

Sensitive - Commercial

Office of the Minister of Forestry
Office of the Minister for Climate Change

Chair, Cabinet Business Committee

Introduction of averaging accounting into the New Zealand Emissions Trading Scheme

Proposal

1. This paper seeks Cabinet agreement to introduce a simpler carbon accounting approach into the New Zealand Emissions Trading Scheme (ETS) for all rotational post-1989 forests which apply for ETS registration after 31 December 2020.
2. It also seeks agreement to allow an optional transition for existing post-1989 forests registered in the ETS before 1 January 2021 from the current 'stock change' accounting approach to the new averaging accounting approach, which is based on the average long-term carbon stored in a forest.
3. This paper also provides an alternate option that will enable forests planted in 2019 and beyond to use averaging accounting if Cabinet does not wish to make a decision on an optional transition for existing forests at this time.
4. Further details about the design of averaging accounting will be brought to Cabinet in May 2019 as part of a package of proposals to improve the incentives for forestry in the ETS.
5. The reason for bringing forward the decisions in this paper is to provide certainty to the industry and ensure there are no disincentives to plant in the 2019 planting season.

Executive Summary

6. Incentivising increased forest planting through the ETS will support achieving New Zealand's climate change emissions reduction targets. It will also support the One Billion Trees programme.
7. Issues with the current settings for forestry in the ETS mean that it is not incentivising as much carbon storage as it could. In particular, the financial risks and administrative requirements associated with financial liabilities for post-1989 forests¹ at harvest reduce the incentive to join the ETS and plant more trees.

1 If an area of land has become forest, either through regeneration or planting, after 31 December 1989, and was not forest on 31 December 1989, it is termed "post-1989 forest land" and can be registered in the ETS.

8. Internationally, New Zealand has adopted a new method to account for the carbon stored in rotational forestry², known as averaging. Averaging accounting measures and rewards the long-term average carbon stock of a post-1989 forest, over multiple harvesting rotations.
9. In order to better increase the incentives for forestry in the ETS, we propose that:
 - 9.1 averaging accounting is introduced from 31 December 2020 as the compulsory accounting approach for all rotational post-1989 forests which apply for ETS registration after that date; and
 - 9.2 existing ETS forestry participants with post-1989 forests registered in the ETS before 1 January 2021 will have the option to transition from the stock change accounting approach to averaging accounting.
- 10 Applying averaging to rotational forestry in the ETS would align with the international approach to forestry accounting and should improve the incentives for post-1989 foresters to participate in the ETS.
- 11 Over the period 2019 to 2027, the additional planting from introducing averaging accounting domestically for newly registered forests is estimated to increase the commercial planting of new exotic forests (afforestation) by close to 70 percent (estimated increase of around 78,000 hectares from current projections), excluding Government planting initiatives. It could add a further 89 million trees towards the One Billion Trees programme.
- 12 Overall allowing averaging for existing post-1989 forests will not add to new planting. However if existing foresters use averaging to extend their harvest cycles, officials estimate that it could provide 8 million additional removal units of carbon storage to New Zealand in the 2020s.
- 13 Giving existing forests an option to transfer to averaging is also likely to increase the supply of units into the ETS because it will allow those foresters to sell the units that they already hold with reduced risk.
- 14 Officials estimate that allowing existing forests to transfer to averaging could increase the supply of units into the ETS by approximately 13.3 million New Zealand Units (NZUs) at an approximate, undiscounted fiscal cost of \$332.5 million across 10 years through less income from harvest liabilities. This will create a challenge to effectively managing the supply of units in the ETS, and will allow more of the existing stockpile of NZUs of around 130 million units to be sold to emitters.
- 15 On balance we consider that the benefits of allowing existing forests to transfer to averaging outweigh the costs. Providing access to averaging accounting for

² Forests that are harvested on regular cycles of clearfell harvesting and re-growth.

existing post-1989 forests will provide long term alignment between domestic and international accounting, and will increase sector confidence in the ETS. In the long-term (in the period 2040 to 2100), the Crown will also have lower costs in the ETS, as allocations to participants using averaging will decrease.

- 16 However if Cabinet does not wish to make a decision on a transition for existing forests at this time, we have provided a more limited, alternate option to allow forestry participants with post-1989 forests registered in the ETS after 31 December 2018 the choice of using either the stock change accounting approach, or the averaging accounting approach.
- 17 While this option would address an immediate need for clarity by foresters considering planting in winter 2019, and would reduce the fiscal impact of a transition to averaging accounting by existing foresters, it would also mean that most post-1989 foresters already registered in the ETS would miss out on the benefits of averaging accounting. This could affect the value of their land compared to 'new' forests under averaging, which would benefit from greater flexibility and liquidity of their NZUs.
- 18 Many of these existing forestry participants were the 'first movers' who helped established the forestry aspect of our ETS and as foresters, are likely to further contribute to the growth of our forest estate.
- 19 The more limited transition option also risks maintaining the misalignment between international and domestic forestry accounting for those forests.
- 20 If Cabinet prefers to take the more limited transition decision now, then we propose that Cabinet direct officials to report back before the end of May 2019 on whether existing forests registered before 1 January 2019 should be made eligible to transition to averaging accounting.
- 21 Further information of the design details of averaging for newly established and existing forests will be included as part of the package of improvements to the incentives for forestry in the ETS that we intend to bring to Cabinet for approval in May.

Background

The ETS is an important mechanism to achieve New Zealand's climate change objectives and forestry plays a key part

- 22 New Zealand is committed to taking action on climate change and supporting the transition to a low emissions future. The ETS can help to meet its emissions reduction targets and long-term mitigation objectives by placing a price on greenhouse gas emissions.

- 23 It also puts a price on greenhouse gas storage, meaning that foresters in the ETS can earn credits for the carbon that their trees store. This provides an incentive for foresters to undertake additional forest planting.
- 24 Incentivising additional afforestation through the ETS can also assist the Government to meet a range of other objectives, including the One Billion Trees programme.

The current settings for forestry means that the ETS is not incentivising as much sequestration as it could

- 25 A review of the ETS concluded in mid-2017. It identified a number of issues with the forestry settings within the ETS that reduce the incentives for foresters to enter the scheme and establish new forests.
- 26 In particular the current carbon accounting approach ('stock change') requires a participant to pay for any loss of carbon in their forests, even if that loss is temporary (such as when forests are harvested and replanted). Following harvest, foresters must surrender to the Crown a significant amount of the New Zealand Units (NZUs) they have earned from the forest's growth. They then earn units as their replanted forests grow.
- 27 This financial risk of harvest liabilities, combined with the administrative complexity of accounting for a temporary loss of carbon, reduces the incentive for foresters to join the ETS and receive the financial benefit for the carbon stored in their forests. This means that the ETS is not supporting as much new forest establishment as it could, particularly amongst small forest owners.

The way New Zealand accounts for forestry at an international level is changing

- 28 New Zealand will soon change its approach to accounting for how forestry contributes to meeting its international climate change targets.
- 29 This new accounting approach is known as 'averaging'. It was negotiated as part of the Paris Agreement to support a more accurate measure of the climate contribution of a country's forest estate for both rotational forests and non-harvested forests over the long term. The new international approach will apply from 2021.
- 30 Under an averaging approach, New Zealand accounts for changes in the long-term average carbon stocks of its post-1989 forests, including over multiple harvesting rotations. New Zealand will still need to account for permanent deforestation.
- 31 This new approach better accommodates the cyclical nature of New Zealand's fast-growing rotational post-1989 forests and aims to ensure that only long-term permanent increases to our forest carbon sink count towards New Zealand's climate change targets.

Public consultation and further analysis has been undertaken on a range of proposed changes to forestry in the ETS

- 32 In July 2018, Cabinet agreed to public consultation on a range of proposed improvements to the way forestry operates in the ETS [CAB-18-MIN-0374 refers]. These proposals included introducing averaging accounting domestically for both newly established and existing post-1989 forestry.
- 33 Public consultation was carried out in August and September 2018. The feedback received was largely supportive of changing the way forestry is accounted for in the ETS to address the issues identified above. In particular, there was strong support for the introduction of averaging accounting for newly established forests. Feedback on introducing averaging accounting for existing forests was mixed.
- 34 Further research, analysis and additional, targeted stakeholder engagement, has been used to further refine this package of proposed improvements.

It is important to make decisions now to support additional forestry planting in 2019

- 35 Given the public support for averaging for newly established forests, many post-1989 forestry participants are seeking clarity about whether it will be applicable to the new forests that they plant in 2019. Projections estimate that increased planting in 2019 from access to averaging accounting could add a further 5 million trees towards the One Billion Trees programme.
- 36 Foresters are now making decisions around where and how much to plant this winter. Foresters need to make these decisions as early as possible in order to secure labour and seedlings, undertake ground preparation work and make other commercial arrangements.
- 37 There is a risk that foresters will delay planting until 2020 or later without clarity around whether averaging will be applicable to planting in 2019. We are already receiving reports of some foresters cancelling seedling orders for this planting season.

Introducing averaging accounting for current and future forests

Applying averaging accounting domestically to better incentivise forestry in the ETS

- 38 In order to better increase the incentives for forestry in the ETS, we consider that it is important that all post-1989 forests regardless of planting year will have the opportunity to use averaging accounting.
- 39 As such, we propose that:
 - 39.1 averaging accounting will be the compulsory accounting approach for all rotational post-1989 forests which apply for ETS registration after 31 December 2020; and

- 39.2 existing ETS forestry participants with post-1989 forests registered in the ETS before 1 January 2021 will have the option to transition from the stock change accounting approach to averaging accounting.
- 40 We also seek Cabinet's authorisation to make a public announcement noting this decision.
- 41 Applying averaging accounting domestically would help to remove some of the current disincentives forestry participants face to join the ETS and establish new forests. It will also mean New Zealand's domestic settings are better aligned with the new international accounting approach.
- 42 Further information on the design details for averaging for newly established and existing forests will be included in a second set of decisions as part of the package of improvements to the incentives for forestry in the ETS that we intend to bring to Cabinet for approval in May 2019.
- 43 We have discussed the design details of averaging for newly established and existing post-1989 forestry with officials, and we are confident that these proposals are well progressed.

Averaging accounting is a simpler approach for ETS forestry participants

- 44 Under averaging, participants with newly registered forests would receive a sum of NZUs that reflects the amount of carbon that is stored in their forest over the long term, and would no longer face harvest liabilities. This sum of NZUs is based on the average amount of carbon the forest holds when multiple growth and harvest cycles are taken into account.
- 45 The NZUs would be paid to the participant as their new forest grows. Once the forest reaches the age at which it stores its long-term average for carbon (its "average age"), NZU payments would cease. As long as the forest is replanted following harvest, no NZUs would be owed to the Crown.
- 46 We intend that a forest's 'average age' will be a function of the growth rate of the forest, the type of forest, and the length of time between harvests (the longer the rotation age the more carbon is stored over time). We will confirm this as part of the May Cabinet paper and subsequent regulations.

Averaging accounting has a range of benefits for both foresters and the country

- 47 Under averaging, ETS forestry participants could sell more of the NZUs that they generate with less risk, as they would not need to worry about having to surrender units at harvest if they replant.
- 48 It would also mean reduced administrative cost and complexity for ETS forestry participants as they would not need to calculate their liabilities to the Crown every time they harvest, and may have simpler reporting obligations at the close of each Mandatory Emissions Return Period.

- 49 Over the period 2019 to 2027, the additional planting from introducing averaging domestically is estimated to increase commercial afforestation by close to 70 percent (estimated increase of around 78,000 hectares), excluding Government planting initiatives. This is primarily from the projected increase in afforestation from newly established forests.
- 50 This additional afforestation will also support New Zealand's climate change objectives. Projections indicate that this new planting will decrease the volume of New Zealand's net greenhouse gas emissions through forestry removals by 15 million tonnes from 2021 to 2030, and by 141 million tonnes between now and 2050, with a total value of \$1,275 million from 2019 to 2050.³
- 51 The averaging approach will support the One Billion Trees programme by increasing the number of trees expected to be incentivised by the ETS. It is expected that these proposals could add another 89 million trees on top of 130 million expected from business-as-usual planting under the ETS.
- 52 Applying averaging domestically through the ETS would also help reduce a misalignment occurring between how New Zealand accounts for forestry domestically and internationally from 2021.
- 53 If the ETS continues to allow use of the stock change approach for newly registered forests, it could mean that over time the NZUs allocated to, and surrendered by, participants no longer reflect the level of effort required by New Zealand to meet its climate change targets. This prolonged misalignment could result in the Government receiving fewer or allocating more units than it needs from participants.

Averaging accounting should be the compulsory accounting approach for newly registered forests from 31 December 2020

- 54 In order to maximise the benefits of averaging for newly established forests, we propose that averaging should be compulsory for forests registered after 31 December 2020.
- 55 Allowing ETS forestry participants to continue to use the stock change approach for newly registered forests after 31 December 2020 would risk increasing the misalignment between international and domestic forestry accounting.
- 56 It would also add complexity for participants who would have to choose between the stock-change and averaging accounting approaches.
- 57 We are proposing a start date of after 31 December 2020 as this is likely to be the earliest point regulations to support the introduction of averaging will be available. This date also aligns with the start of our first nationally determined commitment (NDC) under the Paris Agreement.

³ Using an increasing carbon price to \$50 by 2050 and a discount rate of 6%

Providing access to averaging accounting for existing post-1989 ETS forestry participants is also important

- 58 We are also proposing that all ETS forestry participants with post-1989 forests registered in the ETS before 1 January 2021 have the option to transition to averaging accounting. This will include those foresters considering new planting in 2019.
- 59 We consider it important that existing forests also have access to averaging accounting, although the case for doing so is less clear-cut than for newly established forests.
- 60 Overall allowing averaging for existing forests will not add to new planting. However, we expect that a proportion of participants who transition to averaging could be able to increase their carbon sink through extending rotation lengths. Officials estimate that this could deliver another 8 million units of additional carbon removal units towards our international target.
- 61 Over time moving existing post-1989 forests to averaging will also result in greater ongoing alignment between domestic and international accounting. This will help to ensure mitigation effort is correctly aligned with the ambition of New Zealand's emissions reduction targets.
- 62 It will also mean that existing participants can benefit from the reduced reporting requirements of averaging accounting. It will provide flexibility for participants to choose which accounting approach suits them best, without impacting existing contracts or business plans.

The transition for existing post-1989 ETS forestry participants will occur over time

- 63 During public consultation, it was proposed that this transition should occur at one specific date.
- 64 However feedback from stakeholders and further analysis has indicated that this approach may not provide existing participants with enough flexibility to move to averaging under existing contracts and business structures. This could reduce the total number of participants that would transition, undermining the impact of the policy.
- 65 It is our intention that existing ETS forestry participants will be able to make a one-way transition to averaging accounting from the stock change approach at any mandatory emissions return (MER) as they occur over time. Foresters are required to complete a MER every 5 years to calculate the changes in a forest's carbon stock during that period.
- 66 We are also aware that in the future that there may need to be some ability to limit the transition to averaging accounting. We also intend to recommend that a power should be reserved in legislation for the Minister of Climate Change and

Minister of Forestry to jointly introduce a time limit on the ability to transition to averaging accounting in the future.

There are some unintended consequences that will be addressed

- 67 There is a benefit for forest owners to register their forest with as low a carbon stock as possible in the ETS under the averaging accounting approach in order to earn the greatest number of NZUs.
- 68 Therefore, participants with existing forests who have either not registered in the ETS, or who registered with a high level of carbon stock, have an incentive to 'deforest' for accounting purposes, only to re-forest once the criteria for being deforested has been satisfied. This would allow them to earn NZUs from the beginning of the forest's growth up to its long-term average.
- 69 To address this, we intend to strengthen the existing tests for deforestation, so that this unintended loophole does not encourage increased deforestation. This will be addressed in the May Cabinet paper.

Averaging accounting for existing forests will also have unit supply impacts and a fiscal cost to the Crown

- 70 Allowing existing forests to transition to averaging accounting is likely to increase unit supply in the ETS in the short-term, which will exacerbate the existing over-supply of units. Under business as usual accounting the Crown expects surrenders of 91.9 million units from 2021-2030, but under a transition to averaging this reduces to 78.6 million units (a change of 13.3 million units). This is because forest owners that transition to averaging accounting will have lower unit surrender liabilities at harvest, and will be more able to trade units on the market.
- 71 This will come at a fiscal cost to the Crown of approximately \$332.5 million (undiscounted) across 10 years, as the Crown receives approximately 13.3 million less New Zealand Units (NZUs) than expected from harvest liabilities.
- 72 Over time the Crown will have lower costs in the ETS, as allocations to participants using averaging will decrease.⁴ The estimated 13.3 million reduction in units surrendered is a conservative estimate based on assumptions of participant's behaviour. If participants shifted to averaging sooner than has been forecast the reduction in surrendered units could be substantially low, to as few as 1.9 million units.⁵
- 73 The increased supply of units in the 2020s will add to the challenge of managing supply in a market where there is already large oversupply of NZUs and this may compromise the Government's ability to enable and enforce a

⁴ Long term cost is expected to be \$151 million discounted at 6% (assuming a slowly increasing carbon price to \$50 by 2050).

⁵ If we assume that participants more than 10 years away from harvest would shift immediately rather than wait until harvest, then we estimate there will be a unit supply increase of 1.9 million units over the 10 years, with a long term cost of \$10 million discounted at 6% (assuming a slowly increasing carbon price to \$50 by 2050)

stringent cap on the ETS. The units that are freed up could represent an approximately 10 per cent increase in the current stockpile total.⁶

- 74 The increased supply of units from existing forests transitioning to averaging will need to be managed through the newly-strengthened unit flow framework of the ETS, assuming that the framework and auctioning mechanism is working effectively to align unit supply with emission reduction targets.⁷
- 75 We recommend that unit supply issues be seen as a second order impact. ETS design changes should first and foremost be driven by the objective of driving the right incentives through the ETS to meet the Government's climate change objectives.

An alternative option is to limit the use of averaging accounting to forests registered from 2019

- 76 If Cabinet does not wish to make a decision on a transition for existing forests at this time, we have provided an alternate option that would address the immediate need for clarity by foresters considering planting in winter 2019 on whether their forests would be eligible to use averaging accounting.
- 77 This approach would allow forestry participants with post-1989 forests registered in the ETS after 31 December 2018 the option of using either the stock change accounting approach or the averaging accounting approach.
- 78 This option would provide foresters considering planting this year the confidence they need to increase their volume of planting. It will also avoid the fiscal costs associated with allowing all post-1989 forests to transition to averaging accounting.
- 79 However this option would mean that existing post-1989 foresters would miss out on the benefits of averaging accounting, including reduced reporting requirements and reduced administrative complexity. Providing existing post-1989 forestry participants with the choice to move to averaging accounting was also overwhelmingly supported during public consultation.
- 80 Limiting the availability of averaging accounting would also retain the misalignment between international and domestic ETS accounting for the foreseeable future. This potentially limits the ability of the ETS to drive mitigation with the right level of ambition to help meet New Zealand's climate change targets.

⁶ The current stockpile of NZUs banked in private accounts is approximately 130M units. The stockpile accumulated over 2013-15 when ETS participants surrendered high numbers of cheap international units and banked the NZUs that were allocated to them.

⁷ In December 2018, Cabinet approved tranche one of improvements to the ETS including enabling a cap on emissions covered by the ETS (including auctioning, limiting international units, price controls and a coordinated decision-making process) [refer DAB-18-MIN-0606.01]. Decisions on tranche two of improvements to the ETS will be brought to Cabinet over the next few months.

- 81 On balance we have weighed up both options and consider the benefits of providing access to averaging accounting for all existing post-1989 forests outweigh the costs. This option will provide long term alignment between domestic and international accounting, and will increase sector confidence in the ETS.
- 82 If Cabinet prefers the more limited option of only allowing the optional use of the averaging accounting approach for forests registered in the ETS after 31 December 2018, then we propose that Cabinet direct officials to report back before the end of May 2019 on whether existing forests planted before 1 January 2019 should be made eligible to use averaging accounting.

Next steps

Further design details for averaging accounting will be included in the May Cabinet paper

- 83 We are currently working on a wider package of improvements to the incentives for forestry in the ETS that we intend to bring to Cabinet for approval in May. This paper will contain further information on the design details for averaging for newly established and existing forests.
- 84 This package paper will also contain proposals for complementary policies to support the introduction of averaging accounting and proposals to recognise domestically the carbon storage benefit that New Zealand gains internationally from harvested wood products (HWP).
- 85 At these decisions are finalised, they may also have some effect on the proposals to introduce averaging accounting for new and existing forests.

Consultation

Public consultation and stakeholder feedback

- 86 Feedback received during the public consultation on proposed improvements to forestry in the ETS was strongly supportive of the introduction of averaging accounting domestically for newly established forests, and for existing forests.
- 87 The results of submissions received after consultation showed that 73 submitters (out of 114 who expressed a preference) supported the introduction of averaging accounting for new forests in the ETS.
- 88 In response to the question concerning the eligibility of existing forests to use averaging, 63 out of 93 submitters supported the option that gave existing forests a one-off and one-way choice to transition. Many submitters however raised the desire to be able to transition to averaging at the harvest of their first rotation, due to existing contracts and business plans.

- 89 The desire for clarity on the applicability of averaging to forests planted in 2019 was also a common theme throughout the public consultation. It has also been raised consistently during our conversations with stakeholders.

Departmental Consultation

- 90 This paper was drafted by the Ministry for Primary Industries (MPI). The following agencies were consulted on an earlier version of this paper: the Ministry for the Environment (MfE), The Treasury, Department of Prime Minister and Cabinet, Te Puni Kōkiri, the Ministry of Justice, the Ministry of Business, Innovation and Employment, the Ministry of Foreign Affairs and Trade, the Department of Conservation and the Environmental Protection Authority.

Financial Implications

There will be a fiscal cost to the Crown over the next four years

- 91 The changes sought in this paper will lead to behaviour changes in foresters, which will affect ETS unit flows to and from the Crown account.
- 92 We expect increased establishment of new forests, which could lead to increased Crown NZU allocation expenses of \$5.9 million over the next four financial years to 2022/23.
- 93 We also expect some existing forests to transfer to averaging. In the short term, this leads to a decrease in harvest surrenders (i.e. Crown income) of \$27.9 million over the next four financial years to 2022/23. This would result in a change in net costs for existing forests in the ETS from \$899 million to \$927 million over the next four financial years. This would be offset by reduced Crown expenses in the medium term as the forests would not be allocated units on their next rotation.

	\$million – Increase/(decrease) on operating balance					
Forecast fiscal impact	2018/19	2019/20	2020/21	2021/22	2022/23	Total 2018/19 to 2022/23
Increase in net expenses from introducing averaging accounting for new forests	(0.017)	(0.118)	(0.427)	(1.469)	(3.858)	(5.889)
Decrease in revenue from introducing averaging accounting for existing forests	(0.481)	(1.540)	(3.864)	(7.083)	(14.977)	(27.945)
Total fiscal impact	(0.498)	(1.657)	(4.292)	(8.552)	(18.835)	(33.834)

There will also be a long-term fiscal cost to the crown, but this will be outweighed by the benefit of progress towards international targets

- 94 Over the period 2019 to 2030, the estimated net fiscal impact of introducing averaging accounting for newly registered and existing post-1989 forests would be \$382.5 million. Between 2031 and 2040 this fiscal cost is \$510.3 million, and the cost is \$112.0 million from 2041 to 2050.
- 95 Over the period 2019 to 2050 the total estimated net fiscal impact of introducing averaging accounting for newly registered and existing post-1989 forests would be \$1,004 million.
- 96 However the benefit that this would provide in terms of additional carbon storage that New Zealand would otherwise have to purchase to meet its climate change obligations equate to a total benefit of \$1,275 million.⁸
- 97 The alternate approach, allowing only forests planted from 2019 to use averaging accounting, will reduce the cost by \$151 million to \$853 million over the period 2019-2050. The total benefit is still \$1,275 million.

Changes to the Climate Change Information System will also be required to implement averaging accounting

- 98 Te Uru Rākau manages the Emissions Trading Scheme (ETS) for forestry under delegated authority from the Environmental Protection Authority, who manage the wider ETS. The ETS for forestry is administered through an IT system called the Climate Change Information System (CCIS).
- 99 The future of the CCIS is currently being reviewed as it has reached the end of its functional life, and is no longer supported by Microsoft. This means that it is unable to be modified to meet future ETS requirements and is at risk of failure for existing functions.
- 100 Te Uru Rākau is currently scoping the requirements for an upgrade of the CCIS and developing a business case. In addition to accommodating future design changes, an upgrade of the CCIS would also enhance the usability of the system for current and future participants.
- 101 While a final estimate of the likely cost of the upgrade to the CCIS is still being determined, an overall budget estimate of \$20 million to \$25 million is anticipated based on past efforts and output in attempts to enhance the current system, advice from industry experts and other costing metrics.
- 102 Te Uru Rākau intend to follow Treasury's Better Business Case process to develop the budget bid for Budget 2020/21 to seek this additional funding once a final estimate has been determined. Part of this will involve testing the market for IT system providers.

⁸ These reflect a positive change in forecasted carbon storage from additional afforestation on the basis that 1 tonne of carbon sink is equivalent to 1 NZU. This has been calculated using the same price and discounting assumptions that has been used to calculate costs.

103 Approximately \$3 million of the costs in paragraph 100 would be required to implement averaging accounting in the CCIS. This sum at this stage is a best efforts estimate, and dependent on the future policy decisions on the detailed design of averaging accounting, the market response by service providers, as well as decisions on supporting regulations scheduled for 2020.

There will be an ongoing need to support the implementation of averaging accounting

104 Including averaging accounting in the ETS will also require additional support and operational staff to manage the increased participation rates and dual accounting system (existing stock change and averaging). This is approximately \$2.1 million per year from 2022/23.

105 This funding will also be sought as part of a future budget bid.

Legislative Implications

106 The policy decisions from this paper will require legislative changes to be made to the Climate Change Response Act 2002 (CCRA).

107 A Bill to amend the CCRA is already on the 2019 Legislation Programme with a Category 2 priority. This Bill will give effect to the policy decisions in this Cabinet paper, as well as those in the forthcoming May Cabinet paper.

108 In order to support meeting this legislative timeframe, we propose that Cabinet invite the Minister for Climate Change, in consultation with the Minister for Forestry as appropriate, to issue drafting instructions to the Parliamentary Counsel Office to give effect to the recommendations in this paper.

Impact Analysis

109 A Quality Assurance Panel with representatives from the Regulatory Quality Team at the Treasury, Ministry for the Environment, and the Ministry for Primary Industries has not had the opportunity to review the Regulatory Impact Assessment "Emissions Trading Scheme Forestry Accounting: Introduction of Averaging" produced by the Ministry for Primary Industries and dated March 2019, in the time available. Therefore, the Panel is unable to verify that the RIA provides sufficient analysis to adequately meet the Quality Assurance criteria.

110 As set out in the Cabinet Office Circular (17) 3, if substantive decisions are made on this paper the responsible Minister will subsequently be required to provide a quality assured Supplementary Analysis Report as agreed with the Minister of Finance and this must be published along with the original Regulatory Impact Assessment. We will fulfil this requirement through an updated RIA with the subsequent decisions in May.

Human Rights

111 None of the proposals in this paper have human rights implications.

Te Tiriti o Waitangi

112 The proposals in this paper are intended to support Māori landowners to increase the benefits they can realise from their forestry estates.

Gender Implications

113 This paper has no gender implications.

Disability Perspective

114 This paper has no disability implications.

Publicity

115 As noted in paragraph 29 above, we intend to publicly announce this decision, subject to Cabinet agreement.

116 A ministerial media release will be prepared and is attached. Some media attention is expected, particularly from trade publications and media in regions where forestry is a prominent industry. At this stage, we are not expecting a negative reaction from stakeholders and media to this announcement.

Proactive Release

117 Following Cabinet consideration we intend to consider the release of this paper, with certain redactions in line with the Official Information Act 1982.

Recommendations

118 The Minister of Forestry and Minister for Climate Change recommend that the Committee:

1. **Agree** that averaging accounting will be the compulsory accounting approach for all rotational post-1989 forests which apply for ETS registration after 31 December 2020.

2. **Agree** that EITHER

- 2.1. existing ETS forestry participants with post-1989 forests registered in the ETS before 1 January 2021 will have the option to transition from the stock change accounting approach to averaging accounting.

OR

- 2.2. existing ETS forestry participants with post-1989 forests registered in the ETS after 31 December 2018 will have the ability to use the averaging accounting approach.

- 2.3. and direct officials, if recommendation 2.2 is preferred, to report back before the end of May 2019 on whether existing forests registered before 1 January 2019 should be made eligible to transition to averaging accounting.
3. **Note** that we intend to bring a paper to Cabinet in May 2019 that will provide further detail on the design of averaging for newly established and existing post-1989 forestry as part of a package of improvements to the incentives for forestry in the New Zealand Emissions Trading Scheme.
 4. **Note** that we have discussed design details of averaging for newly established and existing post-1989 forestry with officials and we are confident that these proposals are well progressed.
 5. **Note** that over the period 2019 to 2050 the total estimated net fiscal impact of introducing averaging accounting for newly registered and existing post-1989 forests would be \$1,004 million.
 6. **Note** that over this same period introducing averaging accounting for newly registered and existing post-1989 forests would provide a benefit of \$1,275 million in the form of additional carbon sequestration to meet New Zealand's climate change objectives.
 7. **Note** that allowing existing ETS forestry participants with post-1989 forests the option to transition from the stock change accounting approach to averaging accounting will increase unit supply to the ETS by approximately 13.3 million New Zealand Units (NZUs) at an approximate fiscal cost of \$332.5 million across 10 years through less income from harvest liabilities.
 8. **Authorise** the Minister of Forestry and the Minister for Climate Change to make a public announcement on the decision to introduce averaging accounting for new and existing forests, in line with the decision taken in recommendation 2.
 9. **Invite** the Minister for Climate Change, in consultation with the Minister for Forestry as appropriate, to issue drafting instructions to the Parliamentary Counsel Office to give effect to the recommendations in this paper.

Financial recommendations

10. EITHER (if Recommendation 2.1 is agreed to)
 - 10.1. **Approve** the following changes to appropriations to give effect to the policy decision in Recommendation 1 above, with a corresponding impact on the operating balance:

	Impact on operating balance \$m – increase/(decrease)				
Vote Environment Minister for Climate	2018/19	2019/20	2020/21	2021/22	2022/23 &

Change					outyears
Non-Departmental Other Expenses Allocation of New Zealand Units	(0.017)	(0.118)	(0.427)	(1.469)	(3.858)

10.2. Agree that the proposed changes to appropriations for 2018/19 above be included in the 2018/19 Supplementary Estimates and that, in the interim, the increase be met from Imprest Supply.

10.3. Agree that the expenses incurred under Recommendation 10.1 above be a pre-commitment against the Budget 2019 operating allowance.

10.4. Note the following changes to forecasts as a result of the policy decision in Recommendation 2.1 above, with a corresponding impact on the operating balance:

Vote Environment Minister for Climate Change	Impact on operating balance \$m – increase/(decrease)				
	2018/19	2019/20	2020/21	2021/22	2023/23 & outyears
Non-Departmental Other Revenue: Surrender of New Zealand Units to the Crown	(0.481)	(1.540)	(3.864)	(7.083)	(14.977)

10.5. Agree that the forecast reduction in revenue noted under recommendation 10.4 above be a pre-commitment against the Budget 2019 operating allowance.

OR

If Recommendation 2.2 is agreed to:

10.6. Approve the following changes to appropriations to give effect to the policy decision in Recommendation 1 above, with a corresponding impact on the operating balance:

Vote Environment Minister for Climate Change	\$m – increase/(decrease)				
	2018/19	2019/20	2020/21	2021/22	2022/23 & outyears
Non-Departmental Other Expenses Allocation of New Zealand Units	(0.017)	(0.118)	(0.427)	(1.469)	(3.858)

10.7. Agree that the proposed changes to appropriations for 2018/19 above be included in the 2018/19 Supplementary Estimates and that, in the interim, the increase be met from Imprest Supply.

- 10.8. Agree** that the expenses incurred under Recommendation 10.6 above be charged against the between-Budget contingency established as part of Budget 2018.
- 11. Note** that the information technology systems to implement Recommendation 1 will cost \$3 million, and that ongoing administrative costs will be \$2.1 million per annum from 2022/23 onwards.
- 12. Note** that the implementation of averaging accounting relies on an upgrade to the Climate Change Information System that is expected to cost approximately \$20 to \$25 million.
- 13. Note** that the funding to give effect to Recommendations 11 and 12 will be sought in Budget 2020.

Authorised for Lodgement

Hon Shane Jones
Minister of Forestry

Hon James Shaw
Minister for Climate Change