GreenCollar Submission

Introduction

Ensuring that ACCUs and the carbon crediting framework maintain a strong and credible reputation supported by participants, purchasers and the broader community requires us to learn from experience and continue to improve and enhance the institutional and legislative frameworks which underpin the Scheme. With respect to the ERF, this means ensuring methods are fit-for-purpose and updated in response to new data, access to new technology and information, and shifting baselines.

Success also necessitates ongoing investment and commitment to ensure key stakeholders and the community (to the extent possible) have a good understanding of what the Scheme is (and is not) intended to achieve, as well as how it does (and does not) work. This is particularly important when introducing changes to the Scheme and associated government policy settings. Adjustments to the Scheme and policy settings must be done in a way that is well planned, evidence based, **strengthens future implementation, builds certainty and confidence** and **avoids undermining the value of accomplishments to date.**

The Scheme and associated policy settings must provide clarity and certainty whilst reducing risk. This is critical to provide a confident environment for growth of investment in R&D, method development, technical innovation and ultimately scaling of land-based carbon sequestration and emission avoidance projects.

Summary and Key Points

GreenCollar raises the following as critical for consideration by the Independent Review Panel and notes that these comments pertain predominantly to the land sector where it has the greatest experience:

1. **<u>Not sacrificing quality for ease of use and participation – the role of measurement and third party audit</u>.** The value of Australian Carbon Credit Units (ACCUs) lies in the ability of purchasers and other stakeholders to transparently and robustly assure that emissions avoided, or sequestration credited, has in fact occurred. Effectively measuring, accounting and verifying that carbon stock/emissions changes have occurred as a result of project activities necessarily comes with a level of expertise and technical effort..

   The task of writing a method and a set of rules is finding how to balance the need for accuracy and assurance with ways that can be practically implemented on the ground. However, focusing solely on practical implementation can lead to disproportionate focus on upfront transaction costs. In the past, this has led to efforts to limit the very things that provide confidence, such as measurement and audit, in order to simplify implementation and make participation more readily accessible and straightforward.

   GreenCollar is of the strong view that this is a flawed approach. It argues that many of the criticisms levelled at the ERF arise as a direct result of insufficient requirements for measurement and over-reliance on desktop tools and models. This is particularly true of the Human Induced Regeneration (HIR) method. These issues can largely be solved by strengthening requirements for measurement.

   When considering transaction costs, it is relevant to note that, distinct from the HIR method, there are no other forest restoration or reforestation projects globally which are based largely on simulation models. Instead, offsets are generated after measured demonstration of sequestration having occurred in trees.

   Concerns this leads to high cost is not borne out by experience. In every case we have worked with globally, the most significant costs are implementation and opportunity costs over the multi-decade lifespan of projects. Transactions costs are a small fraction of the total cost. In the development and generation of ACCUs, measurement, validation and demonstration provides confidence that sequestration has occurred, establishes the integrity of the resulting ACCU, and transaction costs represent a small percentage of the actual financial value of derived offsets.

2. **<u>Understanding and managing uncertainty</u>.** Many of the types of activities known to deliver significant carbon sequestration and climate change benefit in the land sector also inherently have a level of accounting uncertainty (e.g. vegetation management, soil carbon management, fire management). This uncertainty cannot be construed as meaning land management activities are not delivering the purported climate benefit and it absolutely does not mean activities should not be undertaken or should be omitted from the Scheme. To the contrary, land sector activities delivering carbon sequestration are some of the most important if we are to have any hope of meeting net zero targets.

    With this in mind, focus must be on how to acknowledge and manage uncertainty appropriately rather than attempt to eliminate it. Mechanisms such as the risk of reversal buffer and the principle of conservativeness built into method design play a significant role in addressing inherent uncertainty, but more can be done.

    It is evident that uncertainty risk management (including risk of uncertainty buffers, requirements around target precision, etc) must be more better communicated in order to make it clear what is being delivered, what and how risk is being controlled and providing transparency around assessed impacts.

3. **<u>Incentivising world leading innovation in methodology development and project delivery</u>:** Method development has been a vexed issue under the ERF and its predecessor the Carbon Farming Initiative (CFI). Repeated reviews have sought to resolve these issues, and both the Department and now the Clean Energy Regulator have focused on method development at various times.

    The reality is that the ERF method development pathway is a long way from a best practice design process. With all due respect to government, its best use of resources simply cannot be methodological development and design when global capability, expertise and financial knowledge outside of government with respect to environmental accounting is so much more extensive.

    Current processes for method development in Australia are different to the rest of the world. There are no other programmes globally in which the regulator is responsible for writing new methodologies. Instead, most commonly there is expert development and submission of new methodologies by third party stakeholders including project proponents, industry, academia, NGOs and more. This allows and encourages private sector innovation with associated efficiencies and new ideas. This leads to rapid movement in methodological development, encourages competition for the best approaches and drives efforts to discover new opportunities not covered by existing methods. This is a far superior approach to the current process where priorities are predetermined by either a political or government process and then restricted by access to limited funding and technical capability.

    We strongly support amendments moving Australia towards international best practice in method development (e.g. VERRA, GS, California ETS offsets), which allow for expert development and submission of methods. In these processes, regulators deliver critically important roles such as giving approval for methodology writing after concept submissions, developing key principles underlying standard development, overseeing approval of new methods, withdrawing methodologies if problems arise, and triggering method consolidation when similar methods exist.

    We will have better, more innovative methods and a wider breadth of methods if government enables and supports method identification and development by experts and key stakeholders. **We believe government should instead focus on ensuring that the barriers to entry for method proposal and development are high and robustly enforced.**

4. **<u>Role of co-benefits</u>.** As stated in the consultation paper, the ERF framework is designed to deliver lowest cost abatement. However, in GreenCollar's experience there are many economic, social and cultural benefits of nature-based carbon abatement projects. Many landholder partners convey the importance of the financial co-benefit to their families being able to stay on the land, support local jobs and communities, and their ability to invest in their farms and sustain improved land management. The revival and retainment of long-term underrepresented semi-arid woodlands ensure sustainable operation of dominant forms of land use such as cattle, sheep and goat grazing. Carbon sequestration

projects provide a meaningful real opportunity to diversify on-farm income, reducing exposure to fluctuating commodity and climatic conditions (for example floods and drought).

Landholders reinvest their carbon money into infrastructure, and many can now destock early when drought hits, improving business resilience and maintaining jobs. Long term projects can bolster working stations and farms, keeping families on the land and preserving the rural way of life. Good projects work alongside existing farming operations; they do not lock up land or require destocking but instead careful design and monitoring improves land health and overall productivity through improved soil quality and ground cover, better water retention, reduced run-off, restored vegetation and improved biodiversity. As evidence, GreenCollar can present the operation of hundreds of projects it operates throughout the country. Co-benefits also have ongoing value well beyond the life span of the carbon projects. In order to incentivise long term participation by landowners beyond the carbon crediting period, GreenCollar points to the benefits of additional environmental markets opportunities such as biodiversity credits for example which could pay landowners to support important and difficult things such as the transition from a thickened forest dominated by pioneer species (typically INS or Invasive Native Species) to a more open diverse forest with healthy understory and groundcover.

Notwithstanding the many and varied benefits which come along as 'co-benefits' to carbon farming, GreenCollar does not believe this should be seen as a reason to accept weak carbon accounting for all the reasons stated elsewhere. However, co-benefits are an important tool in large scale practice change and must absolutely be taken into consideration when assessing the overall impact of the scheme to date and what features to further strengthen and enhance.

Carbon co-benefits should be explicitly not implicitly accounted for and measured in order to recognise their contribution, not only to climate mitigation, but also to improving other natural capital assets.

5. **We must address land clearing and the ERF is our most effective tool to do this for the long term.** Politics and land clearing make for an awful mix, which is why after over 100 hundred years of trying to solve this problem land clearing rates in QLD and NSW are as high as they have ever been. The only effective long-term solution is to properly value the carbon, biodiversity and conservation value of vegetation such that it is an attractive long-term economic alternative to land clearing. When this can be done, it works. We know this categorically from the wide uptake of projects where landholders qualify for participation under the limited scope of existing methods. Ongoing large scale land clearing and deforestation represents the opportunity cost of failing to do this.
It is a fallacy to discount avoided emissions from avoided clearing projects as inferior or of less certainty than other land sector projects.

- **Crediting of Avoided Deforestation projects:** GreenCollar considers the current crediting profile of AD projects to be both appropriate and conservative. Crediting of AD projects occurs over 15 years and this is largely to address an unknown specific date of clearance. In addition, the soil carbon pool has been omitted as a conservative measure. For AD projects in Western NSW, there is high risk of clearing, as evidenced by historical and contemporary clearing rates, and limited circumstances in which AD projects are permissible. It is a significant strength of the AD method that it does not credit fully in year 1 of a project (as is common under international methods) which would lead to a flawed baseline. Spreading credits over the life of the AD projects reflects the probability of clearing event over the period and also incentivises continued land management and improved practice.

- **Avoided Clearing in QLD and NSW:** There is an urgent need for an avoided clearing/deforestation methodology applicable in QLD and NSW where rates of clearing and forest loss are exceptionally high. Current international best practice models the risk of clearing for a given area based on regional historical clearing rates taking into account factors such as accessibility, proximity to existing clearing, desirability of climate and soils, topography and previous management. There are now numerous precedents for risk-based assessments of clearing, most notably the development of the Verra JNR allocation tool, which removes the requirement to establish project-specific baselines

and utilises a risk probability approach derived from national or subnational datasets to establish the baseline.

Under the risk-based approach, a project proponent can ascertain the relative risk of a clearing event which would result in the loss of current or future forest cover on a unit of land as a composite of a number of risk factors (as described above) not limited to the fact it has been cleared before or has a pre-existing permit to clear. The relative risk on specific hectares would determine baseline deforestation and can also be used to derive a discount factor for issued abatement. This would remove the requirement to set arbitrary risk thresholds, e.g. low, medium, high.

Based on current land clearing rates, we estimate an additional 5.6M-11.3M tonnes per annum of abatement could be generated from avoided clearing.

- **Alternative risk-based approach:** A QLD specific model has been developed (by Don Butler, currently a professor at ANU) applicable to land where at least one previous clearing event has occurred. This shows a strong correlation between the modelled risk and real incidents of clearing on QLD category X land. Similar risk mapping has been conducted by NSW DPI and OEH. These models are considered conservative but notably both are ready for inclusion and use as a starting position as part of the Integrated Farming Method.

  The level of clearing risk for a unit of land under the QLD specific model is obtained by using regression modelling to assess eleven biophysical variables for which there are readily available spatial data (e.g.: vegetation cover, slope, time since last clearing event, rainfall), and correlating those with clearing patterns detected through remote sensing by the State-wide Land and Trees Study (SLATS). This method could build off work being completed internationally on risk of deforestation where a percentage risk is calculated for each pixel and the recent rate of clearance on an annual basis is applied to the pixels with the highest risk of loss. The approach that is being followed internationally is to credit based on proportional risk of deforestation.

6. **Improvements to regeneration methods can be made which will strengthen both existing and new projects** (including HIR, environmental plantings and in low rainfall landscapes)**.**

- **Direct Measurement** - As highlighted, best practice changes to the HIR methodology and other regeneration methods should include requirements for repeat direct measurement carried out in the field versus wholly desktop modelled approaches. Allometric measurement indisputably provides more scientifically robust determination of actual abatement versus modelled mechanisms.

  Direct measurement would also allow for planting and natural regeneration methods to be combined into one, making it simpler and allowing for combinations of natural and planted restoration projects not possible due to limitations of the FullCAM model.

  GreenCollar has consistently advocated for the need for a requirement for repeat, field-based measurement to ensure sequestration in regenerating forests is not overestimated and is sufficiently conservative (including in uncleared rangeland areas). Further, repeat direct measurement over time can be used to provide surety that observed increases in woody biomass are real, persistent (i.e. not temporary) and additional to impacts of rainfall.

- **Calibration of FullCAM** – GreenCollar shares the concern raised by the ANU/UNSW ERF research team that FullCAM is not currently calibrated for use on sites where native vegetation exceeds 5% of the estimated maximum biomass at the modelling commencement date. It is noted in particular that the requirement outlined in the 2019 Guidelines on stratification and evidence records for HIR and NFMR that carbon estimation areas demonstrate more than 5% canopy cover at project commencement may result in a violation of the FullCAM model assumptions.

  GreenCollar has consistently advocated for the inclusion of a requirement for direct measurement to provide a mechanism to ensure that sequestration in regenerating forests is not overestimated as well as repeat direct measurement to provide surety that observed increases in woody biomass are real, persistent (i.e. not temporary) and additional to impacts of rainfall.

- **Use of FullCAM** - Globally, there may be other tools available to complement FullCAM, such as the new Verra AR methodology. Under that methodology, there must be a remote sensing analysis that looks at similar lands and sees the percentage that are/are not reforested over a given time period (e.g. capturing where clearance of the young vegetation is occurring). This would thoroughly deal with the additionality question. Subsequently, accumulation is based on permanent measurement plots. There is a requirement that existing large trees be excluded from calculations of increment meaning projects are only focused on the growth of new seedlings and saplings. This could greatly simplify the stratification process. The only stratification exclusions would be actual areas of existing forests, and areas where trees are unable to grow. Such a methodology would be the ideal solution.

  An alternative to a FullCAM modelling-only approach could be to use measurement to demonstrate that sequestration is equal or higher than the model predicts. The model sets the maximum that can be credited, but if measurement gives stocks lower than given by the model then only this lower number would be credited.

7. **Additionality considerations** - GreenCollar recognises that the HIR method does not control for the impacts of rainfall on regeneration. That is, it has no processes for separating out the impacts of management from the impacts of rainfall in any observed changes in woody biomass. Due to this, there is a risk HIR projects in uncleared rangeland areas are being credited for non-additional abatement. **This risk however is theoretical** and GreenCollar does not suggest that projects have been over credited. Notably, Scheme design intends that this should be addressed by the risk of reversal buffer. Such approaches are best when uncertainty cannot be adequately removed in the short term through measurement. The risk of reversal buffer applies to all sequestration projects and reduces the carbon abatement issued during a reporting period by 5%.

8. **Policy uncertainty and unpredictability can lead to loss of market confidence:** The last 18 months has already had significant impact on the market affecting both buyer confidence (in the quality of ACCUs they are purchasing), investment and developer confidence (to invest in project design and development) and prospective landholders confidence (to participate and make land management changes needed to deliver projects).
   If at any time the Scheme is subject to change, particularly retrospective change, this will have the effect of devaluing historic projects and ACCUs in turn making investment into new projects higher risk. Certainty and minimal sovereign risk is critical to provide market confidence and build the solid investment environment required. Changes should be made in the context of updating baselines as data access and measurement improves whilst safeguarding the value of activity already undertaken. Changes to methods must be prospective not retrospective.
   To do otherwise would make ERF projects borderline un-investable as project proponents would have no certainty of project continuity.
   Regular review of the powers and functions of regulators like the CER is critical to ensure ongoing community and investor confidence. GreenCollar notes the relatively short time frame of this review and, noting the highly complex subject, argues the need for regular reviews to keep pace with new science and technology in measurement, modelling and attribution

9. **The 'one-third rule':** GreenCollar considers this rule adds unnecessary red tape and was introduced on the basis of inadequate evidence. A very short consultation was conducted in relation to this significant change which became effective without further consultation on 8 April 2022. The change provides the Agriculture Minister with authority to effectively veto regeneration projects if the Minister considers the project would have a material adverse impact on agricultural production or the local community in the region. There is minimal guidance, unclear policy parameters and the rule applies to native forest regeneration projects covering more than one third of a farm which is often the case with regeneration projects. In its assessment of the Regulatory Impact Statement the Office of Best Practice Regulation noted "*To achieve a good practice assessment as per the Australian Government Guide to Regulatory Impact Analysis, the RIS would have benefitted from: • Additional evidence on the historical relationship between Emissions Reduction Fund projects and any unintended negative social, economic*

and environmental impacts in regional communities." A copy of GreenCollar's submission to the consultation process is attached for the Panel's information.