

WENTWORTH GROUP

OF CONCERNED SCIENTISTS

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Climate Change Policies Review
Review Branch
Department of the Environment and Energy
Canberra ACT 2601

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Dear Review Branch,

Submission to the Climate Change Policies Review

We welcome the Australian Government's 2017 climate policies review. It presents a valuable opportunity to set in place a long-term plan for Australia to meet its *Paris Agreement* commitments, while providing investor certainty to secure a clean and reliable supply of energy for the Australian economy. With the right incentives in place, such action also presents an opportunity to finance large-scale investments in carbon farming across regional Australia. A stronger carbon price presents a compelling economic opportunity, particularly for regional economies, to repair degraded landscapes and improve farm productivity. Such outcomes are achievable and are in Australia's national interest.

Without global action, global temperatures are likely to increase by 4 degrees or more by the end of this century, a level the world has not experienced for around 40 million years.¹ This would have profound implications for Australia – our cities, coastal regions, agriculture, the health of the Australian environment, and the health of its people. It is in our nation's self-interest that global greenhouse gas emissions are reduced to hold "the increase in the global average temperature to well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels".²

Australia's emissions have grown at 1% per year for the last two years. According to the government's own forecasts released in December 2016, Australia's emissions are therefore projected to be about 2% above 2000 levels in 2020³. The government's forecasts also suggest that emissions from Land Use Land Use Change and Forestry (LULUCF) are projected to increase from their present near-zero levels. The combination of these two factors means that Australia is unlikely to meet its emissions reduction target of 5% below 2000 levels in 2020, and puts at risk its commitment to reduce emissions by 26-28% below 2005 levels by 2030. Australia must make its contribution to global climate change mitigation efforts with a credible government-led plan to transition it to a net zero emissions economy by 2050⁴.

Achieving a net zero emissions economy by 2050 in an economically responsible way requires long-term emission reduction targets, a price on carbon, and stronger incentives to store carbon in the landscape. The Australian Government has, in its favour, much goodwill amongst rural communities, farmers, indigenous land managers, conservationists, industry leaders and scientists to embrace such reforms. The uptake for the *Renewable Energy Target*, *Carbon Farming Initiative* and *Emissions Reduction Fund* is evidence of this, as are on-going calls by the Australian community and industry for a stronger carbon price.

This submission is generally focused on questions in the *Review of Climate Change Policy Discussion Paper* related to "land and agriculture", and makes the following key points:

1. Healthy landscapes store more carbon.
2. A strong carbon price is a compelling economic opportunity for regional Australia.
3. It is in the long-term national interest to go beyond "lowest cost abatement".
4. There are solutions to encourage carbon offset co-benefits.
5. Partnerships are critical to long-term policy success.

We note that this review does not discuss climate change adaptation policies that will be required to make Australia more resilient to the impacts of climate change. This omission is understandable in the broad context of the review but is regrettable.

1. Healthy landscapes store more carbon

The focus of climate change mitigation must be on reducing emissions from energy generation, manufacturing, agriculture and transport. Whilst this is fundamental for reducing Australia's emissions, it is near impossible to achieve the scale of reductions required unless we also harness the full potential of our landscapes to remove carbon from the atmosphere and store it in vegetation and soils.

Harnessing this potential presents Australia with an opportunity to transform the way we manage Australia's landscape - repairing degraded land and river corridors, improving the condition of agricultural soil, and conserving Australia's biodiversity.

Healthy landscapes store vast quantities of carbon. CSIRO has estimated the biophysical potential of the Australian landscape to store carbon⁵. These estimates indicate that while only a proportion of the total potential is practically achievable, if Australia were to capture just 15% of the biophysical potential of our landscape to store carbon, it would offset the equivalent of 25% of Australia's current annual greenhouse gas emissions, every year for the next 40 years⁶.

2. A strong carbon price is a compelling economic opportunity for regional Australia

Food and fibre production provides the backbone of many regional economies, as well as the resource base for the valued-added industries that support regional jobs. A long-term carbon price presents an opportunity to restore landscape health, enhance agricultural productivity and support regional employment^{7, 8}.

Realising the co-benefits of storing carbon in vegetation and soil requires Australia to commit to a long-term cap on emissions, to provide long-term investment security to landholders, and to create a sufficient carbon price that covers the cost of landscape restoration⁹. The *Emissions Reduction Fund* has spurred a modest level of investment in revegetation, avoided deforestation and soil rehabilitation, and supported technology solutions such as capturing methane from piggeries for energy use¹⁰. However, so long as the government is the only *effective* large-volume buyer of carbon offsets from these projects, the available investment will be constrained.

To realise the full potential of abatement in the land sector, the carbon offset market must be expanded through the creation of an economy-wide price on carbon¹¹. Regardless of the type (be it a cap-and-trade emissions trading scheme or energy intensity scheme) the overarching design should create sufficient demand for carbon offset credits. This will encourage carbon offset projects that not only reduce Australia's domestic emissions, but also repair agricultural soils and improve production whilst restoring native vegetation, conserving biodiversity and improving water quality through the mitigation of streambank erosion.

The most recent *Emissions Reduction Fund* auction closed with an average carbon price of \$11.82¹². Modelling by the CSIRO, ABARES, Climate Works Australia and other reputable institutions suggest that a carbon price of \$25 tonne CO₂e is necessary to unlock a potential \$2 billion per annum into carbon farming investments across the continent^{13,14, 15, 16,17, 18}. A long-term carbon price would be a transformative economic policy, particularly for rural economies through, boosting sustainable agricultural intensification and through the fast-tracking of new technologies that would contribute to the repair and conservation of the Australian landscape^{19,20}.

The implementation of carbon pricing initiatives, be it cap-and-trade or a carbon tax, have grown threefold in the last decade and now cover around 13% of global emissions. This includes seven out of ten of the world's largest economies²¹. The introduction of an economy-wide carbon price is generally favoured by industry and financial markets. In many cases, in the absence of a carbon price, thousands of companies are already using an internal carbon price to assess potential investments²⁰. Climate change and carbon pricing is also rewriting the rules on how rating agencies, insurance companies and regulators assess the risk of an asset, prompting fresh calls from industry to institute a strong carbon price to help remove policy and investment uncertainty^{22,23,24}.

Australia can have a strong price on carbon while also growing the economy, shifting to renewable energy sources and repairing Australia's degraded landscapes.

3. It is in the long-term national interest to go beyond “lowest cost abatement”

The *Emissions Reduction Fund* is presently designed to purchase “lowest cost abatement”. Going beyond “lowest cost abatement” will produce multiple benefits – for people, for regional economies and the environment. Achieving these outcomes requires a suite of institutional arrangements to manage the carbon offsets market so that carbon farming is guided into areas of highest co-benefits, and away from areas of potential high risk such as prime agricultural land and monoculture plantings in water catchments.

Without complementary land use controls and water use accounting arrangements in place, there is a risk that carbon forests could take over large areas of agricultural land, affect water availability, and affect cultural values. Evidence suggests that recent reforms to native vegetation clearing laws, particularly in Queensland and New South Wales, have in many cases reversed the carbon abatement, biodiversity and natural resource management gains from carbon offset projects paid for through the *Emissions Reduction Fund*^{25,26}.

Carbon offset projects are investments, and like for all investments Government’s role is to put in place sufficient protections for investors – the last thing the land sector needs is another Managed Investment Scheme type failure. The challenge for Australia is therefore to use this new terrestrial carbon economy to drive investments towards improving the health of our agricultural soils, to use the best available science and Australia’s existing natural resource management and land use planning systems to protect areas of high conservation significance and high value agriculture, and to repair degraded landscapes.

From a branding and reputation perspective, it is critical that Government is mindful of not ‘greenwashing’ the benefits stemming from its carbon offset scheme. The *Carbon Farming Initiative’s* ‘positive list’ was a simple means of streamlining project assessment against the ‘additionality’ requirements, and the negative list was a way of preventing carbon farming activities that have a high potential for perverse outcomes. The Government should reinstate both these lists and also the additionality requirements to reduce the risk of unintended negative consequences both to the scientific-based integrity of the scheme. The *Emissions Reduction Fund* must deliver real emissions reductions.

4. There are solutions that encourage carbon offset co-benefits

The original design of the *Carbon Farming Initiative* encouraged the development of a ‘co-benefits index’ to quantify the benefits of a given carbon offset project. This was a leading Australian innovation, and should be reinstated as a way to boost carbon offsets with a premium price where there are real and superior co-benefits. This is particularly important for the voluntary carbon offset market which often seeks projects that go beyond lowest-cost emissions reductions. Such a scheme could also assist farmers and landholders to communicate their positive contribution to land stewardship, a powerful motivation for many.

However, a voluntary market alone is not likely to fully capture the opportunity to achieve environmental and NRM co-benefits. In addition to the co-benefits index, Government should also explore other instruments to encourage private sector investment to better conserve our natural capital, for example:

- Support regional NRM bodies, Landcare groups and others, to ‘top up’ offset projects with additional incentives to leverage multiple public benefit outcomes;
- Create additional voluntary environmental markets through ‘credit stacking’ under the carbon farming rules, whereby multiple offset credits (carbon, biodiversity, sustainable agriculture, water quality) can be accredited, banked and sold under international best-practice carbon offset sustainability certification standards (such as the Gold Standard²⁷ and the Verified Carbon Standard²⁸);
- Provide targeted taxation incentives to co-benefits projects on properties identified in regional NRM plans as having high conservation significance, or other long-term benefits to the community;
- Issue Green Bonds that support climate mitigation and adaptation on the land, such as those recently announced by the Queensland Government²⁹ and certified by the Climate Bonds Initiative³⁰;
- Assist in the establishment of farm or sector-based stewardship accreditation schemes, such as an *Australian Standard for Sustainable Agriculture*³¹ which would include whole lifecycle analyses of energy, water, land and biodiversity inputs underpinning food and farm certification for both Australian grown and imported products.

In addition to incentives that encourage sustainability co-benefits, the underwriting of carbon offset investments through the building of a system of regionally based, *National Environmental Accounts*, is critical to monitoring the health and change in the condition of environmental assets, and thus banking these co-benefits on a project and credit-by-credit basis.

We are encouraged by the meeting of Commonwealth, state and territory Environment Ministers on the 25th November 2016 where “Ministers agreed to work together to develop a common national approach to environmental accounts in 2017” and who noted that “This important work will ensure accurate and reliable information is available to governments, communities and businesses to better understand the condition of the environment and make better decisions”³².

We also welcome and support Minister Frydenberg’s statement with the release of the *2016 Australian State of the Environment Report* that he has “committed – along with state and territory environment ministers – to develop more detailed environmental accounts for Australia to build this capacity to better understand our environment and how best to protect it.”³³

Though many of these incentives and initiatives will require initial government investment, there are ways in which to encourage co-investment by the private sector, and thus long-term sustainability of a well-designed carbon offset scheme. Green bonds, impact investment, public-private-partnerships, seed funding and setting up a robust stewardship accreditation are just a few examples. Government should consider ways in which to get the private sector more actively involved.

5. Partnerships on the ground are critical to long-term policy success

There are 56 regional NRM organisations (including Catchment Management Authorities) across Australia with a long history of delivering action and outcomes on the ground, including for the *National Landcare Programme* which has a strategic objective of increasing carbon stored in vegetation and soil³⁴. Regional NRM plans coupled with land use plans can help identify and manage community and environmental benefits and impacts from carbon farming. Governments should use these existing regional natural resource management institutions and state, territory and local government land use planning schemes to direct carbon offset investments to achieve these outcomes across the Australian landscape.

Existing regional NRM plans identify priorities for working with land managers to invest in improving biodiversity, soils, water and other natural resources. Existing land use plans (and development approval processes) implemented by state, territory and local governments regulate land use tenure and zoning, and therefore where and how land use changes, and how land is managed. The challenge for governments is to link the carbon offsets markets with NRM plans and land use (zoning) plans. Both NRM and land use planning, when done well, involve communities and stakeholders in determining where and how land should be used and managed to achieve a variety of social, economic and environmental objectives.

The most effective approach to optimising carbon farming offsets at the appropriate scale is for state, territory and local governments to link regional NRM plans across Australia to land use planning schemes and zone land according to its suitability for carbon farming offsets¹⁰. Land use planning schemes can then guide carbon farming offsets into areas of highest benefit and away from areas of risk, without significantly undermining the carbon market.

Thank you for the opportunity to contribute to the government’s review of Australia’s climate change policies.

Sincerely,

Mr Peter Cosier

On behalf of the Wentworth Group of Concerned Scientists

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