate related costs are less obvious but probably as predictable. For example, it is likely that importing countries will shut New Zealand out of overseas markets, or penalise it, for not meeting its Paris Agreement targets.⁸ It is highly likely that insurance costs will rise (or insurance will be denied), both for residential and commercial risks, because of climate change. It is highly likely that fish will move to colder water; pests and disease to warming zones; rainfall patterns will change, affecting land use. The list goes on.
46. Climate change has serious consequences, both economically and socially, and the last thing we as a country can afford is to:
 - (a) Wink at defects in the system for measuring the very real progress we need to make as a country to show we are making, because ultimately, we are only fooling ourselves in doing so.

⁸ Which is the complete answer to those who say we shouldn't do anything as a country because we are small and larger countries are not doing enough. Try saying that the EU Commission when it penalises our exporters for not meeting their emission standards.

- (b) Allow emitters to game the system by surrendering current NZUs only made possible because of the past use of phantom forestry credits surrenders that should never have been allowed (see further Appendix Two).
 - (c) Mistake the consequential question of who should bear the inevitable costs of climate change with primary issue of how to reduce those costs by reducing the impact of climate change.
47. As these submissions are focussed on the Draft's proposed guidelines for forestry these two fundamentals are considered below from a forestry perspective.

"Offsetting" forestry carbon removals against required emission reductions can be seen as gaming the system.

48. For reasons expanded on in Parts A and B above, carbon removals must not only increase before 2100 to reach out 2050 Net Zero Carbon but must remain removed thereafter. The 2050 Net Zero Target is not just to be reached but to be maintained. The relevant timeline is examined below, but essentially emissions that are in the atmosphere (or their effects are) until at least 2100 must be matched by removals that will remain removed for a matching period.
49. It doesn't take a great stretch of imagination, nor great insight, as to how judges will view it, if removals are made before 2050 but put back into the atmosphere in the years after that (or even before 2050). To count these as meeting 2100 targets is nonsense and to do so for claiming progress is being made on reaching targets is simply gaming the system. The CCC should say so. The problem is that if the CCC and the Government do not call out gaming practices, international bodies will sooner or later likely do so. This may either be in changes to accounting for NDC or trade barriers. And in the VER space Judges are likely to do so too. These are risks too important to ignore.
50. There is a high likelihood that importing countries (or trading blocs) will struggle with forestry offsets because most do not allow them. California does allow then in its cap-and-trade ETS, but it requires forests to have at least 100 years permanency. And if a New Zealand Judge rules it is a breach of Fair Trading or Market Conduct laws to imply a forest is permanent when it cannot be proved to be, why would importing countries agree to a lesser standard for accepting New Zealand imports standard than domestic New Zealand law requires?
51. Many forests planted today must be cut down (*e.g.*, they are subject to time limited forestry rights or joint venture agreements, or they are or may be felled for lumber returns). As noted in Part A it is easy enough to test how many are regarded by their owners as permanent to see how many forests are registered in the permanent forest category under the ETS. As a first step to prevent gaming the ETS system, all new plantings should be made under the category of permanent forests if they are to qualify for NZUs.

52. Even registration as a permanent forest under the ETS may not be sufficient to define permanency. It certainly would not be as a defence to a successful prosecution for breach of Fair Trading or Market Conduct laws. That is important because it feeds into what trade barriers New Zealand is likely to face if it continues to adopt an offsetting practice that importing countries are likely to find offensive.

53. Where are these risks recognised and considered in the Draft?

Failing to ban current use of NZUs only made possible by past use of Phantom credits.

54. This is addressed in Appendix Two below. However, the fundamental objection is clear. Allowing this gaming of the ETS simply gives our trade partners an excuse to ban New Zealand imports, including timber, or place tariffs on them, because they do not meet their own domestic environmental standards.

55. Where are these risks recognised and considered in the Draft?

Mistaking the consequential question of who should bear inevitable costs of climate change with primary issue of how to reduce those costs by reducing the impact of climate change.

56. There are legitimate issues to be addressed as to how to equitably share the costs of climate change. However, the first issue is how to reduce those costs, otherwise we are at risk of rearranging the chairs on the Titanic rather than preventing the collision with the iceberg. The risk is neither difficult to understand nor challengeable.

57. The first issue in relation to forestry (in fact in relation to all matters addressed in the Draft but here the focus is on forestry) is whether a concern to share the costs of combating climate change be shared equitably will itself reduce or slow global warming, and if not what cost/benefit trade-offs are involved?

58. Take the concern that locking up forests will impact on rural communities (Draft p 94). There is no doubt it will. But how does tinkering with the ETS forestry settings slow global warming? Doesn't it do the opposite? Rural communities increase global warming because agriculture is responsible for nearly 50% of GHG emissions in New Zealand. So not putting land into forestry (of the right kind, *i.e.*, where there are to be no removal reversals before 2100) has a double impact. It not only means increased emissions, but also no emissions reductions which would occur if the land was converted to forestry.

59. So, if the CCC thinks it is important to save rural communities by not planting forests and thereby adding to climate change (or more correctly failing to prevent it), what time frame is it applying? Is it the next election cycle, or pandering to a special and vocal interest group with climate cost/benefit trade-offs? Politicians are the ones who pander to special interest groups when making decisions to get votes, the CCC does not and should not have to.

60. What is missing is a careful analysis of the impact of climate change will be on special interest groups if obvious steps are not taken now to slow climate change because they are thought to impact on that special interest group in some way in the short term. Put bluntly, will the costs of shielding special interest groups from the immediate costs of preventing change simply lead to higher costs those groups must later pay for the long-term consequences to them (and all of us) of that short term relief?
61. Behind the rural communities claim to be unfairly affected by land use changes to forestry is the threat of what impact this has on export earnings. But is failing to be serious about climate change going to result in export markets locking famers and foresters out because they have not taken the steps that their own domestic producers have? It is understandable that farmers in Ireland or the Netherlands, having reduced their herds by 25%, as they are required to under the EU Green Plan, will want to block imports from countries where farmers have not. And in the longer term, what is the impact on rural communities of uncontrolled climate change? Will pastoral farming become much harder because of rainfall changes, or novel pests or impact on animal health, *etc*? If it will, is pandering to a special interest group today simple killing them tomorrow?
62. Where are these risks recognised and considered in the Draft?
63. The CCC is not statutorily excused for not taking steps to slow global warming (planting more trees) because that will affect rural communities. Section. 5M Act allows the CCC to consider certain matters, but not at the expense of missing the 2050 Net Zero Carbon target. Section 5M on any reading requires both short term and long-term impacts to be considered.

Failing to model changes under the Paris Agreement banning short terms offsets for calculating our NDC.

64. This could possibly happen (see Part L below). If it does there is a virtual certainty the Government will stop allocating NZUs to new plantings because it will need to reduce emissions, far more sharply than it has to date, to meet our Paris Agreement commitments. That will require NZU prices to rise sharply, perhaps to over NZ\$200/tonne. There will no place for new tree plantings in the ETS.
65. It is curious that the CCC has not considered this real possibility and modelling the risk factor into its modelling at Figure 4.4 and the assumptions that under-pinning it.
66. It may be that NDC accounting will be allowed for existing forests (see Part H). At the very least the CCC could have modelled the benefits of encouraging (the right kind of) planting if this is a foreseeable risk.
67. The CCC might say this is outside its remit but there is nothing in the Act which expressly prohibits it considering it. Not to do so is simply to admit its future forestry modelling is defective because it fails to account for real future risks.

68. Part L below looks for explanations why the CCC might be only modelling some risks and not others.

There are no contingency plans.

69. The CCC has a plan to get us to 2050 Net Zero and keep us there afterwards. But achieving that plan is highly contingent on several things, as Figure 4.4 illustrates, including reducing emissions as predicted (experience gives little confidence this will be achieved); and having access to phantom forestry removals (those that will be reversed before 2100), even if forestry is kept in the ETS, as it should be.
70. No banker would lend money based on such a plan. A banker would require evidence that real risks, if they eventuate, will not prevent a borrower repaying. Why is the future wellbeing of New Zealand being risks based on a highly speculative plan of how we will manage climate change and meet our international commitments? The Draft addresses wellbeing at some length (Draft Chapter 6) but never once mentions what the failure of its assumptions about future emissions reductions and removals will have on that wellbeing.
71. If emissions don't come down as predicted, we may need more forestry not less. Why doesn't Figure 4.4 recognise this?

Submissions

- E To be serious about climate change the CCC needs to take obvious steps to combat it, including not allowing phantom forestry NZUs (permanence of removals to 2100 not proved) from new plantings to remain in the ETS, and to put an end to gaming of the ETS by relying on past phantom overseas credits to claim present ETS benefits.
- F The obvious way to do this is to require all new plantings to be under the permanent forest regime to register under the ETS. The CCC needs to carefully consider if this is sufficient of further proof of legal and silviculture longevity is necessary.
- G The long-term impact of climate change on special interest groups, like rural communities, including the impact of tolerating temperature increases to confer immediate benefits on them, such as protecting rural communities by not planting forests, needs to be modelled to ascertain whether:
- Such tolerance will cost them more in the long run than the perceived benefits they are receiving.

- Shorter term consequences, such as having markets closed because insufficient progress to combat climate change is being made, will destroy any benefits intended to be achieved by not taking steps to combat climate change to indulge social policies in their favour.

H The CCC's modelling should include risk related adjustments, such as changes to NDC accounting, the reaction of overseas importers to New Zealand's policies, and failure to achieve emission reductions of the kind postulated in Figure 4.4. It is unreal to suppose that the CCC's targets are real when risks to them are equally real but not modelled.

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Part D: The economically rationally forester.

72. The focus here is not on declared production forests, because the rationale for establishing them is to maximise clear fell proceeds. In most cases foresters engaged in production forestry will have banked NZUs to meet future deforestation costs if planted under the stock accounting rules, which most of such forests would have been.
73. But even here one must be careful of assumptions. Many production foresters, *i.e.*, those whose business model depends on growing a range of age classes to ensure that lumber comes onto the market at regular intervals, are eyeing the possibility of taking marginally productive land and forests out of their business model and depending on returns from lumber versus carbon credits, making decisions about what to fell and what not to.
74. Much will depend on the timber species and the point in its grow cycle. For example, with *pinus radiata* early decisions about felling will have led to an expensive regime of thinning and pruning which will not generate as many NZUs as “locking the gate”. This is less an issue for foresters of other species and who can be a little more *sanguine* about forestry choices.
75. For all other forests where the forester has one or two age classes only, there has been a recent sea change. Whether one looks at existing forests, and even some new ones, the classic investment model was to adopt a forestry regime that maximised clear fell receipts, just as with multi age class production foresters. Investment funds were inevitably solicited on the basis that there would be returns in 26 years (or whatever) with costs met up front or from production thinning, or by incidental carbon credits. Changes to a “lock the gate” regime often had to be unanimous.
76. It took a while to sink in for many foresters, but those who had options came to realise they had higher returns from “locking the gate” and forgetting about clear felling. That is, they would carbon farm and not tree farm. This was usually an irrevocable decision because one consequence of locking the gate, and neither thinning nor pruning the trees, was loss of the ability to mill high grade timber classes, with a drastic decline in clear fell values.
77. When looking at what rationale economic decisions a forester will take, we need to distinguish between those with existing forests and those who are determining whether to plant in the future. First those with existing forests.
78. A forester who has made the decision to farm carbon rather than timber farm has few palatable economic choices if, as the CCC would recommend, no NZUs are available in the future, the very basis on which carbon farming was chosen instead of lumber farming. The trees have far less value than they would have had had they been subject to a clear fell forestry regime.
79. The first choice facing this forester is to walk away from the forest, to defer deforestation costs to a later time when the forester will rationalise the Government can have the land and

trees because the deforestation costs will not be paid. In the meantime, ongoing costs such as rates will not be met but the rating authority (or whoever) will not be able to foreclose against the forest because the Crown has a first charge against the land for deforestation costs.

80. The value of the land will be of little consequence. Clear felling and stumping marginal land for some other land use would be too expensive an option.
81. A slightly brighter outcome will be that foresters will determine that reduced returns from felling will exceed deforestation costs so they will meet ongoing costs to maturity and then fell. This is, however, highly speculative.
82. Under either scenario there will be no replanting of the forests. Walking away from a forest means the Crown will likely not receive the costs of deforestation while at the same time will be far less likely to maintain net carbon zero after 2050. Based on the current EU ETS prices (NZ\$160/tonne CO₂) and a reasonable assumption that 2,000 tonnes of CO₂ will be released when the forest dies, that implies the forester's decision to walk away from a forest which was being carbon farmed would end up costing the Crown NZ\$320,00/ha in unfunded liabilities under the Paris Agreement.
83. Rational decision making will be further complicated by whether a forester owns the land under the forests or has a lease or registered forestry right. If the latter walking away from the forest will force the landowner to make the same decisions as the foresters has, and to also decided to walk away from the forest. There is a difference though, in that the landowner will also lose significant amounts of either rental or participation in supposed future forest rentals. If that sum cannot be recovered from the forester who walks away, leaving the landowner with expectation profit loss as well as deforestation costs and ongoing costs in relation to the land for which there will be no compensation (e.g., rates), a rational response is to join a class action and sue the Government. The damages could possibly be enormous, and even if successful an owner may still walk away and leave the Government with no means to recover the deforestation costs and with an exposure to under the Paris Agreement of up to NZ\$320,00/ha.
84. The position in relation to forests yet to be planted is more straight forward.
85. The Draft signals that forestry should be taken out of the ETS after the 2025 sequestration year (no changes for 2023, 2024 or 2025). If that recommendation was made and accepted by the Minister, there would be no more new forestry plantings thereafter. Foresters would not plant until the 2025 year and then stop. Very few investors, other than age class production foresters, will regard forestry as an attractive option if there are no returns from carbon credits. Given it takes 2 years from commitment to planting because of seedling supplies *etc*, foresters who have committed to land options, started site preparations etc, will abandon them. Seedling contracts will be cancelled. Those sunk costs will have to be met by someone. Putative foresters will be looking for ways to avoid them, probably by claiming force majeure clauses apply.

86. Even if the Government keeps forestry in the ETS, if the CCC's predictions at Draft Figure 4.4 are correct, and accepted by forestry investors, the first question putative investors will ask themselves is whether they want to accept the risk that they plant and everyone else plants so creating the outcome postulated by the CCC in 2037 when there is apparently going to be an oversupply of NZUs. If they plant and no-one else does, then the CCC's predictions will be wrong and there will be no oversupply in 2037. If everyone plants, thinking others won't then the risk of planting will not have paid off and the CCC's predictions will be correct.
87. Usually, an oversupply leads to severe price dislocations. It will likely drive the NZU price to the floor, whatever that then is. However, for economic planning purposes a price of zero would be assumed because with an oversupply only a lucky few will have offers to sell accepted at the then floor and all others will be without buyers. In the event a forester plants believing others won't, but they do, it is necessary to bill into a risk model the price of getting this decision wrong is valueless NZUs and wasted investment.
88. Foresters might take a "wait and see" approach, but this is not really going to help them. If everyone plants, then they will not plant. But if no-one plants, everyone will likely also be taking a wait and see approach, in which case a particular forester is not any wiser as to whether to plant or not.
89. It is doubtful that foresters will plant for the few years returns that the CCC predicts can still be made before 2037. New plantings are required to be under the averaging accounting regime. That generally means no NZUs after year 16 for *pinus radiata* (which is 95% of current new plantings) and around 10 years thereafter for a newly planted forest to sequester commercially significant amounts of CO₂ (other than natives which are much slower). We can assume that investors considering investment in non-production forests planted after 2025, by studying the Drafts estimates of future emissions and the ETS cap, will not invest for NZU returns, which will be in surplus supply after 2037, but only for clear felling returns.
90. On that basis, given it is necessary to adopt a far more expensive forestry regime (generally 2 thins and 3 prunes for *pinus radiata*) to maximise clear fell returns, it is likely that new forestry plantings after 2025 will return to a pre-2019 demonstration line and not the one surmised by the Draft of 75,000+ ha a year to 2037 (Draft p 57).
91. For forests committed to in 2024 and 2025, where substantial NZUs could be available for one or two years (in 2036 and 2037) before NZU supply supposedly exceeds demand the two questions that obviously arise here, not modelled, are first whether this narrow window of assured NZU returns will drive new planting at the rates predicted, and what kind of new plantings?
92. To complicate matters, forestry investors cannot have an equal "bob each way" on NZU and clear-felling returns. A forestry regime designed to maximise stumpage will produce fewer NZUs than a "shut the gate" regime. And the second unmodelled question is what the

impact of plantings at the assumed plantings at the demonstration line only until 2025 will be?

93. The above will now have to be modelled in the impact of the National Party's announcement 12 June 2023 that if elected they will not allow further conversions of productive land to exotic forestry.

Submissions

- I The CCC must consider what rational economic decisions forest investors will make if its recommendations being accepted. There is no evidence that it has.
- J Those decisions are likely to engage the Crown in litigation and regardless of that expose it to very large unfunded liabilities under the Paris Agreement when foresters decide to stop planting or walk away from their forests. The former is almost certain if forestry is taken out of the ETS and the latter certain in an unknown number of cases.
- K In addition, there will be significant costs for many people associated with the forestry industry, *e.g.*, seedling suppliers, both economic and loss of jobs. These may need to be considered by the CCC.
- L Even if forestry is not taken out of the ETS, if putative foresters accept there could be an oversupply of units in 2037, as the CCC postulates, acting rationally they will not take that risk, with the result being that no such oversupply will occur, leaving New Zealand with a potentially huge unfunded liability under the Paris Agreement.
- M If the CCC will not recognise phantom forestry carbon credits under the ETS, and the Government accepts this, modelling will likely show there will never be an oversupply of NZUs in any year and an easy, if not required, way to incentivise decarbonisation and removals will have instantly been found, with none of the risks to the country of either taking forestry out of the ETS or price signalling oversupply to deter new forests (without phantom credits) being planted.

Part E: Why is it a bad thing to tank the ETS by sequestering more carbon than emissions?

94. If we keep planting forests at the rate Draft Figure 4.1 predicts, then according to Draft Figure 4.4 by 2037 we will have more removals than emissions. That gets us to 2050 Net Zero Target. That is what the CCC must give advice on.
95. The point here is that if in the process of reaching that goal through continued forestry investment we render the ETS otiose, as the Draft assumes we will, this is not a failure on the part of the Government or the CCC. It is a success. The ETS has helped us reach the 2050 Target.
96. It is beside the point being made here that the ETS is unlikely to produce this result despite the Draft assuming it will, for reasons including price signalling by the CCC in Draft Figure 4.4, making such plantings less likely (see Part D above). And as pointed out in the submissions in Part D, no such result is likely (it is yet to be modelled) if the Government and the CCC exclude phantom from new plantings from the ETS (removals cannot be proven to last until 2100).
97. But the preceding paragraph apart, why do we need to fix the ETS which, according to the CCC, is going to get us to 2050 Net Carbon Zero if it stays as it is, and the Draft's predictions are correct? Why does it matter if we plant our way to the 2050 Net Zero Target? After all we need to both increase carbon removals and reduce emissions without one excusing inaction on the other. If by 2050 we capture (by removals) everything we emit we are at net zero carbon.

"We cannot plant our way to meet our 2050 Net Zero Target". What does this mean?

98. We *can* plant to achieve net zero by 2050. The Draft says this is a bad thing, but why. Ministers and the CCC can repeat the mantra that "we cannot plant our way to meet our 2050 Net Zero Target" but it is a falsehood because we clearly can.
99. The Draft suggests several reasons why we cannot keep planting to achieve the 2050 Net Zero Target.
100. The first is that forestry planting will stop sometime in the 2030s because there will be excess supply of NZUs after that date. Consequently, it concludes, there will be insufficient new forestry to offset mortality of pre-2037 forests as it occurs after 2050 (Draft Figure 3.1).
101. Unfortunately, this wishful statement does not reflect what happens in real life, as Part D illustrates. If foresters were to accept the conclusions at Draft Figure 4.4, they would not

plant. If phantom forestry carbon credits were not recognised under the ETS there would likely be no oversupply. Doing the latter should be sufficient to slow the rate of new plantings, arrest any decline in the carbon prices and at the same time cover incidental and unexpected mortality. As noted above this has neither been considered nor modelled.

102. The Draft dismisses restricting the NZ ETS to permanent forestry category because “that would reduce the area of permanent forest planted, but it would not prevent further planting of production forests from displacing gross emission reductions” (Draft p 62). With respect this is a *non-sequitur* and possibly not “expert advice”.
103. Restricting new plantings from entering the ETS unless they are provably permanent would not reduce the area of permanent forests for two reasons. First, we do not know what forests are permanent until 2100, which the CCC has a statutory duty to determine and monitor (to give expert advice) but has not.
104. Second, why would allowing proven permanent forests (*i.e.*, those that can prove they will not be felled or die before 2100) “reduce the area of permanent forests?”. One would have expected that only allowing such forests into the ETS would have the opposite effect.
105. The Draft then suggests restricting ETS participation to permanent forests “would not prevent further planting of production forests from displacing gross emission reductions”. If that refers to impacts on the operation of the ETS there would be no effect if non-permanent forests did not qualify for NZUs (which most production foresters bank at present to meet deforestation liabilities in any event). And of course, the Draft just assumes that it is a bad thing to displace emissions reductions when this will not happen with a permanent forest regime, and even if it were to, we would still be reaching our 2050 Net Zero Target.
106. There is no attempt to define what a “permanent” forest is, despite the Act requiring the CCC to monitor emissions savings achieved by 2050 to ensure they remain thereafter.
107. The California CARB, which the Draft is happy to refer to in support of its draft guidelines when it suits, (albeit mistakenly: see Part L below) confronts this issue by requiring qualifying forests (representing leakage to its cap-and-trade ETS) be permanent for 100 years. But it also requires there be a carbon reserve of 17% which is not allocated tradable credits and they be provably additional.
108. However, counter-intuitively, the Draft at the same time assumes that *pinus radiata* forests⁹ will be cut down every 30 years and therefore persistent planting and felling will maintain an average stocking of 50% of 30-year maturity carbon removals. This assumption supposes that whatever carbon removals are achieved by 2050 can be maintained consistently thereafter. They will not but the CCC is using two assumptions to support different

⁹ The Draft at Box 4.1 p 59 does not refer to *pinus radiata*, but it is the major planted species and the one with maturity profile that fits the assumptions in that Box.

conclusions that are mutually exclusive. And of course, as noted several times above, if the CCC is correct and there will be an oversupply of NZUs in 2037 there will be no further rotations of forests.

109. Putting aside that oversupply of units in 2037 is unlikely to happen because economic choices made in the market will not allow it, the CCC may be conscious of, while not directly addressing, the fundamental gap in its conclusions that we need to reduce the influence of forestry in the ETS to preserve the ETS, when forestry, by driving the ETS price to its floor means we have achieved the 2050 Net Carbon Target. We might conclude this because the Draft sets up several straw arguments to paper over this gap. The following may be examples of attempting to prevent this gap being exposed.

First straw agreement: different timelines.

110. The first such straw argument appears to be that there is no equivalence between emission reductions and emission removals because of timeframes (Draft p 47). That is theoretically correct because fossil fuels not burnt remain under ground forever and emissions from fossil fuels once in the atmosphere effectively remain there forever, but forests turn carbon negative at some point.
111. The key here, however, and not mentioned in the Draft, is that there is an equivalence if forests can be proven to remain sequestering until at least 2100 and that is taken as the end date for comparative purposes. After that the IPCC requires nothing further, because if we have not met IPCC targets by then we can essentially stop trying. The planet will have runaway temperature rises. Surprisingly the Draft does not accord any importance to the IPCC end target date.
112. As the Draft acknowledges (Draft p 47) climate change itself can reduce permanency of carbon removals but this is simply a factor to be considered when assessing whether forestry removals can be considered sufficiently certain to be considered permanent and therefore to be brought into the ETS.
113. However, counterintuitively, the Draft p 48 suggests using forests to create biomass that is then burnt will return emission reductions to the atmosphere, thus preventing fossil fuels being burnt, and this is somehow a good thing, presumably in terms of IPCC targets.

Second straw argument: driving ETS to the floor by overplanting, even if means we meet our 2050 goals, will result in no cover for eventual mortality.

114. Despite the Figure 4.4 model supposing otherwise, the Draft at pp 49-50 appears to raise another straw argument against the fact that forest removals will get us to 2050 Net Zero Target on its own, by asserting we need to plant forests both before and after 2050 to maintain zero net emissions. Presumably this reflects the ETS settings (Figure 4.4) and the requirement for meeting and maintaining 2050 Zero Carbon Target through to 2100.

115. As noted above, this carries the further assumption that permanent forests will ruin the averaging accounting regime. Which on the CCC's assumptions they will, but then the averaging accounting regime a tool, like the ETS, not a goal.
116. In any event averaging accounting has always been a flawed concept. It was always suspect because of negative climate loops (the atmosphere and earth break down carbon at an increasingly slower rate as average temperatures climb), and because modelling shows the planet is always better off with a species that will continue to remove carbon through 2100 than with *pinus radiata* being replanted and felled over shorter periods. The CCC fails to produce updated and comparative modelling of this.
117. Further, the averaging accounting assumption that carbon removals achieved by *pinus radiata* can be maintained at a constant level after 2050 is also misplaced. For example, it is becoming apparent that substantial areas of land, especially in Gisborne, are unsuitable for *pinus radiata* planting, and need to be planted in longer living species that are still immature in 40+ years and are more conducive to soil stabilisation. Suitable species will not reverse carbon sequestration before 2100.
118. And finally, and most importantly, the averaging system will be broken because non-production age class foresters, accepting the CCC's signalling that there will be an oversupply of NZUs (which will not happen if phantom credits are not allowed in the ETS), will likely stop rotational forestry.
119. The Draft makes the point that there are existing plantings of *pinus radiata* that will become carbon negative in the period after 2050 (effectively between then and 2100) or are felled because of changing land and lumber prices. What that mortality is likely to be is not modelled and needs to be determined to determine the size of the problem. That done, there are several options to confront it. Stripping phantom credits out of the ETS will encourage plantings of permanent forests¹⁰ which will likely address the issue. Another way is to use the deforestation charges for mortality received by the Government to plant new permanent forests. Finding solutions will defeat the straw argument, and so it should.
120. Nor is there any consideration of the Government's intention to plant trees offshore or buy ITMOs to create offset credits. This is addressed further in Part K below.

Third straw argument: we need to protect foresters from themselves.

121. The Draft states unrestricted forestry will be bad for foresters (Draft p 60) because "it could drive a large amount of afforestation for several years, followed by a drastic decline in planting rates". But in what way is this bad for forestry. Did we have bad forestry in 2018 and before when there was little net afforestation?

¹⁰ As repeated throughout these submissions we need to encourage fast growing exotic species that will not be carbon negative before 2100, like redwoods and D Fir, and which will continue to sequester through to beyond 2100, as well as planting natives, which will only sequester meaningfully beyond 2050. We turn to this in the following Part G.

122. The Draft also expresses the concern that investors may not get the returns from NZUs “they anticipated” when there is (a supposed) excess supply after 2037. But that can only apply to forestry commitments before 2023, because now the Draft has warned of the risks for new plantings, largely covering the years the Draft estimates continued high rates of planting will exist. For forests committed to before 2023 there has always been risks, although as the Government has until now continually affirmed, they do not include the risk of ETS credits not being available.
123. One is left a little cold by this concern for foresters. They are big enough to look after themselves if there is no political intervention costing them their livelihoods and returns on considerable investment. What they require from the CCC is informed and unbiased recommendations, and from the Government recognition they have helped the Government meet its NDC totals, after being encouraged by it to do so, by making investment decisions based on ETS participation they were promised. Both the CCC and Government should focus on these deliverables and not on crocodile tears for foresters because the Government may renege on their side of the economic bargain.

Submissions

- N The CCC needs to explain why the ETS needs to be saved from forestry when forestry will, on the Draft’s assumptions, ensure we achieve 2050 Net Zero Targets.
- O The Draft needs to abandon straw arguments against permanent forestry unless it can properly defend them.

Part F: Figure 4.4, which is the basis for the Draft's forestry conclusions, is flawed.

124. The Draft (Draft p 60) is concerned that continued new forest plantings will cause the NZ ETS to lose its ability to drive emissions reduction or afforestation. That is supposedly because, as modelled at Figure 4.4 (Draft p 62), there will be more forestry NZUs than demand (by emitters) for NZUs by 2037, and partly also because there will be no further auctioned amounts and free allocations after 2037.
125. As a further conclusion, the Draft states there is **no alternative** but to reduce the value of forestry NZUs. This erroneous conclusion is not addressed here but is in Part G. At this introductory point the focus is on why the concern is misplaced because the model is wrong.

Testing the assumptions in Figure 4.4 against commercial forest decision making and micro-economic

126. The first cautionary note is that the growth of trees and the NZUs they support has no cross elasticity of supply. Trees are a long-term investment and growth occurs slowly over several years.
127. If we accept Figure 4.4, and we shouldn't, but say we do to test it, in 2037 supply of NZUs will exceed demand.¹¹ As already noted, that means there will be a price war and a lucky few will sell NZUs at the floor price. The rest will be worthless. Unless foresters can get off-take commitments 27 years in advance (they presently cannot), based on Figure 4.4 a commercial investment decision would have to assume zero carbon prices after 2037.
128. Part D has already outlined the effect of signalling what will happen to new plantings if putative investors accept Figure 4.4 as correct if there were to be continued planting at today's rates. They will stop planting so it will not be correct.
129. For forests on stock change accounting (those already growing) the Draft expresses concern that NZUs will continue to accrue because owners will change to a "shut the gate" approach (Draft p 59). If that is a market response it is hardly a novel one. While noting that the hectares of such forests do not appear to be extensive (Draft Figure 4.1) and has not been estimated or distinguished in Figure 4.4, existing foresters always face price risks engendered by new plantings, both for NZUs and lumber returns.
130. If Figure 4.4 is correct, prices received for NZUs after 2037 may be zero. But that of course supposes investors plant new forests after 2025, which they will not because they too will assume that if they do so, and everyone else does so too, that NZU prices will be zero (or at the ETS floor if they are lucky enough to find a buyer) at the time they start to receive

¹¹ The assumed reductions in gross emissions are of course highly speculative and the reductions made to date do not give confidence that they will be achieved.

significant volumes of NZUs, which Figure 4.4 predicts they will. This assumption makes no economic sense.

131. From a forestry and micro-economic perspective, the Draft Figure 4.4, from which most of the Draft's forestry recommendations derive, is insensitive to realities and therefore deceptive.

Submissions

P Figure 4.4 must be disavowed as must all conclusions that arise from it.

Q The CCC needs to take expert forestry and micro-economic advice before republishing it.

DRAFT

Part G: Draft Chapters 4 (Emissions Pricing) and Chapter 10 (Forestry)

132. This Part assumes the Draft is correct to assert ETS must continue to be an effective mechanism for achieving net carbon emissions by 2050 and thereafter, despite no convincing arguments why this cannot be achieved by leaving forestry in the ETS and simply weeding out phantom carbon claims and taking other steps to stop emitters gaming the system, or why the ETS needs to remain effective it drives sufficient planting to remove all our emissions.
133. The purpose of this Part is to show that even on the CCC's modelling on this assumption, the conclusion that there is **no alternative** to complementary policies (see next Part) for forestry have only been made by shutting eyes to other considerations that have yet to be considered. This is quite apart from the explanations in Part A, D and F as to why the model is otherwise to be disavowed.
134. *“New Zealand’s climate policies need to encourage both decarbonisation and afforestation, as both have essential roles to play in an equitable and sustainable low emissions transition”* (Draft p.52).
135. That is correct as far as it goes.
136. Decarbonisation is encouraged by the NZ ETS because, as the CCC correctly points out (Draft p. 52), putting a price on carbon, if it is sufficiently high, will deter purchases of goods and services with a high carbon footprint and consequently cause producers of such goods and services to reduce the carbon emissions associated with their products or services.
137. The price at which consumers will cease to buy goods and services and instead buy alternatives is unfortunately not developed by the Draft. Peer reviewed studies suggest it is much higher than the price of NZUs have so far achieved.
138. Afforestation is essential to achieve the 2050 Net Zero Target. The planet needs to both reduce emissions and sequester carbon, at least until 2100 to meet IPCC goals. This has nothing to do with New Zealand's NDC obligations because NDC targets are achieved in New Zealand, if at all, through “offsetting” forestry sequestration in New Zealand against deficits in otherwise required emission reductions. As noted above (Part A) this is misleading unless there is a guarantee such emissions will be permanently removed until at least 2100. There is generally no such guarantee.
139. *“[T]he NZ ETS is not fit to drive gross emissions reductions over the second and third emissions budget periods, or to deliver carbon dioxide removals by forests need to achieve net zero emissions of long-lived greenhouse gases by 2050 (the 2050 net zero target)”* (Draft p 52).

140. The Draft is careful not to expressly challenge the need for afforestation to meet IPCC targets, which somewhat match the 2050 Net Zero Target, but are by no means limited to it, and which require countries to meet the 2050 Net Zero Target so they can then meet the 2100 target, which is no aggregate temperature rises above 1.5 degrees C over pre-industrial levels. The latter effectively requires carbon removals made before 2050 are not released back into the atmosphere before 2100. The correspondence between the IPCC goals and those of the Act are in Appendix Two.
141. What the Draft appreciates is that high carbon prices will create incentives to afforestation, but it then points out that if such incentives are too high the number of NZUs available after 2030 will drive down the price, thereby disincentivising afforestation and reducing the incentives for emissions reductions.
142. Putting Parts A, D and F aside, while noting they illustrate why there will not be an oversupply of NZUs, there are several other reasons for “surplus”¹² credits accumulating after 2030, not all of which are recognised by the Draft, and which are expanded on below. Each of these properly addressed will also ensure there is an undersupply of NZUs:
- (a) Failure to bring agriculture into the ETS, which would eventually double the need for NZUs.
 - (b) Failure to address and remedy the large stockpile of NZUs already existing.
 - (c) Failure to distinguish between forestry removals that help the planet meet all IPCC goals, which does not mean selectively taking one goal (2050 net zero) which is only to be understood and achieved as a stepping-stone to 2100 goals.
 - (d) Creating new credits under the CCR without matching them with integrity removals.
 - (e) Litigation.
 - (f) Changes to the National Environmental Standards for Plantation Forestry.
 - (g) National Party announcement 12 June 2023.

What the goals of the Draft should be (and are not)

¹² Meaning having the potential to drive down the NZU price.

143. The goal should be to recommend amendments to the ETS so it achieves targets of both incentivising emission reductions and afforestation, the latter on proof it will not die or otherwise reverse carbon removals before 2100. Both are equally important to reaching 2100 IPCC goals (*i.e.*, to stop recognising phantom credits).
144. Suggestions that forestry can be incentivised outside the ETS are disingenuous unless there are clear guidelines on who will pay and how for those incentives (see Part L below). But for the prospect of NZUs, log prices are such that forests would not be planted, or at least not the non-production forests which are necessary to ensure carbon sequestered is not released back into the atmosphere before 2100.
145. There is little prospect of the Government substituting the return from NZU sales with cash compensation. The CCC should accept this instead of raising this unlikely prospect without analysing it (other than calling it a political issue) and then using this unlikely suggestion to make recommendations that essentially prioritise emission reductions at the expense of equally important permanent carbon removals because, it supposes, other ways will be found to continue to incentivise forestry. They will not unless the Government chooses to use most or all its auction proceeds for forestry grants.
146. Noting the absence of any modelling or serious discussion on how permanent carbon removals can continue to be incentivised within the ETS while at the same time incentivising emission reductions, the Draft then compounds this omission with a range of curious suggestions on how permanent carbon removals can (and therefore one surmises, should) be incentivised outside the ETS. In essence these require some or all carbon removals to be removed from the ETS (e.g., half their value is the same as removing 50% from the ETS), which is simply reducing their value as an incentive to continue to remove carbon from the atmosphere and not be felled.
147. An analysis of these curious suggestions appears at Part L below. The Draft acknowledges the need to carefully think “through amendments to the NZ ETS [including] potential impacts on groups affected by the NZ ETS, including those who have made investment decisions” (Draft p 54) but doesn’t refer to this again. Clearly it is intended that someone else will fill in the gaps here because the CCC has not.
148. With respect, there are unanswered questions around the quality of the reasoning in the Draft around Figure 4.4; the conclusions that are reached on it; the lack of appropriate modelling of alternatives to continue to incentivise both emission reductions and carbon removal activities within the ETS, and the selective reliance on assumptions when it suits but not otherwise. An example of the latter is assuming that a way can be found to “provide durable incentives for net carbon dioxide removals by forests ...”, because they will be separated from forestry (Draft proposed recommendation 3 p 54). But why make this assumption without analysing and modelling changes that can be made to keep forestry incentivised within the ETS?

There is no apparent mention in Figure 4.4 of abolishing the CCR and the impact this would have on it.

149. The CCR was intended to control price increases above what was considered acceptable. The context was always likely conceptually flawed in the context of what the ETS was designed to achieve, namely, to raise the price of carbon to send signals to consumers to look for lower carbon intensive goods and services.
150. Operating as it was intended to before December 2022, the price of carbon already exceeded the CCR with the result the CCR was triggered and more NZUs were created. Those NZUs were meant to be backed by international purchases of high-quality carbon credits (units trading on the EU ETS are currently NZ\$160-e). To date the Government has made no attempt to match “paper” NZUs with high quality ones. The point here, however, as the CCC has pointed out in the past, is that the CCR was only intended to be invoked in unusual circumstances, but by 2022 was already obsolete because prices exceed it.
151. It is ironic that one way to incentivising both emission reductions and emission removals within the ETS is for the CCC to re-recommend new settings be adopted to effectively prevent what have been to date “phantom” credits being generated by the Government because of the CCR being breached.
152. This recommendation should have been accompanied by modelling to ascertain what the effect of abolishing or punting the CCR into the future would have been on the ability to continue to incentivise emission removals within the ETS.

There is no mention in Figure 4.4 of reducing the existing stockpile of NZUs and the impact this would have.

153. The CCC does not address this. That is a shame because the effectively disposable stockpile in the main consists of NZUs which remain available because emitters have gamed the system by acquiring cheap and usually fraudulent credits in the past.
154. This is explained in Appendix Two which looks critically at how the existing stockpile was generated.
155. There is no equitable basis on which emitters should be allowed to retain the benefit of these dubious credits at the expense of foresters who are making meaningful contributions to carbon removals. It is not the latter that should bear the cost of over-supply of credits (if this is indeed an issue) but the former.
156. Again, no modelling or analysis has been undertaken by the CCC leading to guidelines that will more equitably distribute the remedial consequences of over-supply of NZUs.

There is no mention in Figure 4.4 of what happens if agriculture is brought into the ETS.

157. It is generally understood the Government is leaning towards a separate emission reduction scheme for agriculture. However, recent indications are that farmers have not been able to recommend what an alternative to the ETS should be, so that necessary legislation can be passed in 2023. If it is not passed agriculture will come into the ETS and the Government is not ruling out a tax on fertiliser as an interim measure. Of course, the latter may simply be a stick to get farmers to agree to a non-ETS scheme. However, if agriculture did come into the ETS that would eventually double the NZUs required. No modelling has been done on either of the following, each of which could maximise incentives for emission removals to be continued under a trading scheme:

- (a) The impact on either the ETS (or a “sister” scheme applying only to agriculture) if a major trading partner refuses to accept, or penalises, agricultural products that do not meet domestic emission reduction rules. This is the elephant in the room with agriculture and no-one is addressing it. But the CCC surely has an obligation to do so given the reasonable likelihood it will occur¹³ and the disastrous consequences for New Zealand if it does. Will forestry removal units have a role to play here and if so, why hasn’t that been modelled before assuming the value of those removal units must be reduced?
- (b) Is there a role for emission removals to play in any agriculture emission reduction scheme, and if so, what might it be in terms of continuing to incentivise forestry removals?

There is no mention in Figure 4.4 of refusing to allow “phantom” credits for new plantings to enter the ETS.

158. As noted above, “phantom” credits describe non-permanent forestry credits that are recognised before 2050 on the grounds that removals are certain until at least 2100 (emissions are) but in fact there is no basis for making this assumption and a reasonable risk they will be reversed before 2100. These have been explained in Part A.

159. The risk of reversal of carbon removals with existing forests is only exacerbated by low NZU prices for forestry carbon removals, or taking forestry out of the ETS altogether, because the low deforestation charges will encourage clear felling when timber prices rise. Even if forests are not cut down if forestry carbon removal pricing falls much further, there is still an incentive to sell accumulated NZUs at low prices because any deforestation cost will be met by all or some of the value of the timber on clear felling.

There is no mention in Figure 4.4 of litigation impacts.

160. What will the effect on Figure 4.4 be if, e.g.:

- (a) a New Zealand court or regulator rules that it is a breach of Fair Trading or Market Conduct Acts to claim forestry removals are green when there is no proof that removals will not be reversed before 2100?
- (a) a European Court or regulator rules that New Zealand’s compliance with IPCC targets is insufficient and inconsistent with EU regulations.

¹³ Compliance with domestic (i.e., foreign) environmental standards is included in the latest trade agreements New Zealand has signed and being penalised for not doing so will not give rights under the GATT.

(c) Paris Agreement countries decide to ban offsetting in calculating NDC totals.

160 These have been mentioned above in different contexts.

161 One type of litigation not mentioned elsewhere, but could, if successful, have a profound effect on not only Figure 4.4 but the entire Draft is if the CCC is judicially reviewed for not discharging its statutory duty to give independent and *expert* forestry advice. It would be difficult to prove that the forestry analysis in the Draft meets the standard required to be expert.

Changes to the National Environmental Standards for Plantation Forestry.

161. On 113 June 2023 the Government announced that the Resource Management Act, which has not previously applied to “shut the gate” forests, would be amended to do so.¹⁴ While this occurred after the Draft was published the Government had indicated it would make the change in 2020, so it was foreseeable. The proposed amendments have not been tabled, but at present exotic plantation forests are a discretionary or restricted activity where there are impacts on watercourses, coastal areas, and water tables, specified native birds, major earthworks, noise etc.

National Party announcement

163 On 12 June 2023 the National Party announced that if elected they would stop further conversions of productive agriculture land to exotic forests. If elected, and pundits put this as 50/50, this policy would mean the predictions in Figure 4.4 would not eventuate.

164 The impact of these proposed amendments on future forestry plantings has yet to be modelled.

Submissions on Part E

R Create a new model for future risks considering not only the impact of the submissions in Parts A, D and E, but also the following:

- Reducing the current stockpile as set out in Appendix Two.
- Abolishing the CCR.
- Model the possibility that New Zealand will be required to include a large part of agricultural emissions in the ETS because of trade barriers and giving this a probability factor.

14 Changes to the National Environmental Standards for Plantation Forestry. The key definition is “plantation forest” in s. 2 Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017. Previously the regulations had not applied unless a forest “has or will be harvested”

- Rejecting averaging accounting as unnecessary and unlikely to help achieve statutory goals.
- Considering litigation risks and outcomes.

S Recognise that both emission removals and emission reductions can be incentivised within the ETS, this being consistent with the Act, and desist in erroneously asserting they cannot.

T After doing the above, create a model to determine if these steps can both incentivise carbon emissions and carbon removals within the ETS, meaning treating each of have equal value in reaching the 2050 Carbon Zero Target.

DRAFT

Part H: Why we are stuck with phantom forestry carbon credits for existing forests.

165 There is no reason why we should tolerate phantom credits for new plantings. It doesn't help the planet for the reasons in Part A.

166 The position in relation to existing forests is, however, balanced by several other considerations, economic and equitable, which probably require we "hold our noses" and continue to recognise phantom credits for existing plantings.

The economic costs if we stop recognising them.

167 We are talking mainly about forests that exist under stock change accounting. Most forests that are in the ETS are subject to the stock change rule. These are forests that have been planted since 1989 and have not elected to be subject to the averaging accounting regime. These forests have deforestation liabilities and taking them out of the ETS or statutorily reducing the value of carbon removals relative to emission reductions will likely lead to increased deforestation, thereby leading to increases of emissions after 2050, which will likely not allow post 2050 goals to be reached.

168 As explained in Part D, the effect of taking these existing forests out of the ETS could be abandonment. In many cases that will leave the Government with a possible unfunded exposure which at today's EU ETS price would be in the range of NZ\$320,000/ha.

169 In addition, in relation to such forests it is also necessary to bear in mind that taking them out of the ETS or reducing artificially the value of carbon removals within it, will lead to more felling, not less. At least some foresters will be able to fell for sufficient to meet deforestation costs, thus avoiding future forestry costs. The land could only be used for low return grazing (full of stumps and forest debris) but that might at least meet rates *etc.* and be an alternative to abandonment.

The equitable aspect

170 Other than for age class production forestry, forests have been planted or maintained because of expectations, induced by successive governments, that they can be paid for, in part at least, by NZUs, and on that basis have often entered long term loans, forward sales of carbon, and the like. In a nutshell politicians got foresters into this mess and somehow the Draft assumes it is foresters who bear the costs of poor prognostication.

171 There has been an economic (in the sense of social) contract between foresters and the Government. The Government wanted forests to be planted to meet NDC goals. It wasn't prepared to give money, but it gave NZUs which foresters could monetarise by selling them to emitters. The Government in doing this was aware that forestry is a long-term commitment and that foresters were making investment decisions based on the availability of these NZUs. And it knew it was inducing them to make long-term commitments because that was of economic benefit to the Government, by reducing its financial exposures under the Paris Agreement (or earlier Treaties).

172 Secondly, because foresters have entered these long-term commitments, based on the economic contract with the Government, many third parties have been implicated in that economic contract. There needs to be recognition of the legal and practical difficulties of unwinding existing funding arrangements, forward sales, take-off agreements, and commitments to forestry expenses induced by the economic contract.

- 173 The Government has already addressed these issues when bringing in carbon accounting and decided that it was too difficult to change the rules for existing forests given the impact on third parties. No doubt similar submissions will be received again.
- 174 There is likely to be far fewer forests subject to averaging accounting, because it has only applied for 3 years. However, similar issues may apply as do to stock change forests, *e.g.*, funding, investor inducements, and forward contracts, based on the encouraged expectation of future NZUs.

Possible litigation

- 175 Part D has already canvassed the litigation which taking forestry out of the ETS will generate, and which the Government is unlikely to avoid. Similar litigation can be envisaged if forestry remains in the ETS but all phantom credits, and not just those for new forests, are no longer recognised.

No exemption for overseas forests for phantom credits

- 176 Existing forests planted overseas, even by New Zealanders, were not planted subject to an economic contract with the New Zealand Government but under the laws of a foreign jurisdiction and subject to the risks of law change in that jurisdiction.
- 177 Overseas forests are not in the ETS and are unlikely to be. That effectively prevents the issue arising. While there is a mechanism emerging under Article 6.2 of the Paris Agreement (Internationally transferable migration options, or ITMOs, with a corresponding adjustment to add CO₂-e purchased to the NDC of the buying country and deduct it from the NDC of the selling country), the final rules have not been worked out. No-one has truly grappled with the risks involved here. Gold Standard has suggested rules that freeze accounts if outcomes are not what is expected, but by then the horse has bolted. With forestry sequestration, there may be no way to prevent sold CO₂ sequestration (ITMOs) being reversed before 2100 when these contracts are only intended to be for 6 years and even within that period a government can *e.g.*, turn a blind eye to unlawful logging.

Submissions

- U On balance, phantom carbon credits currently allowed to existing forests should for economic, equity and litigation reasons, continue to be allowed.

Part I: The possible NZ\$60 billion hole if we follow the CCC's recommendations on forestry.

- 178 This hole may appear as follows, and it follows the broad outlines of Draft Figure 4.4.
- 179 The Draft assumes what NZUs we will have if forestry continues to be planted as it was in 2022. By 2037 we will have more NZUs than we need so we will meet 2050 Net Zero Carbon, even if we ruin the ETS in the process.
- 180 But, as Part D explains, even if forestry remains in the ETS, and certainly if it does not, foresters are going to stop planting if the assumptions at Figure 4.4 are accepted. That likely means that the assumed volume of NZUs by 2037 will not be there.
- 181 We can manage this by leaving forestry settings under the ETS unchanged but refusing to allow new forests to claim phantom credits, and by taking other steps such as reducing the stockpile when it has only grown because emitters have been gaming the system. Such steps would give foresters confidence that the assumptions in Figure 4.4 are incorrect, and this would continue to incentivise both removals and reductions within the ETS without any oversupply occurring.
- 182 If the CCC doesn't recommend these obvious, and probably mandated, steps, and the Government doesn't accept them, then what is the effect of forests not being planted?
- 183 Based as much as is possible on Figure 4.4, removing new plantings will mean that we will go from a projected oversupply of NZUs to an undersupply. We must appreciate of course that removals can occur both within the ETS and without, and both will count to the 2050 Net Carbon Zero target, but foresters are making decisions whether to plant, and that impacts on both forests within and outside the ETS.
- 184 In Figure 4.4 the difference between the projected emissions line and the supply of NZUs through auctions and free allocations is met by forestry removals. If you were to make reasonable assumptions about the amount of forestry removals if no new forests are planted and what is needed until 2050 to meet net zero carbon, it may average 15 million tonnes p.a. shortfall in removals through to 2050. There are many assumptions here, but it's for the CCC to provide the necessary figures to refine these.
- 185 15 million tonnes for 25 years represent a 375m tonnes deficit, formerly made up by assumed uncontrolled forestry plantings. At the current NZD equivalent of the EU ETS trading price (NZ\$160), that is NZ\$60 million dollars. That is in 2023 dollars.

- 186 After 2050 the figure is probably bleaker because forests that have been abandoned will start to die, at least if they are *pinus radiata* on unsuitable land, for reasons explained in Part D.
- 187 These figures for Crown exposure do not include litigation awards, if any, made against the Crown for taking forestry out of the ETS.

Submissions

- V Model the costs of the Draft's forestry recommendations considering the rational economic decisions foresters will make if the assumptions in Figure 4.4 are accepted as possible and factor those into new recommendations.

DRAFT

Part J: Apparent bias against forestry

188. Apparent bias is not an allegation of bias. It is an allegation that taking the Draft as a whole, a reasonable person would conclude that bias might exist.
189. Apparent bias may *e.g.*, be made out here because:
- (a) The Draft has set up straw arguments without fairly looking at the consequences of doing so, and/or
 - (b) The Draft has unfairly denigrated the role of forestry in meeting the 2050 Net Carbon Target.
190. An entity charged with giving “expert” advice should not leave itself open to the charge of apparent bias.
191. The following are some examples of apparent bias, accepting many repeat, in a different context, what has already been traversed above:
- (a) Failure to give full weight to the fact, sometimes acknowledged, that New Zealand needs to both reduce emissions and remove emissions. The world needs to do that too to meet IPCC targets. Given failures to meet reduction targets to date it is imperative that carbon removals continue or are even accelerated, providing of course there is proof that they are permanent removals, i.e., will not be temporarily removed but put back into the atmosphere before 2100.
 - (b) Deciding, without explaining why, forestry cannot be allowed to destroy the ETS even though forestry may help achieve the 2050 targets. As the Draft points out, the ETS is a tool to achieve the 2050 Net Zero Target. So, why does the draft assume it must be preserved if it encourages enough forestry to achieve that target, albeit one consequence is the ETS tool no longer drives decarbonisation?
 - (c) “Concluding” there is no way to keep NZU prices up other than penalise forestry. This follows from the unexplained conclusion that forestry prevents the ETS drive 2050 Net Zero Target, even if it independently allows us to achieve that. Even if this is overlooked, why does the Draft p 46 conclude that the Government must make a choice between forestry (leaving it in the ETS) or the proper functioning of the ETS (supposedly only achieved by taking some forestry out of the ETS). Why can they not both be accommodated within the ETS? The Government and the CCC have a choice to find ways that incentivise both within the ETS. There is a way to do this, the basis of this submission (not allowing forests to be awarded for phantom credits, those that cannot be proved will not be reversed) and probably an option compliant

with the statutory purposes of the CCC. By stating that the choice is between focussing on gross emission reductions and increased removals with limited reduction in gross emissions, the Draft displays a bias (conscious or not) against obvious solutions that do both.

- (d) The Draft refers to the need to consider principal risks and uncertainties associated with emission removals and the main one of these, curiously not referred to, is including in the ETS forests which are likely to be carbon negative before 2100, either by earlier felling, or mortality. Recognizing this and removing future forests in this category from the ETS is entirely consistent with the Act and the Climate Change Response Act 2002.
- (e) The Draft appears to accept phantom credits (new plantings that cannot prove they will not be reversed before 2100) as a basis for suggesting permanent removals be penalised. Why not expose phantom credits as a fraud on the planet and not recognise them under the ETS? This could include not only removals that will likely be reversed but the use of phantom international credits before they were banned in 2015 to enable the storing of NZUs that could be used later.
- (f) Assuming foresters will continue to plant even though they are now told their credits must be taken out of the ETS by 2037 or at least diminished in value.
- (g) Picking out forestry as the villain of future supposed booms and busts in ETS carbon prices (which will not occur if only long live removals are recognised, as in California), is not balanced against any discussion of factors which may influence future carbon pricing. The CCC appears to have identified a supposed problem with forestry remaining within the ETS, which can easily be remedied within the ETS, but the CCC erroneously says cannot, but failed to identify other risks that, if they eventuate, will support higher future carbon prices.

192. The greater the number of apparent biases, the harder it is to avoid it existing.

Submission

W Take all examples of apparent bias out of the proposed guideline unless they can be justified.

Part K: What is going on here?

193. The CCC clearly wants to downgrade the role of forestry in the ETS. Not only is it proposing to make such a recommendation, but the Draft evidences an apparent bias towards doing so. None of the reasons given in support of such a recommendation make sense and the stronger reasons against doing so are avoided, leading to a false conclusion that there is no alternative. Because of this, the Draft can be seen as somewhat of a sell document to support a desired outcome (what that might be is considered in Part L below), not unbiased expert advice.
194. There must be a reason for this. One hopes the CCC's reasoning just followed poor modelling of Figure 4.4. That seems unlikely as that would not explain the one-sided arguments that then followed in defence of Figure 4.4. If, however, this is the reason, and one hopes is, the CCC will confirm this by withdrawing its forestry recommendations.
195. If the CCC does not withdraw them, we need to shadow box the real reasons for the CCC's wanting to downgrade the role of forestry in the ETS because it is not ready to disclose it. If we understood what ulterior goal the Draft was seeking to achieve, and why, we could more fairly assess those goals without having to meet the Draft point by point. The necessary corollary of not disclosing an ulterior goal is of course to have invited a great deal of effect from submitters that is unlikely to be relevant.
196. One possible reason for wanting to downgrade forestry in the ETS could be a suspicion that offsetting will be banned under the Paris Agreement. This is fair enough if it exists, but why not say so. Clearly the Government wouldn't want to raise this, but the CCC is required to if it exists.
197. Offsetting forest sequestration that cannot be proven to remain sequestered until 2100 is a fraud on the planet. Counting emission removals against 2100 targets when it is known some, if not most, will be reversed before 2100, pushing the IPCC 2100 target further from reach. cannot be justified.
198. New Zealand may be the only country presently and significantly offsetting in this way. If there was a ban, New Zealand would need to increase remission reductions dramatically to meet our NDC obligations. Everything the CCC had recommended to date would be instantly obsolete.
199. Further, based on Draft Figure 4.4, imposing such a ban in 2025 would require emission reductions equivalent to at least 375 MtCO_{2e} before 2050 (considering auctions and free allocations), which at the current EU ETS price of NZ\$160/e/tonne is NZ\$60 billion over the period to 2050.

200. Another possible reason for wanting to downgrade forestry in the ETS is to protect productive agricultural land from conversion to forestry, to protect export returns and the character of rural communities. But as noted above if this truly is a climate change related concern where are countervailing arguments about the deleterious impact of doing so on climate change; the long-term costs of that on the special interest groups intended to be “protected” and the trade barriers likely to be erected because serious climate change has been watered down?
201. A further possible reason for wanting to downgrade forestry in the ETS might be a bias against the profits a few businesspersons make in planting forests for government grants. If so there needs to be a debate about how successive Governments could in the past (and will in the future) avoid costs under the Paris Agreement if they had not incentivised, by grant, the growing of trees. These grants have cost the Government nothing. It is emitters who have paid. The fact is we need to both incentivise reductions in emissions and their removal to meet the 2050 Net Zero Target. Profit envy has no role to play.
202. Or does the CCC believe the Government can plant trees overseas, as the latter has suggested,¹⁵ or buy ITMOs at a lower cost than incentivising forestry in New Zealand? The Draft does not refer to this so probably it rightly regards this scheme as only relevant to NDC accounting and not reflective of what we need to do to show that by 2050 New Zealand emissions match New Zealand reductions and removals. Planting trees overseas and somehow claiming emission removals belong to New Zealand is of course fraught with difficulties. For example, are the plantings in poor rule of law countries where there is no guarantee there will be no removal reversals before 2100 (*e.g.*, by illegal logging).
203. One expects the CCC has not become ensnared in the Government’s apparent crusade against new exotic forestry plantings (see announcement 23 June 2023 against farming land conversion to forestry). That would be a breach of its statutory duty to be independent and would expose it to judicial review if it had done.
204. Until the CCC explains its motives for wanting to downgrade forestry in the ETS we simply do not know what they are. The reasons given do not do that.

Submissions

- X If the Draft’s reason for wanting to downgrade forestry in the ETS is flawed modelling, it withdraws its forestry recommendations.

¹⁵ Until more definite plans are unveiled the CCC has set the target for overseas purchases (ITMOs) at zero.

Y If it is not, the CCC must disclose what is behind it wanting to downgrade forestry.

DRAFT

Part H: Complementary Policies

205. These are set out at Draft pp 61-62 and then again at pp 63-66.
206. Before considering the Draft's suggestions two points to note:
- (a) We do not need complementary policies if the CCC's modelling at Figure 4.4 is correct. The ETS would have done its work to achieve 2050 Net Zero Targets, even if it no longer of further use because of there will be a surplus of NZUs.
 - (b) If the CCC recognises that non-permanent forests need to be proved to be permanent to be eligible for NZUs, because forests that are cut down before 2100 reverse temporary removals, the only complementary policy response is to encourage such forests. Rising NZU prices because of such restrictions will encourage this, but planting of native forests may need some encouragement outside the ETS.

As a result, Complementary Policies may have little role to play. They cannot play the major role the Draft suggests they can for the reasons below.

207. The Draft is very vague on what Complementary Policies should be, although it is much bolder, albeit mistaken, in thinking they are necessary.
208. For reasons above, long term sequestering forests should remain in the ETS. Whether that fixes the CCC's issue with boom-and-bust carbon pricing is yet to be modelled. If it does not, complementary policies may be required to encourage more planting, not to take forestry out of the ETS but to encourage planting, particularly of natives which appear to require greater incentives than the ETS provides, outside of it.
209. It is too early to speculate what such policies will need to achieve, if ever required, but part of that will require sensitive analysis around tree species, sites and forestry outcomes of the kind conspicuously lacking in the Draft.
210. The Draft adopts a scattergun approach to defining so called complementary policies. As far as can be ascertained at Draft pp 61-62, and the concept is not developed in any practical way, emitters could be penalised for GHG emissions, presumably by a tax or levy, which would then be passed onto consumers. The ETS would remain but only to include forestry and only as a "backstop" to reduce remaining emissions after other regulations have had effect.

211. At this point we must of course suspend the reality that if the ETS will deliver us 2050 Net Zero Target then why fix it?

How Complementary Policies came to prominence when the Draft concludes we will meet 2050 Targets anyway.

212. Figure 4.4 Draft essentially drives the Draft recommendations regarding forestry. Having regard to Figure 4.4 the Draft concludes “we judge there is little alternative to” amending NZ ETS incentives. “Based on current information, strengthening complementary policies [read taking forestry out of the ETS] appears to be the only other viable option to give increased certainty about the achievement of gross emissions reductions”. Figure 4.4 therefor demands attention, and it gets it in Part A above.
213. But as discussed at Part A, Figure A is misleading and all the “conclusions” the Draft reaches by relying on it must be abandoned. This is quite apart from the CCC reaching the conclusion that no other viable option exists to Complementary Policies when clearly at least one does. That is refusing to register new plantings under the ETS if they cannot prove there will be no reversals before 2100. That conclusion is a *non-sequitur* and displays either (conscious or unconscious) bias or paucity of lateral thinking.

California is not an example of complementary policies, and the Draft is wrong to say it is.

214. California is cited as an example that could be followed. That is hardly a good example in the context of supposedly “fixing” the issue of forestry carbon removals driving down the cost of carbon. For a start the CARB is a cap-and-trade mechanism like the EU ETS. It is not a complementary policy to one. There is limited leakage by granting forestry credits, like in New Zealand, under the CARB, but to qualify it is necessary for forests to be planted for 100 years.¹⁶ The very approach taken in these submissions. And here is the irony: if the California forestry rules were adopted here forestry could remain within the ETS without driving down the price, the very problem that the “California” model is postulated to address.
215. The “California” model is therefore a solution in search of a problem, the more so because it is wrongly represented as a complementary policy to an ETS. Forestry leakage was allowed in California not because there was a problem with too much forestry, as there allegedly is in New Zealand, but for collateral reasons of provable community benefits, providing qualifying offsets were limited to between 4 and 8%. Unlike New Zealand, California does not allow offsets against the US NDC, and therefore saw no need to incentivise the practice.
216. The Draft then apparently abandons the suggestion California be followed, and at pp 63-66 suggests a range of possibilities that might be.

¹⁶ CARB requires rigorous third-party verification of offset projects to ensure that their reductions are real, quantifiable, permanent (for a minimum of one hundred years for forest projects, for example), and additional – that is, beyond what is legally required and what normal practices are for any given project.

Maybe not California, but some other curious suggestions (bearing in mind there is likely no problem)

217. Limiting the proportion of forestry units that emitters can surrender (Draft p 64).
- (a) This effectively makes a proportion of forestry removal units valueless relative to the price of other NZUs.
 - (b) As the Draft accepts, it raises the same issues regarding existing forests as taking existing forests out of the ETS altogether, namely the impact on third party funders, forward buyers, shareholders, or other investors *etc.* There are also equity considerations around emitters buying forward from selected foresters leaving others in the cold.
 - (c) The suggestion that limitations could apply to fast growing forests, but not slower native or other species (like Douglas Fir or redwoods) goes partly to Part A, namely only newly planted trees that can prove sequestered carbon will not be released before 2100 should be brought into the ETS. The fact is longer growing but fast sequestering species like D Fir and redwoods are necessary to meet 2050 Net Zero Target, while slower growing and sequestering natives will only help with this after 2050.
218. Introduce a minimum emissions price for emitters via an additional levy or fee, which would leave forestry NZUs undifferentiated from other units but would subject emitters to a higher incentive, even if NZU prices dropped.
- (a) This has not proven a successful model overseas. In the UK the effect has been to close fossil fuel generators to encourage wind and solar, but the “dirty”, albeit unspoken consequence, has been necessary reliance on high emitting diesel generator farms at peak load times. The same effect has been identified in other European countries.
 - (b) The Draft does not even begin to model these consequences.
219. Move forestry into a separate project-based mechanism (Draft p 65). An example given is the Australian ERF which the CCC says achieves efficiency.
- (a) Australia is a poor example, and the suggestion requires proper analysis before being raised.

- (b) The Australian scheme, still in its infancy, depends on the integrity of the projects recognised by the ERF. There is still a raging debate as to what “integrity” means.
 - (c) The former head of domestic offsets integrity council in Australia (Professor McIntosh) has called the majority of ERF schemes a fraud on the environment,¹⁷ and a recent parliamentary appointed inquiry admits there is insufficient transparency.¹⁸
 - (d) In terms of the 2050 zero carbon target and its maintenance thereafter it is unlikely many currently approved schemes would qualify.
 - (e) Australia has a different set of possible removal or denial of otherwise guaranteed emission than New Zealand, and a very high level of analysis is required.
220. Introduce an exchange between forestry and other NZUs to reduce the quantity of NZUs allocated for carbon sequestration by forests (Draft p 65). This appears to be little more than a variant at *para 217* above.
221. Reducing the ability to bank forestry NZUs by applying an expiry date (Draft p 66).
- (a) It is assumed this cannot be achieved with stock change accounting but can be with averaging accounting.
 - (b) But averaging accounting does not incentive forestry planting and replanting, simply encouraging (at the right price) investment in fast growing *pinus radiata* that will likely be felled or become carbon negative in the period between 2050 and 2100. As a result, the submission here is that new plantings should not qualify under the ETS unless permanence can be proved.
 - (c) Averaging accounting will not meet the required goal of maintaining forestry sequestration during that period and needs to be abolished.

The voluntary forestry Carbon market will not provide an answer.

222. Qualifying for forests under the ETS does not thereby qualify a forest to claim voluntary reduction units (VER) even if whether NZUs are immediately surrendered (nor if they are not). This is because to qualify under the ETS it is not necessary to prove either additionality or permanence.

¹⁷ The Canberra Times 25 March 2022.

¹⁸ Independent Review of Australian Carbon Credit Units 8 January 2023.

223. If the ETS is amended to require proven permanence, as submitted here it should be, that of itself would not allow a forest to claim VERs, regardless of whether NZUs are immediately surrendered (nor if they are not). Again, this is because to qualify under the ETS it is not necessary to prove additionality even if permanence can be proven, whereas to qualify for a VER it is.
224. The voluntary market is not just about the supply of VERs but how regulators, and consumers, each view their integrity. If they believe they lack integrity making green claims based on them will have a negative, not positive, marketing outcome and they will not be purchased. Consumer preferences and perceptions should not be manipulated by statute.
225. It all depends how consumers view claims of permanence. For example, if they believe (implied) claims that removals will not be reversed, without proof that is the case, are misleading, then credits without such proof will trade at a severe discount or not be disallowed, as it now the case in the UK and the EU.
226. That in turn will feed into regulatory action against emitters that make such claims without proof, possibly under Fair Trading Acts or Financial Markets Conduct Acts. Of course, emitters could qualify their representations to avoid prosecution, but doing so would immediately turn consumers off.
227. NZUs cannot be the basis for VERs, not just because reliance on them to support green claims will expose emitters (and their directors) to regulatory action, but also because the Government will not cancel NZUs as a result and has specifically advised it cannot guarantee they represent a reduction or removal of emissions.
228. There is no government endorsed framework to earn VERs and no guarantee any such framework could be crafted to avoid regulatory action or greenwashing claims. That requires professional advice on the application of relevant statutes. For the same reason it is doubtful that certification by New Zealand bodies, such as Toitu Envirocare, would prevent the application of such statutes. Their failure to sufficiently prove legal and silviculture longevity strongly indicate they do not so comply.
229. It is possible that VERs could escape the level of integrity required by domestic legislation but selling into countries with similar consumer and market participant laws (such as Australia and the UK) would not achieve that. Careful analysis of the laws of each country and professional legal advice would be required. This applies whether VERs were being sold in those countries or attached to New Zealand products to be exported to those countries. The latter will become particularly challenging. Not only will green representations be judged for regulatory purposes against the laws of those countries, but importing restrictions will increasingly require products to meet domestic environmental rules notwithstanding the integrity of claims made on packaging.

230. The UK advertising standards authority has very recently come out against claims of “carbon neutral” by offsetting and EU banned claims such as “CO2 neutral” or “carbon neutral” based on offsetting unless provable.
231. And finally, VERs would not provide the incentives to plant presently required at around NZ\$20/tonne.

Submissions

- Z Withdraw suggestions about complementary policies from the final guidelines.

DRAFT

Annexure One

Comparison between IPCC goals and the NZ Goals of 2050 Net Carbon Zero.

IPCC

- (a) GHG emissions to peak by 2025.
- (b) GHG emissions (other than methane) to reduce to 43% by 2030 and methane emissions by 33% by that time.
- (c) Net carbon zero emissions by 2050, for all GHG including methane [since there will be some industry groups, like airlines, that will not meet this requirement that means their emissions must be matched by removals that remain removed until 2100].
- (d) If we do the above, then no more than 1.5% average global temperature increases by 2100 over pre-industrial levels.

Climate Change Response Act (Zero Carbon) Amendment Act 2019

- (a) Net accounting emissions of greenhouse gases in a calendar year, other than biogenic methane, are zero by the calendar year beginning on 1 January 2050 and for each subsequent calendar year [“accounting” meaning New Zealand can count phantom carbon credits even though the IPCC does not].
- (b) emissions of biogenic methane in a calendar year show 10% reduction by 2030 [33% required by the IPCC] and between 24-47% reductions by 2050 [zero required by the IPCC unless matched by removals that remain removed until 2100].

Appendix Two

What can be done to reduce the current stockpile of NZUs.

1. It is widely reported that there is a surplus of saleable NZUs in NZEUR registries, estimated by the CCC in its July 2022 report to be 49.1m.
2. The ETS market mechanism is meant to increase prices over time by limiting supply, thus causing emitters to switch to less carbon intensive production because higher prices will deter consumers from buying. It is a policy that is meant to work in lockstep with the diminishing AAUs New Zealand receives each year.
3. Slimming down the stockpile will increase the carbon price. Increasing the carbon price will assist reaching the 2050 Net Zero Target, even if this also incentivises new tree plantings (of the right kind).
4. A recent market report (Jardine) advised there were four sources for the surplus:
 - (a) International offsets purchased before 2016.
 - (b) Fixed price Option elections.
 - (c) Allocation to EITEs.
 - (d) Release of two CCRs.
5. Paragraph 4 does not appear to include NZUs held back to meet future deforestation costs, but presumably these are seen as neutral as they won't be used by emitters.

International Offsets purchased before 2016.

6. Purchases of international offsets were banned after 2015. It is not hard to understand why. These were often of extremely dubious integrity and allowing their purchase for the purposes of meeting required emission reductions would have likely been deceptive and misleading conduct had it occurred in the private sector. No businessman seriously believes you can pay peanuts to get a diamond. Buyers simply shut their eyes to the fact they would never have purchased these claimed offset credits if they were having to prove their integrity.

7. Two recent Guardian newspaper articles report¹⁹ that over 90% of Amazon Forest offsets claimed by Verra, the world's leading offset provider, are worthless in terms of helping the planet. Many people have suspected this as there have been other past "scams" reported in the provision of offsets.
8. These so-called "offsets" purchased prior to 2016 to surrender under the NZ ETS were often 15 cents/tonne CO₂/e or lower. While the Government banned their purchase after 2015 emitters gamed the system by banking their NZUs instead of surrendering them, surrendering scam credits instead. So, the scam continues to be perpetuated today if NZUs are used that should have been surrendered in the past. And the Government, by refusing to step in, is likely to be seen as complicit in this continuing scam.
9. To maintain the integrity of the NZ ETS the Government should require emitters to surrender NZUs equivalent to the overseas credits they have surrendered, receiving a credit for the amount they paid for them, in the form of NZUs calculated by reference to those payments. If they paid 15 cents a tonne CO₂/e for scam credits and the current NZU price is \$72/NZU, then if they must surrender 1,000 NZUs they receive back 2 NZUs, being the ratio of \$72 divided by 15 cents.
10. Predictably emitters will complain about compulsory acquisition of rights, but they did not complain when access to international offsets was stopped, another cessation of rights, as they well knew they had acquired a windfall by gaming the system.
11. Further, it should be made clear that no international offsets can stay on a private registry account, nor the governments accounts.
12. To put this in context, the Jardine market report estimates that almost two thirds of the current surplus was created before 2015.

Fixed price Option (FPO) elections

13. This was used for 57 million NZUs, paid to substitute for the surrender of NZUs. Emitters could, between 2018 and 2021, pay a fixed price instead of surrendering NZUs to meet their ETS obligations.
14. What should have happened was the NZU held by an emitter and matching the FPO paid was then cancelled. Instead, the Government issued a NZU to itself and cancelled it relieving the emitter from the obligation to do so. This government created NZU was an accounting "nothing", so the exercise became simply one of arbitrage: emitters gave the government money to allow them to make money, after the price went up, on NZUs they weren't meant to keep.

¹⁹ February and March 2023.

15. Since the government granted a concession, allowing emitters to keep NZUs they weren't otherwise entitled to, it can take away that concession to by requiring emitters to surrender the NZU equivalents they would have had to but for the Government's prior indulgence. Or they can surrender NZUs calculated at the prevailing price when they paid the FPO amount, allowing them to keep their windfall profits.
16. After all, what the Government gives it can take away, and often does.

Allocation to EITEs

17. The Government has accepted that these allocations exceeded what was required and have legislated to reduce these.
18. The Draft makes further proposed recommendations in free allocations.

Release of two CCRs

19. The Government committed to back these up by purchases of high integrity international credits or other planet assisting activities. This has not happened. Unless or until it does the Government is simply introducing worthless NZUs onto the market. Buying high integrity international credits, *e.g.*, from the EU ETS, is currently going to cost the Government around NZ\$160/tonne. We know this is not going to happen soon, and the chances of it doing so recede as prices on the EU market increase and more phantom NZUs are introduced into the NZ ETS, forcing the price of NZUs lower.
20. Promises deferred to the future do not help the planet now, which is what the ETS is meant to do as the Government's flagship program to fight climate change, assuming they are ever kept.
21. The Ministry for the Environment has called for submissions on the retention of the CCR.