Parliamentary Commissioner for the Environment
Te Kaitiaki Taiao a Te Whare Pāremata

Submission on

Review of the New Zealand Emissions Trading Scheme Consultation

and

Redesign of New Zealand Emissions Trading Scheme Permanent Forest Category Consultation

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Parliamentary Commissioner for the Environment

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Introduction

In my *Farms, forests and fossil fuels* report,[1] I explored some of the problems that I see with using forestry as an unlimited offset for fossil fuel emissions. I found that using forestry to offset carbon dioxide emissions was a poor match given the relative permanence of carbon dioxide in the atmosphere and the relative impermanence of forestry. In addition, given the sheer quantity of New Zealand emissions there was also a high likelihood of massive tracts of land being converted to pine forests. I concluded that there is a strong case for taking forestry out of the New Zealand Emissions Trading Scheme (NZ ETS).

In 2022, I looked at how much forestry would be needed to offset warming from agricultural methane.[2] I found that this use of forestry might be less risky as the lifetime of the cooling effect of a pine production forest is similar to the lifetime of the warming effect of the

[1] PCE, 2019. Farms, forests and fossil fuels: The next great landscape transformation? https://pce.parliament.nz/publications/farms-forests-and-fossil-fuels-the-next-great-landscape-transformation. Wellington: Parliamentary Commissioner for the Environment.

[2] PCE, 2022. How much forestry would be needed to offset warming from agricultural methane? https://pce.parliament.nz/publications/how-much-forestry-would-be-needed-to-offset-warming-from-agricultural-methane. Wellington: Parliamentary Commissioner for the Environment.

biogenic methane from a herd of ruminants. It could be an innovative way to manage New Zealand's agricultural emissions although it would require detailed work to bring to fruition.

I am addressing both the NZ ETS review consultation document and the redesign of the permanent forest category consultation in the same submission. The two are interrelated. It is important that officials working on each understand and factor in that interrelationship.

Despite many countries having net emissions targets, New Zealand is the only country that has carried that focus on net emissions into its carbon price (through allowing unlimited use of forestry offsets in the NZ ETS). Forestry's inclusion in the NZ ETS is causing a number of problems:

- It makes it difficult to achieve gross emissions reductions.
- A large stockpile of privately held units makes it harder for the government to control meeting its emissions targets using the NZ ETS.
- Multiple pathways for forestry's participation, its voluntary nature (for post-1989 forests) and constantly changing rules make unit supply (and demand) and levels of afforestation and deforestation hard to predict.
- Land use change driven by carbon price-induced afforestation is reshaping rural communities.

A review of the role of forestry in the NZ ETS is long overdue.

Review of the New Zealand Emissions Trading Scheme Consultation

Including forestry was one of the major design choices made when the NZ ETS was set up in 2008. Changing those settings now, including potentially removing forestry from the NZ ETS, involves a major adjustment that should be thoroughly thought through. Unfortunately, the execution of this review is well below the standard that would be expected of a good policy process.

1. While the consultation document canvasses some of the issues around forestry in the NZ ETS, it lacks a clear analysis of the specific problem or opportunity it is looking to address. This is important because the best solution depends on the problem definition. The one provided in the consultation document (such as it is) is unclear and potentially contradictory.

    - On the one hand, there is a stated desire to change the emphasis of the NZ ETS from reducing net emissions to reducing gross emissions. This desired change is presumably based on a concern that emitters will choose to purchase forestry offsets rather than take action to reduce emissions. This concern is reasonable given that forestry is likely to remain the marginal source of net emissions reductions for the foreseeable future, preventing the carbon price rising to the point where serious gross emissions reductions are made. Whether this is a problem though depends on whether the environmental outcome sought is a real reduction in gross emissions or an accounting outcome providing a temporary climate benefit by 2050, leaving real reductions for the distant future.

- On the other hand, there is a desire to continue to use the NZ ETS to incentivise removals, presumably to ensure afforestation continues to help meet New Zealand's net emissions reduction targets.

- At the same time, the consultation document also raises the opposite concern: that targeting net emissions by continuing to allow offsetting in the NZ ETS will lead to excessive afforestation (for which read massive land use change at the expense of social and economic options).

There is no explicit recognition that the two goals of gross and net emissions reductions – at least under the current NZ ETS – are in direct competition with each other. The consultation document seems to prejudge the problem as being a desire to promote a low-cost solution to emissions' mitigation (afforestation) without being as frank as it could be about the costs (massive land-use change extending well beyond 2050) or the risks of not incentivising gross emissions reductions. Without a clear problem definition it is impossible to set out a clear path ahead by supporting a particular option. Whether or not I agree with any of the options is a moot point – for serious public policy matters, specifying the problem is an important precursor to any solution.

2. Like any market-based mechanism, the effectiveness of the NZ ETS relies on providing adequate certainty to investors. This is especially relevant to forestry investments given the long timeframes typically involved. Some upheaval is inevitable when the fundamental design principles of a scheme that is the creation of public policy are placed in question. However, in my view the uncertainty created by this consultation has been larger than necessary and could harm the credibility of the NZ ETS in the longer term. A clearer problem definition and more detailed analysis of options, including the transition to any new system, would have helped reduce this uncertainty considerably. In the absence of these fundamental details, it is impossible to support any of the options provided.

   As an aside, the long-term credibility of the NZ ETS would also be improved by ensuring that the phase-out of free allocations for emissions-intensive and trade-exposed (EITE) industries continues and decisions are finalised on how to price short- and long-lived agricultural gases (i.e. through He Waka Eke Noa, or the NZ ETS or another mechanism). As pointed out in previous PCE submissions these exemptions cast a long shadow over the NZ ETS because the rest of the country needs to reach net zero in the 2030s to allow them to continue.[3]

3. Consulting on an NZ ETS review *and* redesign of the permanent forestry category at the same time increases the complexity of the exercise due to the number of possible permutations in play. This number becomes even larger when considering Cabinet's recent decision to bring other forms of sequestration into the NZ ETS and float a potential biodiversity credits system. It is unfortunate that the permanent forestry category was opened to planting in January 2023 without rules in place to ensure that it is effective in both encouraging afforestation and managing the significant risks those forest pose.

[3] PCE, 2023. Submission on the Climate Change Response (Late Payment Penalties and Industrial Allocation) Amendment Bill. https://pce.parliament.nz/publications/submission-on-the-climate-change-response-late-payment-penalties-and-industrial-allocation-amendment-bill.

Clarification of the problem/opportunity definition and what that implies for solutions

As noted above, the consultation document devotes insufficient attention to the problem, or the opportunity, that the review is aiming to address. In the absence of a clear problem definition the proposed options lack sufficient detail on which respondents to this consultation can rely.

In this absence, I lay out some thoughts on both potential problem definitions and potential solutions below. There are many different problems at play here and it will be very difficult to solve them all. The Government needs to carefully consider what it believes to be the crucial issue.

Problem definition 1: Incentivising gross emissions reductions and carbon dioxide removals using the same policy instrument makes the level of both difficult to control. This lack of control leads to uncertain or perverse outcomes.

Whether you think the NZ ETS should primarily deliver gross emissions reductions or you think there should be more control over the proportion of gross versus net emission reductions, the issues are similar.

The problem

Current NZ ETS settings favour net emissions over gross emissions because of the relatively low cost of abatement through afforestation. It is cheaper to purchase forestry offsets than reduce emissions in many situations. In those cases, afforestation is a rational business decision, at least in the short term. Some will claim that unlimited offsetting of emissions is not a problem. That is certainly the case if the outcome sought is an accounting one and a temporary fix.

However, forestry is like a climate credit card – we can get the benefit now, but it needs to be paid back in the future, with interest. While the argument that relying on cheap forestry now keeps the option open to adopt cheaper mitigation technologies in the future might make some sense, it is a risky strategy. This is how the original decision to adopt a net approach in the 1990s was rationalised – forestry would 'buy time' while awaiting low emissions technologies that others would develop. A generation on, it is hard to see what we have 'bought' with that time.

Under current settings, the Government is wanting emissions prices to climb higher to incentivise businesses and households to innovate and reduce their emissions, while at the same time welcoming forestry planting that will enable us to meet our 2050 target and emissions budgets. It is difficult to achieve both these goals simultaneously under current NZ ETS settings.

Potential solution

Perhaps the best way to solve this problem is to remove forestry from the NZ ETS and incentivise it using a separate mechanism (i.e. option 4),[4] as I have previously proposed (albeit for different reasons). My main concern with this approach is the increased complexity, investor uncertainty and scope for bureaucratic control that this option creates.

For those reasons, any proposal to remove forestry from the NZ ETS would need to be fleshed out in much greater detail, with much more thought given to how to grandparent or transition existing forestry participants. If the result of the consultation is that this is indeed seen as the agreed problem, it will require another round of consultation to come up with an appropriately detailed solution. This will only prolong the uncertainty around the NZ ETS.

If forestry were to be removed from the NZ ETS the following principles would be important:

- The transition from current settings to new should **honour the expectations of foresters currently in the NZ ETS**. One way to do that would be for the forests that are currently registered to continue to be used as offsets in the NZ ETS as per the current system. This transition would take decades but it is an important principle that rule changes should not apply retrospectively. We must retain investor confidence in environmental market mechanisms.

- Removing forestry from the NZ ETS would mean that auctions become a more significant source of unit supply into the NZ ETS market. The Government would have to decide how much of that auction revenue, or other funding, it wanted to expend on afforestation. The Government would need to **provide some long-term certainty over unit supply, including the expected quantity of credits that will be auctioned, and any price stabilisation mechanisms that would be put in place**. The Government has done this recently by accepting the Climate Change Commission's recommendations and future governments should continue to do so unless there are very clear reasons not to.

- **Provide investment certainty to forestry operators into the future**. This means giving clear and credible signals over the quantity of carbon that will be purchased and any environmental co-benefits the Government will prioritise in addition to sequestering carbon. I would encourage a tendering process that considered impacts on the local landscape, climate change adaptation, biodiversity and water quality. To do this well, however, would require high quality, granular data contextualised at a local level. For example, local areas need access to high quality physiographic maps of their soils and erosion risk. More research is also needed on the risks and benefits of alternative forestry species and management regimes, and how these compare to the status quo (clear-felled radiata pine production forests). Consideration of social and cultural benefits and impacts is also needed.

[4] Create separate incentives for gross emissions reductions and emissions removals. MfE, 2023. Te Arotake Mahere Hokohoko Tukunga Review of the New Zealand Emissions Trading Scheme. Wellington: Ministry for the Environment.

An alternative solution would be to limit the percentage of forestry units that could be used by emitters to meet their obligations (i.e. a subset of option 3).[5] This would give much more control over delivery of both gross and net reductions. The percentage could be adjusted relatively easily over time if the Government decided the NZ ETS needed to deliver either more gross reduction or more net reduction. Depending on the percentage set, there may already be sufficient forestry units in the NZ ETS to meet demand in coming years. The downside with this approach is that it would reduce forest planting long term, probably necessitating the creation of a separate afforestation scheme to meet our international obligations. There would be nothing to prevent this happening. While there would be some additional complexity and confusion of running multiple afforestation schemes in parallel, it is not unprecedented as we had and have a number of afforestation schemes outside the NZ ETS.

Unfortunately, the Government has never been clear about how much it wants to meet its targets using gross emissions reductions versus net reductions. This is a precursor to being able to structure the NZ ETS to deliver both gross and net reductions in the desired proportions. I am making a recommendation to that effect in my forthcoming review of the first emissions reduction plan.

Problem definition 2: Massive, permanent land use change driven by the cost of reducing emissions from activities that have no connection to the landscapes being planted will foreclose options that we may live to regret.

The problem

The spectre of landscapes covered with pine trees whose embodied carbon must be maintained *in perpetuity* has been raised by some, including myself, as a risky bet for the environment and one that forecloses many future options. Like most good slogans, "the right tree in the right place" contains an element of truth but is not a substitute for a clear way forward. The main implications are the loss of agricultural land, impact on rural communities and tangata whenua, and loss of option values to future generations who may need access to land for other uses in addition to the need for ongoing sequestration to offset truly hard-to-abate emissions. I am yet to see a comprehensive analysis of the scale of this risk. Ideally, such an analysis should go out to at least 2100 as New Zealand will need not only to reach but maintain net zero emissions of long-lived gases post 2050.

Forests only sequester carbon while they are growing, but the land needs to stay in forest indefinitely. That means that if we delay gross emissions reductions we will need to continue locking up more and more land in forestry. This problem needs to be balanced by the need to restore permanent forest cover to erosion-prone land for which there appears to be no realistic alternative use. While native trees may be the ideal for this purpose, I do not think we should rule out using exotics where appropriate to the local landscape. We need to be pragmatic and clear about what we are trying to achieve and the risks and benefits of different afforestation options.

[5] Strengthen incentives for gross emissions reductions by changing the incentives for removals. MfE, 2023.

Potential solutions

There are a number of ways to address this issue:

- Allow landowners to tender for the right to enter the NZ ETS (or if forestry were removed from the NZ ETS, tender to receive forestry subsidies) based on certain conditions. This mechanism could be used to control the rate of land conversion.
- Limit the percentage of forestry units that could be used by emitters to meet their obligations. While this would control the quantity of forestry, it would not control where forestry goes.
- The Government could also opt to solve this problem with a regulatory response by working with local authorities to zone the land as being appropriate for different types of forestry. While this is ostensibly the approach already being taken by this Government (via local authorities) and foreshadowed by the Opposition's proposed policy, I believe it could be done much more effectively (see my comments below).

Regardless of which option is chosen, there are a number of enabling investments that would need to be made to address this problem effectively.

Firstly, more central investment is needed to help local communities understand what should be planted where. For example, local communities need to understand the erosion risk of different types of forestry, as well as have better physiographic maps of land susceptibility to sediment loss. There may also need to be investment in developing markets for species other than pine, which has benefitted from large scale historical research efforts.

Secondly, to do this well there would need to be a significant investment in local capacity building (as has been proposed in respect of Tairāwhiti). Currently, the only institutions capable of undertaking this work are local authorities. In my view, to provide the enduring solutions our landscapes need, there should be a collaborative process that involves local communities and tangata whenua. Local authorities and iwi are not currently resourced to do this well. Long-term resourcing is needed to build the capacity of local institutions (e.g. catchment groups) to undertake this work. Developing this capacity could prove invaluable when it comes to addressing environmental issues aside from emissions reductions such as biodiversity, water quality and climate change adaptation. Talking about collaborative processes is easy. Making them effective is not. Local institutions would need to be able to make and enforce rules for this approach to be effective.

Cross-cutting considerations

Regardless of which problem or which solution is settled on, there are at least two critical cross-cutting considerations that should be addressed by the review: ensuring permanence; and exposing the distributional impacts both in the transition and intergenerationally.

Lack of forest permanence

We know that some of the carbon from fossil fuel emissions stays in the atmosphere for thousands of years. How can we know that the carbon sequestered in trees will do the same – because it must if the offset is to be a real one rather than merely an accounting device to fit an arbitrary deadline (such as 2050). As noted above, any forest planted for carbon offsetting needs to remain in perpetuity. It seems implausible that any government can provide such an assurance.

Future governments may decide that other land uses are more important. Fires, floods, windthrow, erosion, pests and disease pose increasing risks, especially for pine monocultures in a warming world. Insurance can play a part here (provided there is an ongoing source of revenue to purchase it) but we all know that in the case of extreme events the Government is the insurer of last resort and when its resources are exhausted, the environment itself is left to pick up the tab. Recent events in Tairāwhiti have thrown this problem into stark relief. What will happen on the land in Tairāwhiti that could be rezoned as having extreme erosion susceptibility and who will pay for it?

The 'permanence' risk may be relatively low for commercial production forests in the NZ ETS as there is an economic incentive in the value of timber for forests to be replanted. However, I am concerned by suggestions from some quarters that some of the forests that entered the NZ ETS just before the deadline to operate under the stock change rule (which was the standard before averaging was introduced) may become *de facto* permanent forests. There is no guarantee that they will be harvested and in fact with a high carbon price the incentive would be not to harvest and keep collecting carbon credits.

To address the permanence risk, a discount could be applied to monocultures such as pine to reflect the risk of fires, floods, windthrow, erosion, pests and disease. A tonne of carbon sequestered in a clear-felled pine production forest might, for example, only be worth 0.5 NZUs. Different discounts could be applied to different forest types relative to their risk.

This discounting would push up the carbon price (incentivising gross emission reductions) while still supporting removals generally (albeit less generously than at present). Such an approach could also help incentivise more diverse planting (e.g. natives) if that is a policy goal (again, the consultation document is not clear on this). There have been suggestions that natives could be encouraged through the creation of biodiversity credits but no one has yet explained what would incentivise demand for them. Without demand for the credits there will be no revenue stream to spend on native plantings.

The difficulty of applying such a discount would be accurately and fairly calculating the risk of different forestry types, particularly as it would also need to apply to other varieties of exotic forest such as eucalypts and even native forests during their initial stages. Research would be needed to find justifiable numbers. Even then setting the conversion factor would be politically contentious.

Distributional and transitional issues

The consultation document glosses over some fairly large distributional impacts. These are difficult to quantify without more detail on each of the options. These impacts require careful thought, which is one of the reasons that I believe industry operators require more detail on any options that the Government is proposing before committing to support any particular path.

If the NZ ETS forestry settings are changed, more detailed consideration also needs to be given to transitional issues for existing forestry participants. They will have invested on the basis of certain legitimate expectations and in some cases will have paid a premium for land into which the potential carbon returns had already been capitalised. Option 4 could not be supported if it retrospectively removed, without some form of redress, the rights of people who in good faith invested in forestry under NZ ETS conditions that could legitimately have been expected to continue. This would completely undermine any future attempt by government to create market mechanisms to solve environmental issues.

Generally, distributional issues boil down to a question of what is fair. Closing a commons – as we have done by removing the right to freely emit greenhouse gases – will always be difficult. As I have pointed out above, what is certainly *not* fair is changing the rules of the game midway for those involved. For those that have invested in forestry already, there needs to be a transition path laid out that honours their investment.

Fairness is inherently subjective and may not necessarily imply full grandparenting. For a variety of reasons, under current NZ ETS policy settings polluters are not paying the full cost of their actions. As a result, the Government – for which read taxpayers – faces an implicit future liability for the costs of reducing net emissions and adapting to climate change.

Anecdotally, as the price of carbon rose in 2021 and 2022, so did the price of Land Use Capability classes 6 and 7 land.[6] Purchases by forestry operators were effectively setting the price for marginal land. Looking forward, we want carbon prices to rise once again to reduce gross emissions. Based on what we saw in recent years I think it is important to point out that, under current settings, future carbon price rises are likely to lead to two, largely unintended consequences:

1. Higher prices for marginal land (Land Use Capability classes 7 and 8) make it more difficult for government, philanthropic groups or iwi Māori to purchase it to plant natives (or alternative exotic species). The costs of establishing natives are often higher and the return is lower and slower than it is for exotics. Higher land prices increase the opportunity cost of planting in natives.

2. Owners of marginal land will continue to benefit from large, unearned, untaxed capital gains. While whenua Māori benefit from carbon prices when they plant trees, they do not benefit from this windfall gain as their land cannot be sold.

An additional option worth considering

As previously noted, I believe that forestry offsets should not be used to offset fossil carbon dioxide emissions due to their extremely long lifetime in the atmosphere. I believe forestry could, however, play a role in offsetting agricultural emissions of biological origin.

As noted in *Farms, forests and fossil fuels* and my more recent methane note, there happens to be a rough alignment of the warming effect of ongoing methane emissions from a herd of ruminants and the cooling effect of a fixed area of pine production forest on a roughly 30-year rotation. This would suggest that the issue of potential misalignment between warming and cooling responses over time could be overcome to some extent by offsetting livestock methane emissions with pine plantation forestry at the national level. The fact that the cooling effect requires a fixed area of forest means that option values are maintained: a future decision to destock or move to animals with lower emissions would allow a compensating removal of trees.

I concede that this would be a major departure from the status quo, and pine plantation forests could only ever play a small role in offsetting methane at the national level. It is also difficult (but not impossible) to see how this concept could be used in the context of an annual price-based mechanism, or how the country would transition from the world we are in to that one. However, the same could be said for many of the options in the consultation document.

[6] See https://ourenvironment.scinfo.org.nz/maps-and-tools/app/Land%20Capability/lri_luc_main.

Recommendation

For the NZ ETS review consultation to yield meaningful information on how to redesign the NZ ETS, we need to be presented with a clear and definitive problem definition. If officials and ministers can settle on the problem definition, it should then be possible to provide more detail about the potential solutions. Based on the potential problem definitions I have canvassed above, the various permutations of options 3 and 4 seem the most obvious 'solutions' to which more detail could be attached.

I therefore recommend that further consultation be undertaken based on a document that has:

- a clear problem definition
- more detail around options 3 and 4
- details about possible transition provisions, with clear boundaries concerning retrospectivity and consideration of the potential need for redress.

Redesign of New Zealand Emissions Trading Scheme Permanent Forest Category Consultation

While the redesign of the permanent forest category consultation document more clearly articulates the objective of the consultation, it does so in an unbalanced way. The document overplays the benefits and severely underplays the risks of permanent forestry.

A risk management perspective is needed

As outlined above, a critical risk with so-called 'permanent' forests is whether they are indeed permanent. Key risks to permanence are fires, floods, windthrow, erosion, pests and disease. General neglect of the forest is also a key risk as there is no real incentive for owners to continue to manage the forest appropriately once any income stream from carbon credits slows.

While these risks are mentioned in the consultation document, they are done so almost in passing and in a way that seriously underplays their significance. For example, pests, weeds and disease are bundled into the *provide positive environmental outcomes* criterion. These risks are so significant that, at the very least, they should be specific criterion on which to judge the proposals. Ideally, managing risks should be a key objective of the redesign of the scheme.

If a risk management lens had been used to frame this consultation it would have been immediately obvious that the permanent forestry scheme needs very strict rules.

The rules should be very conservative in the quantum of credits handed to participants. I note that this is touched on to some extent in the discussion around option 2,[7] but in my view needs to be much stronger and more conservative.

[7] Create increased demand for removal activities to increase net emissions reductions. MfE, 2023.

It is important to acknowledge that at some point a permanent forest will reach a maximum long-term carbon stock. From this point on, the landowner will have to manage the forest in perpetuity with no further carbon revenue. Depending on what other sources of revenue might be available, the land underneath the trees could be seen as having little or no remaining financial value. From a carbon storage perspective this would appear to be a large liability that is not currently being addressed in the consultation. What if a fire were to burn the forest down in 50 years' time? How would tree re-establishment, to claw back the carbon lost, be financed?

In my view maintaining the ability to sustain ongoing forest management is a significant risk going forward and one that needs to be addressed carefully. One way to manage this risk would be through holding back some of the credits or requiring bonds. Interestingly, this was the requirement in California but recent fires have already literally burned through this contingency. The lesson to be learned is that any retention of credits or bonds will need to be quite large to appropriately manage the risk.

If the risk mitigation fails, liability will ultimately lie with the Crown. It may be worth considering whether permanent forestry is only allowed to be established on land under long-term stewardship– such as the Department of Conservation estate and whenua Māori. If it is allowed on private land it may be best to limit permanent forestry to a certain percentage of the land parcel and to land that delivers a range of other environmental benefits.

There is clearly a need for ongoing management of any forest, including permanent forests

I am currently investigating the risks and benefits of alternative forestry types in New Zealand, which includes examining the various types of forest currently being incentivised by the permanent forest category. While it is premature to say what this work will conclude, some general points that have emerged so far are worth noting in the context of the current discussion.

Permanent forests require long-term management that differs from production forestry and potentially lasts for centuries. Careful consideration will need to be given to how they are created and maintained, including how risks such as fires, floods, windthrow, erosion, pests and disease will be addressed over time. Crucially, this applies to all permanent forests, whether transition, exotic or indigenous.

While it may be hoped that an indigenous forest will slowly accumulate carbon for centuries, this may not always eventuate. Both the successional pathway and the carbon profile of some indigenous forests are uncertain. For example, under a passive management model it may take a hundred years or so for a forest to transition from kānuka and/or mānuka to taller tree species, if at all (this would depend on local seed sources and bird populations, local climatic conditions, site characteristics, pests and weeds, etc). This is notable from a carbon perspective, as both mānuka and kānuka are highly flammable and could fuel fires that disrupt successional processes and delay establishment of taller forests. Browsers and weeds can also present serious challenges to the establishment and long-term health of indigenous forests.

There is currently a cacophony of voices with various competing views on what should constitute a permanent forest, and whether permanent exotic forests should be allowed in the permanent forest category. Notwithstanding my comments about the risks of unlimited offsetting of emissions through large-scale pine afforestation, I am yet to form a view on what *types* of forest should or should not be allowed into this category. However, I would note that when appropriately located and well managed, permanent exotic forests can provide many environmental benefits.

Continuous cover forestry can provide a more environmentally sustainable method of timber production than clear-fell harvest and could be incentivised by allowing exotic forests into the permanent forest category under some circumstances. It could also provide an ongoing source of income to support the long-term management requirements of the forest.

The concept of 'transition forests' as described in the document is worthy of further investigation and research. But based on our limited current knowledge, we need to proceed with caution. I find it remarkable that the uncertainties around transition forests are repeatedly highlighted in the consultation documents and yet there is no option presented to apply the knowledge we do have to limit the circumstances (location, scale) under which transition forests might enter the permanent forest category.[8] Rather, the focus of the consultation is on how to manage them. While management is crucial, a precautionary approach would be to consider which sites are most likely to succeed.

From the limited knowledge we have, we know there are particular site characteristics that will either enable or limit the likely success of a transition from exotic to indigenous forest.[9] There is also limited evidence for how this process could work at scale. Solutions could include requiring the planning process for transition forests to have site pre-assessments to judge the likelihood of success, and considering limitations on land type and size. For example, in areas where success is deemed to be less likely, it may be prudent to limit this forest type to areas that would be suitable for production forestry. Then, should the transition fail, the forest could be moved into the standard forest category.

As noted above, there is anecdotal evidence that some of the rush of NZ ETS forestry registrations prior to the change to *averaging accounting* was driven by forests designed to be managed under *stock change accounting* rules as *de facto* permanent forests. I believe this risk should be monitored, ideally quantified and then any forests where it is found to apply should be made to follow the rules set for the permanent forestry scheme.

Regardless of which forests are allowed to enter the permanent forest category, each forest must have a management plan that adequately captures its purpose, intended pathway, proposed financing and management approach. The minimum requirements of each plan will vary with forest type, location and purpose. For transition forests that plan should include consideration of contingencies should the transition be unsuccessful.

[8] For example, "Consequently, establishing wide-spread transition forests presents an unknown degree of risk (Forbes 2021). Given these uncertainties, current best practice is to only plant transitioning forests in favourable environments, at smaller scales, and to actively manage the transitioning process." Ministry for Primary Industries, 2023. Interim Regulatory Impact Statement: A redesigned New Zealand Emissions Trading Scheme (NZ ETS) permanent forest category. https://www.mpi.govt.nz/dmsdocument/57289-Interim-Regulatory-Impact-Statement, p.18.

[9] Forbes Ecology, 2021. Transitioning Exotic Plantations to Native Forest: A Report on the State of Knowledge. A consultant report prepared for Te Uru Rākau – New Zealand Forestry Service by Forbes Ecology. https://www.mpi.govt.nz/dmsdocument/47521-Transitioning-Exotic-Plantations-to-Native-Forest-A-Report-on-the-State-of-Knowledge-2021-22.

Conclusion

It is unfortunate that registrations for the permanent forest category were opened prior to adequate rules governing the category being set. The backlash that greeted the Government's suggestion the category be limited to indigenous forestry is likely to be repeated if restrictive rules are put in place for the category. The Government will have to think carefully before conceding too much because meaningful and enforceable rules will be needed to manage the significant risks that accompany permanent forests.

Recommendation

The consultation should be reframed from a risk management point of view. The design options that are then consulted on should address each of the risks identified with appropriately strict rules.

Concluding comments

Having both rotational and permanent forestry in the NZ ETS creates significant risks to New Zealand being able to reduce gross emissions. Only if meeting emissions reduction targets is regarded as nothing more than an accounting exercise, is their ongoing inclusion justified – and even then, the option values at stake for land use and many provincial communities are not negligible. If contributing to global action on climate change through reducing emissions is the policy goal, then the role of forestry offsets can only be ancillary and their risks need to be properly managed.

Neither of these consultation documents adequately identifies or quantifies the risks. Neither do they adequately propose solutions to manage and mitigate them. Some serious reworking needs to be undertaken in respect of both consultations if they are to yield meaningful results.

Simon Upton

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Te Kaitiaki Taiao a Te Whare Pāremata