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Submissions
Climate Change Authority
Action on the land - Issues Paper
E: submissions@climatechangeauthority.gov.au

Action on the land: reducing emissions, conserving natural capital and improving farm profitability

RepuTex welcomes the opportunity to make a submission to the Climate Change Authority (CCA) for its issues paper, "Action on the land: reducing emissions, conserving natural capital and improving farm profitability".

RepuTex is Australia's leading energy and emissions advisory firm, providing in-depth analysis of the local carbon, electricity and renewable energy markets. With over 150 customers in Asia-Pacific, RepuTex works with a diverse range of public and private sector customers, including Power, Energy, Metals & Mining and Industrial companies, Project Developers, Land-use, Financials, Government departments and agencies.

RepuTex has a depth of expertise in energy & climate policy and market analysis, utilising our proprietary models to help companies and governments to analyse the economic impacts of Australia's low carbon transition, and the influence of policy on market supply-demand and pricing dynamics.

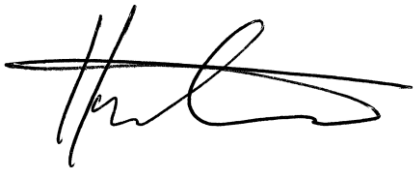
Within the land sector, RepuTex provides Australian Carbon Credit Unit (ACCU) and Emissions Reduction Fund (ERF) pricing services to a wide range of project developers, aggregators and intermediaries - including carbon sequestration proponents, industrial facilities, local and state governments - assisting firms to analyse supply and ACCU pricing dynamics for ERF auction events and future supply-demand dynamics across the Australian economy.

At a sectoral level, RepuTex also undertakes long-term forecasting and analysis of the Land-use sector, underpinned by our proprietary Land Clearing (source of emissions) and Land Sequestration (emissions sink) models. These models are applied to inform our long-term emissions estimates for the Australian economy, and our policy scenario analysis for public and private sector advisory clients.

This submission draws on the above sources, providing input on barriers to, and solutions for, delivering 'win-win' outcomes for the Land-use sector. In particular, we focus on the effectiveness of current policy to support the Land-use sector, and options to involve the private sector in creating new markets.

Should you have any questions regarding this submission please contact me directly on (03) 9600 0990.

Best Regards,



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BRIEFING: An "Early Action Scheme" to increase private sector investment in the land sector

IN SHORT:

- While managing deforestation will continue to be important to Australia's national emissions, the bulk of the land sector's emissions abatement capacity lies in carbon sequestration. Sequestration investment is currently supported by the federal government's $2.55 billion Emissions Reduction Fund (ERF).

- The ERF has been successful in contracting ACCUs and improving farm profitability, however, the policy has not curbed national emissions due to the low-quality of abatement contracted and the high rate of Australia's emissions growth from industrial sectors.

- While the land-sequestration sector is able to deliver large scale abatement, the ERF relies on one-off appropriations within the federal budget to maintain ACCU demand. The sizable cost of Australia meeting its 2030 target may therefore place considerable strain on the federal budget, and may create a political impasse between budget repair and Australia's commitment under the Paris Agreement.

- Even if funding for the ERF is extended, we are unlikely to see the scheme's abatement profile – concentrated in the land sector – align with Australia's emissions growth, underpinned by industrial sectors. This is due to the lack of industry participation in the ERF, with the low price environment of the voluntary scheme creating a weak incentive to induce cost-saving projects.

- The low price environment of the ERF, combined with commercial uncertainty and administrative complexity of the scheme has led to negative sentiment among proponents. This has led to most registered projects becoming 'economically stranded' above the average contract price, with little incentive for further participation, evidenced by poor contracting rates in recent ERF auction events. Looking forward, this likely limits action on the land to non-additional "anyway" projects.

- In transitioning from public funding, the creation of new sources of private demand for ACCUs has potential to complement public funding and support investment in the land-sector. We see two key opportunities to encourage greater private investment in the land sector:

    1. the design of a robust 'baseline and offset' scheme under the safeguard mechanism; and/or
    2. the introduction of an 'Early Action Scheme' (EAS) to provide guidance for high emitting companies to voluntarily develop emissions reduction plans ahead of future emissions regulation, including investment in domestic offsets.

- In the event that emissions baselines under the safeguard mechanism are aligned with Australia's 2030 target, and businesses are held accountable to baselines, a 'baseline and offset' scheme may be an effective way to increase private demand for ACCUs while maintaining compliance flexibility for industry.

- In the absence of (or delay to) more robust settings under the safeguard mechanism, an EAS is able to govern any 'pre-legislative' compliance period by providing guidance for high emitting companies to voluntarily reduce emissions - or incentives to purchase offsets - ahead of future emissions regulation.

- When designed properly, an EAS can act as a transition mechanism to increase the involvement of the private sector in natural resource management, lowering public funding requirements and improving farm profitability through direct investment by industry. An EAS is therefore able to facilitate a win-win for industry and the land-sector, providing policymakers with an opportunity to encourage emissions reductions without applying a direct penalty mechanism or cost handbrake to economic development.

The role of land carbon in reducing Australia's greenhouse gas emissions

The Land-use, Land-Use Change, and Forestry (LULUCF) sector makes an important contribution to mitigating climate change though two paths: avoiding the cycling of carbon dioxide (CO_2) stored in the land to the atmosphere; and by removing elevated levels of CO_2 from the atmosphere. Because of the continental scale of the LULUCF sector in Australia, annual variations in land-use change can create large swings in national emissions accounting, making the sector a critical element of total national emissions and a key pillar to meet Australia's international emissions reduction commitments.

In analysing the abatement potential of the LULUCF sector, we direct the CCA to our report, titled "The role of land carbon in reducing Australia's greenhouse gas emissions", commissioned by The Wilderness Society.

Analysis considers the impact of policy targeting emissions reductions and removals attributed to land clearing (deforestation) and increased investment in land sequestration.

We summarise the key findings below:

- **Should emissions from deforestation be phased out by 2030 through the tightening of vegetation laws**, analysis indicates that between 300 and 650 million tonnes (Mt) of cumulative emissions reductions may be achieved between 2021-30. If governments acted faster and phased out land-clearing emissions by 2020, this would add an additional 100 Mt to the cumulative total to 2030. This is able to occur at minimal cost, attributed to monitoring and compliance of vegetation controls.
- **The land sector's ability to remove CO_2 from the atmosphere is vast**, with between 200 million - 1.1 billion tonnes of CO_2 sequestration possible by 2030 through investment of between $5 - 50 billion.
- **Should the phase out of land clearing be combined with additional investment in sequestration, the abatement contribution of the land sector would be considerable**. Analysis indicates that an additional $5 billion investment in sequestration, combined with the phase out of land clearing, can deliver between 500 and 850 Mt of abatement by 2030. Should investment in sequestration be extended to $10 billion, total abatement from the land sector would increase to between 600 Mt – 950 Mt.
- **At these investment levels, the cumulative amount of abatement from the land sector by 2030 (500-950 Mt) is of the same magnitude as the complete phase out of fossil fuels** from sectors such as transport (100 Mt) and electricity (500 – 700 Mt). This positions the land sector as a significant pillar of Australia's long-term decarbonisation plan.
- **Unlike carbon buried in fossil fuels, carbon stored on land is more vulnerable to being returned to the atmosphere, e.g. through bushfires, insect plagues, and/or changes to land clearing polices**. Therefore, moving carbon from the atmosphere back to the land by planting trees or other means for 25 or 100 years is a critical part of Australia's climate policy response but cannot truly offset fossil fuel emissions that would otherwise remain sequestered for millions of years. A multi-sector emissions reduction approach is necessary to achieve Australia's current target, and prepare for an expected scale up in Australia's ambition.
- **Analysis indicates that early action is able to achieve larger amounts of land carbon abatement for the same initial investment**. For example, in extending the analysis to 2050, findings indicate that the phase out of land clearing, and investment of $5 billion today, would result in over 2,000 Mt of abatement by 2050.

The significant scale of emissions reductions from avoided clearing and reforestation underscores the potential role of the land sector as a significant driver of Australia's national emissions reduction framework. While the land sector is often overlooked, findings indicate it is a key pillar to meeting any international emissions reduction commitment, with scale of abatement that is comparable to the full decarbonisation of the electricity or light

vehicles sectors by 2030. In this context, should land clearing regulation be tightened and investment in carbon sequestration be scaled up, the land sector has significant potential to deliver large-scale emissions reductions in Australia, at relatively low cost.

Below, we examine the potential for policy to unlock greater emissions reductions via increased investment in sequestration, with a focus on options to involve the private sector in creating new markets.

Investment in sequestration - the Emissions Reduction Fund

The Land Use, Land Use Change and Forestry (LULUCF) sector represents a considerable opportunity for emissions reductions in Australia, and could become a key pillar for Australia to meet its current 2030 target - and a future net zero target by 2050 - under any long-term policy vision. Subsequently, it will be critical to address the land-use sector as part of any effective plan that seeks a large-scale reduction in Australia's emissions.

While managing deforestation will continue to be important to Australia's national emissions, the bulk of the capacity to reduce emissions further lies in carbon sequestration. Investment in sequestration is currently supported by the federal government's $2.55 billion (bn) Emissions Reduction Fund (ERF), formerly the Carbon Farming Initiative (CFI). The ERF is the centrepiece of the government's Direct Action Plan climate policy framework, operating as a competitive reverse auction process to tender contracts for Australian Carbon Credit Units (ACCUs) at the "lowest available" cost. The ERF is administered by the Clean Energy Regulator (Regulator), which enters contracts with successful bidders, guaranteeing payment in return for delivery of ACCUs.

The ERF was designed to be supported by a "safeguard mechanism" to ensure that emissions reductions paid for through the ERF are not offset by significant increases in emissions elsewhere in the economy. The safeguard mechanism commenced on 1 July 2016, with emissions baselines for covered facilities set at the high point of each facility's emissions from 2009-10 to 2014-15.

While the ERF has been successful in contracting ACCUs, the policy has not curbed Australia's net emissions due to the high rate of Australian emissions growth, which is outpacing annual abatement purchased by the ERF. The success of the ERF policy must therefore be measured by the sum of its parts – the ERF and the Safeguard Mechanism. In this context, further investment in the ERF will be ineffective in helping achieve Australia's 2020 emissions reduction target unless facility baselines under the safeguard mechanism are tightened.

Public investment in the ERF will be considerable to meet the 2030 target

While the land-sequestration sector is able to deliver large scale emissions reductions, relying exclusively on public investment to support the Emissions Reduction Fund is likely to place considerable strain on the federal budget. Under the current ERF scheme, the federal government is the only source of demand to acquire ACCUs, with investment supported by public funding allocated under the federal budget.

In this context, we do not view public funding as a viable long term solution to support land sequestration, with the allocation of new funding likely to place ongoing strain on the federal budget, while potentially creating a political impasse between budget repair and Australia's international commitment under the Paris Agreement.

Even if funding for the ERF is topped up, we believe that we are unlikely to see the ERF abatement profile – concentrated in the land sector – align with Australia's emissions growth profile, which is underpinned by the industrial sectors. This is due to the lack of industry participation in the ERF, with negative sentiment driven by the low average price of ACCUs and the commercial and administrative complexity of the scheme.

This has created significant barrier to participation for many firms, particularly high emitting companies, with most registered projects 'economically stranded' with little incentive for further bidding given the current low

price environment. Looking forward, this may limit ACCU crediting and issuance, potentially dampening supply of domestic ACCUs for use as offsets.

Furthermore, projects that continue to be registered are more likely to be non-additional "anyway" projects (those that would have occurred irrespective of the ERF), with greater tolerance for low contract prices. This reflects a broader design flaw in the scheme, with low-quality abatement being contracted by the Regulator.

Transition to private funding - An offset market under the safeguard mechanism

The creation of new sources of demand for ACCUs has potential to reduce the fiscal drain of the Emissions Reduction Fund, with investment in the land-sector able to be supported by covered facilities under the Safeguard Mechanism.

In this scenario, facilities exceeding their emissions baseline may be able to source offsets where external abatement is cheaper than internal emissions reduction activities. In the event that emissions baselines under the current safeguard mechanism are tightened in line with Australia's 2030 target, and baselines enforced, such a mechanism would be an effective way to increase private demand for ACCUs.

Such an approach is also able to support low cost emissions abatement for high emitting industries facing a high cost of internal abatement such as Mining and Energy. For these industries, low-cost offsets are able to replace high-cost internal emissions reductions, reducing the economic cost of meeting Australia's emissions reduction target, and minimising competitive impacts, while ensuring broad contribution from high emitting sectors to meet Australia's 2030 emissions reduction target.

A voluntary 'early action scheme' (EAS) can support emissions reductions ahead of regulation

Should the introduction of more robust settings under the safeguard mechanism be postponed, we believe that an opportunity exists for an 'Early Action Scheme' (EAS) to be introduced to provide short-term guidance for high emitting companies to voluntarily reduce emissions - or purchase offsets - ahead of future emissions regulation.

Early action rules exist in China, Europe, California and the United States, defining what constitutes early (or 'pre-legislative') action to reduce emissions, and providing assurance that voluntary action undertaken today will be credited against any future emission reduction regulations.

When designed properly, an EAS can act as a transition mechanism to support greater investment from industry in the land sector by rewarding early actors, while providing a complimentary source of demand to support the supply of high value domestic offsets such as land sequestration. Such a scheme may be implemented at the State of Federal level, which we discuss below.

Federal implementation

While current regulation does not prohibit early action, voluntary rules under the National Carbon Offset Standard (NCOS) are ambiguous in their application for 'covered' facilities seeking to reduce a future liability.

Voluntary action under NCOS sets requirements for companies to become carbon neutral. In doing so, the scheme provides guidance on what is a genuine voluntary offset unit, including: Australian Carbon Credit Units (ACCUs), Certified Emissions Reductions (CERs), Removal Units (RMUs), Voluntary Emissions Reductions (VERs) and Verified Carbon Units (VCUs). In this way, NCOS is not consistent in coverage or scope to the National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015 ("the safeguard rules"), which limits the use of offsets to ACCUs.

In addition, NCOS does not provide guidance on how voluntary 'early action' by high emitting companies will be recognised under any future compliance policy, such as how voluntary emission reductions will be accounted for if emissions baselines decline in the future, or any limit on the use of offsets.

In a baseline system derived from historical emissions, such as the safeguard mechanism, this uncertainty can create a perverse incentive for companies to potentially be penalised for early action, or be rewarded for increasing emissions. For example, facilities that act to reduce their emissions in advance of regulations may be penalised if they are subject a uniform baseline reduction off a lower emissions base (i.e. baselines are set from 'current' emissions in 2018). Inversely, firms that increase their emissions could be advantaged by receiving a higher baseline setting.

The lack of clear regulatory guidance on early action rules may be a missed opportunity for policymakers to better support the land-sector, with a defined EAS likely to send an important investment signal to covered entities and offset suppliers. Ensuring that covered facilities clearly understand what actions will and will not qualify for early action credits may therefore provide regulatory certainty, while early investment may be directed to areas policymakers deem most important, such as the agricultural sector.

This may facilitate a win-win for industry and the land-sector, while providing policymakers with an opportunity to encourage emissions reductions without applying a penalty or handbrake to economic development.

State implementation

A number of states have developed long-term emissions reduction targets and are in the process of developing programs to meet those targets.

Should the introduction of more robust settings under the safeguard mechanism be postponed at the federal level, an EAS may be introduced within a single state or between like-minded states to provide guidance for high emitting companies to voluntarily reduce emissions (or purchase offsets) ahead of future emissions regulation.

In a similar way to the operation of a state-based Renewable Energy Target (S-RET), a state based EAS may be an effective way for states to encourage investment in emissions reduction projects specific to the characteristics of each state. For example, in Queensland and New South Wales, an EAS may be designed to target investment from the private sector into avoided deforestation offset projects. In South Australia and Victoria, investment may be targeted towards soil carbon and energy efficiency projects, etc.

Such a mechanism may therefore support the states as they seek to design policy to reduce emissions in line with their respective emissions reduction targets, while providing an opportunity to increase private investment in emissions reduction activities and capitalise on local economic co-benefits.

Design considerations

The creation of rules or guidelines to allow early action would require minimal change to State or Federal regulation. We envisage a two-step process to create more regulatory certainty and increase market confidence to support early action.

1. **The creation of new "early action guidelines".** Early action guidelines may be established under the existing Safeguard or NCOS schemes, or as a new policy mechanism at the State level (or between like-minded states). The guidelines would clarify how early action undertaken by "covered facilities" will be recognised under a future compliance mechanism. For example, providing guidance on:

- Assurance that one tonne of emission reductions will equal one tonne of credit against any future domestic emission reduction obligation;
- Definition of how an early action credit will be counted against future baselines - for example will early action credits comes out of an allowance (i.e. under an emissions baseline) or be awarded in addition to a limit (i.e. above an emissions baseline). In addition, how will early action credits interact with re-baselining provisions and the setting of future emissions baselines;
- Definition of when specified emissions reductions must have occurred;
- Definition of the permitted use of carbon offsets by type (e.g. Australian Carbon Credit Units, etc.), possibly including international units;
- Definition of the permitted use of carbon offset methodologies to ensure environmental integrity and additionality of allowable units;
- Definition of any limits on the use of offsets (for example: no more than 5% of total permits, averaged over any three-year period may be used under a future compliance scheme as suggested by Hamilton and Karoly in their dissenting report for the Climate Change Authority's special review);
- Definition of any incentive clauses, such as future allowance benefits, or favourable multiyear compliance treatment, or possible tax concessions to kick start early abatement activities (etc.).

2. **Early investment signal from the government.** A signal from the government will be required to incentivise the market to accelerate voluntary emissions reductions. This may be in the form of a statement to introduce tighter restrictions on high emitting companies by a specific year, even if the statement is in general terms. Without such a statement of intent any EAS is likely to be significantly limited in its effectiveness.

Benefits of an early action scheme

An early action scheme is not a mechanism to achieve Australia's contribution under the Paris Agreement, or a specific state emissions target. However, a voluntary scheme for high emitting companies can facilitate a softer landing for high emitting companies in the event that regulations do form part of Australia's emissions reduction strategy in the future. In this way, an effective voluntary scheme can result in emissions reductions without the application of a penalty mechanism, and without constraining economic development.

In creating an early action offset scheme, we see a range of benefits for high emitting companies, policymakers, and the carbon farming industry. These include:

- **Remove disincentives for early action.** Clarification of early action rules can remove disincentives for firms to reduce emissions in advance of regulation by better defining how emissions reductions undertaken now will be treated against future compliance settings.
- **Support the decarbonisation of the Australian economy.** Early investment in actions that reduce emissions will reduce the risk of investments becoming stranded and lead to considerably lower cumulative emissions over the next decade. In this way, delayed action is an unnecessary cost to the economy.
- **Greater investment in the carbon farming sector.** The creation of new sources of demand for ACCUs has potential to reduce the land sector's dependence on fiscal drain of the Emissions Reduction Fund and the on the Federal Budget, while supporting increased investment in the land-sector from covered facilities under the Safeguard Mechanism.
- **Ensure early action in advance of future policy**. Given that emissions reduction policy can take many years to design and implement, early action rules are a way for State and Federal policymakers to provide the investment certainty for high emitting companies to begin executing emissions reduction

plans in support of Australia's 2030 target while policy develops. These companies, with the highest emissions have, to date not participated in emissions reduction policies such as NCOS or the ERF.

- **Improved risk management activity from high emitting companies**. Not all sectors will share the burden and benefits of emissions reductions equally, with high emitting sectors likely to face a larger liability to reduce emissions in line with their relative contribution to Australia's emissions profile. In this way, an improved voluntary framework may provide a basis for effective risk management by providing high emitting companies with a means to design a 'soft landing' in readiness for future compliance obligations. This may also become an effective way to communicate risk management to regulators such as the Australian Prudential Regulation Authority (APRA)[1].
- **Providing a transition framework to a future regulation**. The design of an early action scheme can ensure a smoother transition to any future compliance scheme, or provide the basis for a scheme between likeminded States in advance of a federal policy. While current Australian regulations do not prohibit early action, voluntary rules under the National Carbon Offset Standard (NCOS) are ambiguous in their application for high emitting facilities seeking to reduce a future emissions liability.

ABOUT REPUTEX

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