New Forests Submission to DCCEEW Consultation on Independent Review of Australian Carbon Credit Units

Submitted to:
ACCU Review Secretariat
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Introduction to New Forests

New Forests is a global investment manager of nature-based real assets and natural capital strategies, with AUD 8.7 billion in assets under management across 1.1 million hectares of investments. We are headquartered in Sydney with additional offices in Melbourne, Singapore, Mount Maunganui (New Zealand), San Francisco, and Nairobi. Founded in 2005, we manage a diversified portfolio of sustainable timber plantations and conservation areas, carbon and conservation finance projects, agriculture, timber processing and infrastructure. We aim to generate shared prosperity for our clients and the communities in which we operate and accelerate the transition to a sustainable future.

New Forests' vision is to see investment in land use and forestry as central to the transition to a sustainable future. To achieve this vision, New Forests' investment strategies support the role of forests as nature-based solutions, provide sustainable wood fibre for the growing circular bioeconomy, and contribute to the sustainable development of regional economies and rural communities.

We have been a significant investor in the Australian plantation forestry industry since 2010 and more recently in agriculture. The Australian assets we manage on behalf of our clients cover over 565,000 hectares of land and include plantation forests, two large sawmills, and broad acre cropping. We are the largest private land manager in Tasmania and in the Green Triangle region of South Australia and Victoria. Our assets support regional economies across the country. Please see Appendix One for a map of our Australian assets.

New Forests believes the integrity of carbon markets is critical for their success, both in terms of mitigating climate change and for creating trust among stakeholders in the outcomes of carbon credit projects—we released a Carbon Credits Integrity Position Statement in December 2021 as part of our asset management approach. As such, New Forests welcomes the Independent Review of Australian Carbon Credit Units and is pleased to contribute our submission.

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Summary of New Forests' Submission

There are three parts to New Forests' submission:

1. New Forests' ACCU projects to date – This section summarises the 13 plantation forestry projects we have registered under Schedules 1, 2 and 3 and the commercial, climate, and social benefits these projects have provided.

2. Integrity of Schedules 3 and 4 of the Plantation Forestry Methodology – This section addresses the integrity of Schedules 3 and 4 related to avoided conversion of plantation forests. We directly address the concerns raised by the team at Australian National University. Through the investment analysis we provide in this submission, we demonstrate the critical importance of Schedule 3 of the plantation forestry methodology for the sector and for avoidance of substantial carbon emissions. New Forests strongly supports the integrity of the existing methodology.

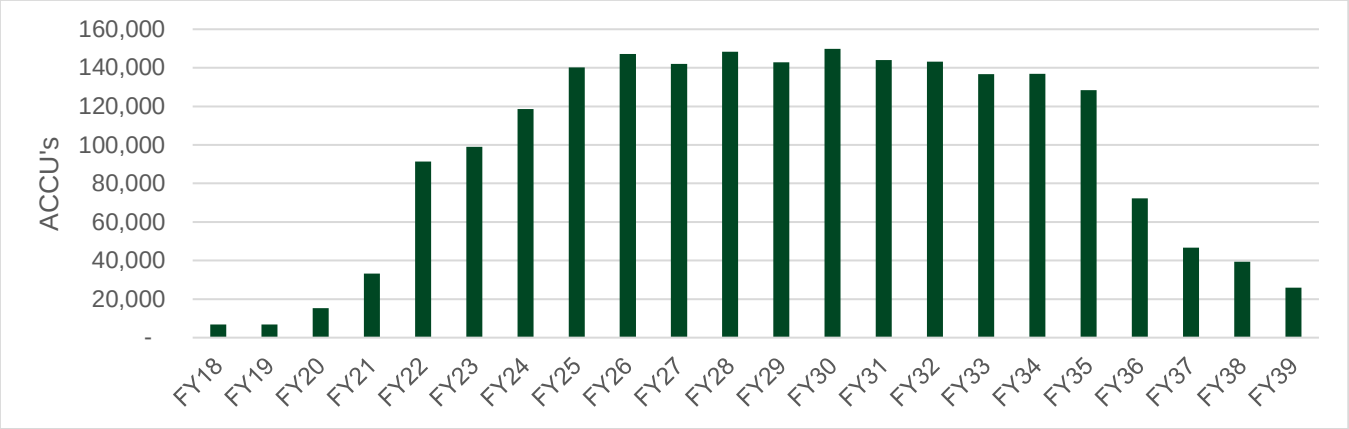
3. New Forests' Additional Feedback on Guidance Questions – This section provides feedback on ways to improve ACCU projects and includes recommendations on resourcing of the Clean Energy Regulator and preparing it for future growth of the ACCU market, improvements to FullCAM, and recommendations for continuous improvement based on latest science. We also provide recommendations on enhancing sustainability, including requiring third party certification of sustainable forest management practices, and creating a policy environment that will support rising prices for nature-based solutions.

New Forests' ACCU Projects to date – Creation of Investment Opportunity and Generation of Climate, Community and Biodiversity Impacts

New Forests has made innovative investments in carbon markets for nearly 20 years, including registration of the first plantation forestry ACCU project in December 2017. More recently, we launched ActivAcre in Tasmania, which seeks to work in partnership with farmers to establish, in its initial phase, approximately 15,000 hectares of on-farm plantation afforestation projects, to diversify income across sustainable timber and carbon revenues. We also invest in the United States in an innovative carbon forestry strategy, linked to the California government-regulated carbon market, are significant investors in New Zealand including the country's Emissions Trading System, and invest across Southeast Asia in a high-impact forestry strategy that seeks to deliver climate, community, and biodiversity impact.

New Forests has been an early adopter of the ERF plantation forestry methodology across our assets. New Forests' ACCU portfolio includes 13 approved projects under the Emissions Reduction Fund (ERF) - Carbon Credits (Carbon Farming Initiative—Plantation Forestry) Methodology Determination 2017 and 2022. Eleven of these projects are Schedule Two projects that sequester carbon by converting an existing short rotation plantation forest to a long rotation plantation forest for commercial harvesting of wood products. One of these projects is a Schedule 1 afforestation project established on pastureland. One of the projects is a Schedule 3 project relating to avoided conversion activities to retain forest where it would otherwise be converted to non-forested land. In total 1.63 million ACCUs are expected to be generated over the lifetime of the 13 approved projects. See Figure 1.

Figure 1: Annual Delivery Schedule of New Forests' Registered ERF Plantation Forestry Projects



For New Forests, as an investment manager specialising in natural climate solutions, the ERF plantation forestry methodologies are critical to ensuring appropriate recognition in Australian climate policy of the contribution of both new and existing plantations to carbon sequestration, based on the best available science. Registration of ERF plantation forestry projects provides access to the ACCU carbon market and therefore ensures that economic use of Australia's freehold land incorporates consideration of carbon sequestration benefits of forest plantations. Below, we highlight the investment benefits and climate and social impacts that the plantation forestry methodologies have had.

Investment Impact - The impact of the ERF on our Australian managed funds has been to increase plantation projected financial returns from negative net present values to positive net present values thereby supporting their continuation as forestry projects. Carbon market-driven returns create investment diversification for our clients and enhances optionality. Relative to a timber-only scenario, the impact of the ERF has been to increase the internal rate of return by approximately 0.5% to 8% across various Schedule 1, 2, and 3 projects, depending on the circumstances of the project. In most cases without the additional revenue streams provided by carbon, forestry as a land use would not meet our clients' expected investment hurdle rate, and the land would either not be acquired in the case of Schedule 1 projects, forestry would become increasingly marginal in the case of Schedule 2 and reverted from forestry to agriculture in the case of schedule 3 projects. The ACCU market has also enabled new investment models to be developed, such as New Forests' ActivAcre investment platform, which is attracting new sources of capital into Australia's rural land sector and will diversify income streams for farmers.

Climate Impact - The existing 13 approved ERF projects will deliver 1.63 million tonnes of CO2e (ACCUs) over the life of the projects (see Figure 1). Based on the continuation of existing ERF plantation methodologies, New Forests has millions of more ACCUs planned to be generated from future plantation afforestation and reforestation projects.

Social Impact - New Forests manages hundreds of thousands of hectares of pine and eucalypt plantation assets integrated with domestic processing and exposed to export markets. These assets support regional economies across the country. For instance, we are proud of our Timberlink sawmilling business, which has recently announced nationally leading investments, including in a CLT/GLT mass timber facility in South Australia and a biocomposite plant in Tasmania that will significantly increase HDPE plastic recycling by diverting it for use in a higher-value timber product. Having a stable, reliable, and sustainable source of plantation fibre for these markets is critical to the Australian economy and to developing new products and markets aligned with decarbonisation. Stable and increased investment returns from longer rotations financed by ACCU revenues support the development of domestic processing infrastructure, which has social and economic benefits. Moreover, the ERF projects established to date have supported additional permanent staff roles in technical and operational forestry roles in project

development and planation establishment. The creation of the ActivAcre product which is aimed at facilitating small scale private landowner level carbon afforestation projects will help support family-owned farms financially by providing income diversification.

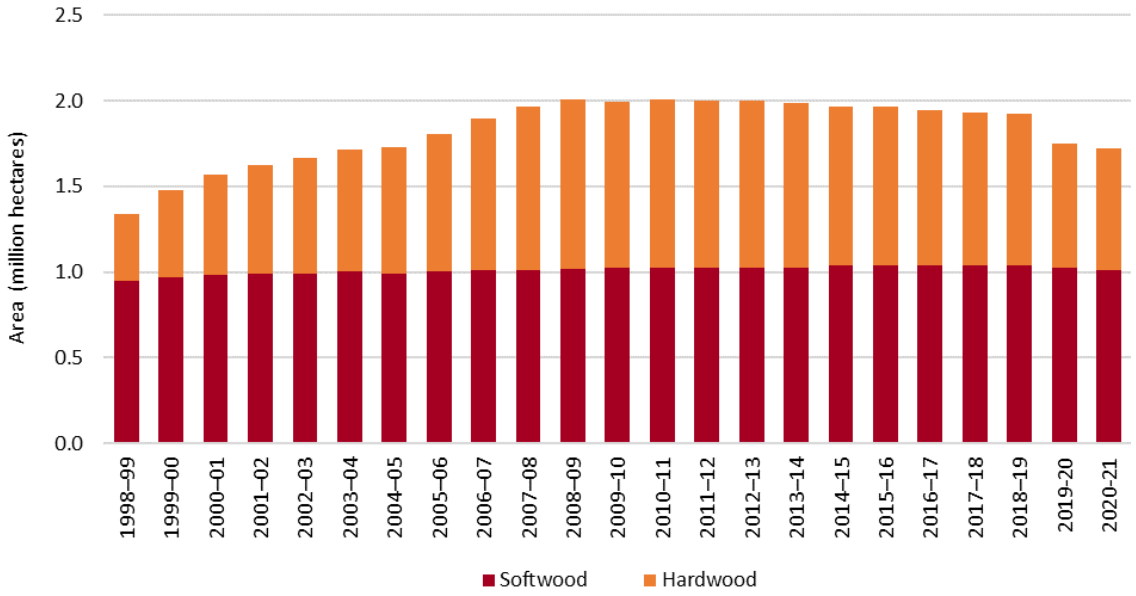
Integrity of Schedules 3 and 4 of the Plantation Forestry Methodology

New Forests understands that a team at the Australian National University has published a document called "Integrity Problems with the ERF's 2022 Plantation Forestry Methodology" dated 12 August 2022. We wish to address the concerns raised in this paper based upon our experience of the real investment decisions we are facing today on plantation conversion because of rising land use competition.

Access to carbon pricing via a stable and long-term policy environment is critical to support the reestablishment of existing plantations given rising land use competition in agricultural land markets in Australia. Without the prospect of additional revenues provided from ACCU sales, the reestablishment of these plantations would be uneconomic, and the land within the project areas would be reverted to pasture or cropping land, which have higher risk-adjusted investment returns. Schedule 2, which enables conversion from short to long rotation, has been insufficient to arrest the decline in plantation area due to superior economic returns being available from alternative forms of agricultural land use; this has resulted in areas established to forest plantations now being managed as grazing pasture or annual cereal crops. This has in part been due to relatively higher commodity prices for grains and meat compared to timber as well as the relatively shorter production cycles of agriculture.

New Forests' investment experience with reversion of forest plantations to agriculture is reflective of the substantial national decline in plantation area as reported recently by ABARES (see Figure 2), as we discuss further below. Through the analysis we provide, we demonstrate the critical importance of Schedule 3 of the plantation forestry methodology for the sector and to avoid substantial carbon emissions. We support the integrity of the existing methodology and also believe different approaches can be explored around quantification of abatement.

Figure 2: The total plantation area declined further in 2020-21 as some hardwood plantations were converted to another land use and revisions to the softwood plantation estate (Source: ABARES 2022[1])



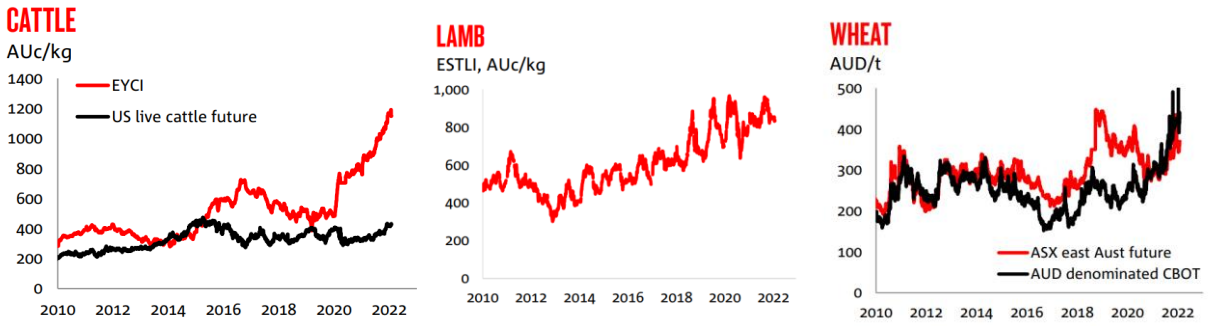
[1] https://www.agriculture.gov.au/abares/research-topics/forests/forest-economics/plantations-update#download-the-overview-report-and-datasets

Integrity Concern 1 – No credible evidence that plantation forestry estate will contract

The ANU paper states that "there is no credible evidence that there is likely to be a significant contraction in the plantation estate any time in the foreseeable future". New Forests is aware of substantial evidence that there will be a significant contraction of the Australian plantation estate and refutes this claim.

The trend of reversion of plantation area identified by ABARES in Figure 2 and which occurred over 2019-20 and 2020-21 was driven primarily by competing land use, not conversion of uneconomic MIS plantations. The MIS companies collapsed in 2011-12 and the new owners of those plantations made the primary conversion decisions for areas with higher and better economic use by 2018-19. The reduction in area over 2019-20 and 2020-21 was driven by rising commodity prices for meat and cereals resulting in dramatic changes to the best economic use of the land. Figure 3 shows the rise in agricultural commodity prices that has driven plantation conversion since 2019.

Figure 3: Agricultural Commodity Prices (Source: NAB 2022[2])



The New Forests-managed estate is under pressure to convert land from plantation to agriculture as part of fiduciary responsibility to maximise returns for investment clients. Since 2020 approximately 25,000 hectares of land from plantation forest investments have been divested, or are in the process of settling, because they have a higher return in agriculture.

Since the release of the new plantation forestry methodology on 2 January 2022, ERF projects under Schedule 3 have been developed in New Forests-managed assets for plantations that would otherwise be converted to non-forest land. Schedule 3 has substantially reduced the rate of reversion to agriculture planned in our asset pool due to the ACCUs that will be issued for avoided emissions. The economic evidence for Schedule 3 is clear, including for the softwood estate. In the softwood plantation assets in the Green Triangle, the 30 June 2022 third party valuation of tree crop assets indicated a negative Net Present Value for all replanted tree crops at establishment of up to negative AUD 7,000 per hectare, without Schedule 3 eligibility. Without the prospect of Schedule 3 eligibility these plantations would be reverted to pasture as this represents the highest and best use and would result in significant carbon emissions into the atmosphere.

We have undertaken an economic and climate analysis of the threat of conversion across our investment portfolio based on current economics of land use. The following are estimates of existing forest plantations which will be reverted to pasture or cropping if Schedule 3 is not maintained and resulting emissions:

[2] NAB, Rural Commodities Wrap, February 2022, available at https://business.nab.com.au/wp-content/uploads/2022/02/Rural-commodities-wrap-February-2022.pdf.

- **84,500 hectares of plantation over the next 5 years**. This would be comprised of 72,400 hectares of hardwood and 12,100 hectares of softwood plantations. This conversion would result in a carbon stock change of approximately negative 17 million tonnes (i.e. emissions).[3] This conversion would represent a 26% reduction in New Forests-managed plantation areas in Australia as at 30 June 2022 and a 5% reduction in Australia's plantation total area according to ABARES[4] as at 30 June 2021.

- **223,000 hectares over the next 30 years.** This would be comprised of 165,000 hectares of hardwood and 58,000 hectares of softwood plantations. This conversion would result in a carbon stock change of approximately negative 45 million tonnes (i.e. emissions).[5] This would represent a 69% reduction in New Forests-managed plantation areas in Australia as at 30 June 2022 and a 13% reduction in Australia's plantation total area according to ABARE as at 30 June 2021.

Given the declining area of plantations under management nationally, the continuation and expansion of the ERF plantation methodologies under the 2022 plantation methodology is critical to ensuring that the carbon stored in Australia's plantation forests is protected. It is reasonable to expect that land use competition will continue to intensify over the coming decades as demand for food, fibre for sustainable fuels and commodities, and renewable energy rises dramatically. This continuing intensification in land use competition makes it more important than ever to create substantial economic value for carbon removed and stored in plantations and other nature-based solutions.

Integrity Concern 2 – Cannot sufficiently prove that plantations would have been converted

The ANU paper suggests there are a number of problems associated with how to establish whether plantations would have converted in the future. We do not believe these concerns are well founded. We address these points below.

First, the reliance on good faith of a CEO or CFO is common practice and can result in severe penalties if good faith is breached. Chief executives take their duty of good faith seriously—this good faith is the basis for audited accounts and entering into legal agreements and contracts. Chief executives who engage in dishonest conduct can be prosecuted for fraud and/or face penalties depending on the circumstances.

Second, the payment of expert consultants for economic or financial assessments is well established practice in many areas of business, including carbon project finance. New Forests is unaware of evidence that funding bias is a problem with ERF projects. On the contrary, across business, expert consultants are used to provide their independent assessments and must act independently as per regulatory requirements, as is the case with the ERF or in other areas of business, such as audit functions. It is the role of the Clean Energy Regulator to ensure that consultants who are being used for various purposes are doing so in accordance with regulatory requirements and to properly audit them from time to time.

Third, analysis around forecasting the economics of land use is well established and understood in Australia and sufficiently robust to support the 2022 plantation forestry methodologies. The ANU paper suggests that establishing a baseline around plantation conversion is subjective in nature and therefore risky. We refute this notion given the professional and well-established nature of forestry, agriculture, and land valuation in Australia. Independent valuers are required to take a standard approach to reviewing materials for Schedule 3 project registrations. This approach

[3] Assumes an average of 200 CO_2e/ACCU is lost per hectare, which is an approximate average of CO_2e sequestration stored on average through a rotation of trees.
[4] ABARES 2022, Australian plantation statistics 2022 update, ABARES, Canberra, August, CC BY 4.0. DOI: https://doi.org/10.25814/8ghb-em15.
[5] Assumes an average of 200 CO_2e/ACCU is lost per hectare, which is an approximate average of CO_2e sequestration stored on average through a rotation of trees.

aligns with how forests are regularly independently valued as part of normal business cycles. This valuation approach includes benchmarking of cost and revenue assumptions and an understanding of current and forecast market conditions both domestically and in international markets. A discounted cashflow analysis is typically employed for valuing large-scale and established forestry estates. This method is transparent and provides useful evidence for decision making regarding replant decisions upon harvest. When saleable carbon units (ACCUs) are also considered, their impact on the financial profitability of the forestry business can be easily demonstrated, as shown in the section we have provided above. It is this comparison that is at the centre of the role of the independent consultant for Schedule 3 projects. We believe this method is fundamentally sound for use in determining whether a project meets the relevant criteria under Schedule 3.

Fourth, the large amount of freehold land ownership of plantation estate in Australia, much of which is owned by institutional investors, means that a significant proportion of the national plantation estate will be under threat of conversion. The ANU paper suggests that the "IRR test" is not a credible basis to determine whether plantation would be converted and that most landowners do not optimise land use for maximum rate of return. In this regard, it is important for the Independent Review Panel to understand the significant amount of ownership of the plantation estate by institutional investors in Australia, who do indeed make their decisions based upon highest and best use of the land from an investment return perspective. Schedules 3 and 4 are pertinent to that plantation estate which is under freehold land ownership and where there is optionality of land use (as opposed to land that is owned by government and leased to plantation growers and which must be replanted after harvest).

- Approximately 40% of the national softwood plantation estate in Australia is on freehold land.
- Approximately 80% of the national hardwood plantation estate in Australia is on freehold land.

The above data shows the Review Panel that conversion is a material threat to a large proportion of Australia's plantation estate. Around 280,000 hectares of the 323,000 hectares of productive plantation land that New Forests manages is freehold (in other words, 87 percent) where there is optionality in land use.

Integrity Concern 3 – Quantifying abatement

The ANU paper raises questions regarding the quantification of abatement from Schedule 3 and 4 projects under the 2022 methodologies. The paper suggests that for projects electing a 25-year permanence period there is an inconsistency between (a) the length of the period over which the project proponent is obligated to maintain forest cover (25 years) and (b) the period over which it is assumed forest cover will be maintained in determining the project abatement (100 years). New Forests recognises that this is an inconsistency in the methodology, but also notes that the additional 25% discount on crediting for projects with a 25-year permanence period was implemented to account for the risk that these forests would not be replanted after the end of the permanence period. However, we also recognise that in an agricultural land market environment similar to today's, there is an increased probability that plantations would not be replanted after the end of the permanence period in the absence of an alternative price signal (such as carbon revenue). New Forests believes it is critically important for the methodology to continue to include Schedule 3 projects with the option for project proponents to be able to elect a 25-year permanence period. New Forests would be pleased to discuss our ideas around different quantification approaches with the Clean Energy Regulator and the commercial and climate implications of various alternatives.

New Forests' Additional Feedback - Responses to Guiding Questions

Our Experience with the ERF Scheme

Information portal
The information available through the information portal has generally been well presented. Specifics relating to the application have been unclear and required clarification with the Regulator to ensure compliance requirements have been explicitly met. The ERF staff have been amenable to deal with. They have contacted us if our submissions have errors and have worked with us to correct those errors.

Concerns related to understaffing of the Clean Energy Regulator
New Forests is concerned that the Clean Energy Regulator may be understaffed relative to the growing number of projects. Registering new companies with the client portal has been time consuming and inefficient. Contact "hotlines" are often unanswered. Given we expect to register many more projects over the next 24-36 months, we are concerned that getting these projects registered and approved will be significantly delayed with negative flow on effects for the businesses we manage, including downstream effects on affected contractors and local communities as operations are delayed or cancelled. New Forests recommends increasing the number of auditors available and ensuring they have sufficient technical qualifications to undertake the work.

Problems with FullCAM model
Our primary challenge with the ERF scheme has to do with the FullCAM model. The carbon estimation process using FullCAM has been time consuming, and the software and client portal are not user friendly, particularly for participants who have numerous assessment areas to model. There are multiple equations that are required to be implemented by a project proponent to determine the quantum of abatement for a project. To ensure that all projects are implementing these equations correctly and consistently, New Forests recommends that the Clean Energy Regulator provide project proponents with a Microsoft Excel workbook (or similar) that has functionality to take the project and baseline modelling output from FullCAM and calculate the crediting by Carbon Estimation Area and for the project as a whole.

Project Monitoring, Verification and Reporting
Auditing requirements add significant cost and are still a big learning curve for some auditors. The current workload resulting from project reporting, auditing, monitoring and compliance is burdensome such that only projects that are large in size are economical to manage. This results in a decreased area registered in projects which reduces the impact of the methodology in meeting Australia's emissions reductions targets. The Clean Energy Regulator may want to consider ways to streamline monitoring, verification and reporting to ensure that smaller scale projects are commercial to register, thereby creating further supply of projects and creating more opportunities for a variety of landowners.

Transparency and Continuous Improvement based on Science
New Forests recommends that the science used to support the carbon credit calculations should be open source and regularly peer reviewed to ensure the best possible science is applied to sequestration. Periodic independent scientific review of the plantation forestry methodologies will ensure their appropriateness and accuracy over time. This will require changes to sequestration calculations as improved science and biometric information is available.

Resourcing the Clean Energy Regulator for the Growth of the Market
Private market demand for ACCUs will continue to grow given growing corporate net zero commitments and strengthening of the Safeguard Mechanism. The Clean Energy Regulator must be set up to succeed in running a growing, high integrity, and globally leading carbon market. We would urge the Government to proactively provide

more resourcing to the Regulator in preparation for this growth, in particular investing in systems and technology that will increase efficiency; skills and capability of staff; oversight, audit and integrity functions; communications and public engagement; methodology development; and science, data and continuous improvement.

Ensuring Sustainable Forestry Outcomes
New Forests recommends that plantation forestry ACCU projects are third party certified to sustainable forest management standards (for example, Forest Stewardship Council or Responsible Wood).[6]

Co-Benefits and Financing Biodiversity
Australia has a unique opportunity to be world-leading in climate change mitigation, both in terms of the clean energy transition and the sustainable land use transition. New Forests believes we need the right policy initiatives in place to ensure that a range of nature-based solutions can contribute to Australia's Nationally Determined Contribution, the country's path to net zero, and the Global Goal for Nature. Australia's competitive advantage in international carbon markets and climate policy can be our strong and committed focus on high-integrity nature-based solutions and creation of investment opportunities for a variety of landholders, including First Nations and farmers.

As we have discussed in this submission, the rising competition for land use will make implementation of nature-based solutions more difficult to finance in the future unless the carbon price increases at a pace that makes nature-based carbon removal and storage competitive with alternative land uses. The commercial challenge will be even more acute for biodiversity-rich permanent plantings of native forests, where there is no productive crop, such as timber from plantation forests. New Forests recommends that the Government consider policies that create demand for biodiversity-rich reforestation and support higher prices for ACCUs from such projects. For example, the Government could require that emitters regulated under the Safeguard Mechanism purchase some proportion of their ACCUs from those projects which have biodiversity benefits in addition to climate benefits.

The Government could look to experience in the California cap-and-trade system with the "Direct Environmental Benefits to California" regulation that has recently come into effect. In California, regulated emitters are only allowed to meet a relatively small percentage of their annual emissions through use of offsets, with some of those offset projects occurring outside the state of California. Starting with 2021 emissions, at least half of those offsets must be sourced from projects that create direct environmental benefits (DEBs) to California (e.g. forestry projects based in California). The result has been a bifurcation in prices for offsets, with DEBs offsets now trading at a premium to non-DEBs offsets. This kind of policy approach could be considered in Australia to create more economic value for desired outcomes, such as biodiversity.[7]

Further Discussion on Our Submission

New Forests trusts our submission to the Independent Review Panel is helpful. We extend an invitation to the panel members to tour our assets to see the positive impact the ERF plantation forestry methodologies are playing in maintaining and increasing carbon sequestration and providing economic benefit to regional economies across Australia. We are keen to engage with the panel on any part of this submission. Please get in touch with us by contacting our Impact & Advocacy team (impact-team@newforests.com.au) and Matthew Crapp (Head of Operations, Developed Markets) at mcrapp@newforests.com.au.

[6] Third party certification of sustainable forest management is a design element of the California forest carbon offset protocol.
[7] See California Air Resources Board, https://ww2.arb.ca.gov/our-work/programs/compliance-offset-program/direct-environmental-benefits.

Appendix One - New Forests Managed Assets in Australia