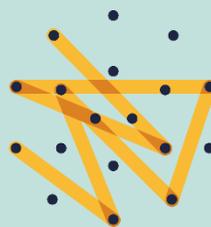


# MARKETS FOR NATURAL CLIMATE SOLUTIONS

An NCS Options Paper for Australia  
October 2020



**IETA**  
A IS FOR AMBITION



**Carbon  
Market  
Institute**

## INTRODUCTION

In December 2019, IETA launched a new initiative called Markets for Natural Climate Solutions (NCS). The objective of the initiative is to build global markets for carbon credits generated from NCS which enables private sector investment at scale. This work is driven by the essential requirement to support NCS at scale in order to meet the Paris Agreement goals. It seeks to champion opportunities for investment driven by various policy and market trends, including the growing adoption of “net zero” targets by both countries and companies, and the need to credibly “net” out remaining emissions with removals of various types.

The initiative is engaging Governments around the world in dialogue on measures they can implement and support to help increase private sector investment into NCS. This paper, developed in partnership with the Carbon Market Institute (CMI), sets out further background on the initiative and several NCS options for consideration in Australia.

## ABOUT IETA

The International Emissions Trading Association (IETA) is a non-profit organisation created to serve businesses engaged in carbon markets. Established in 1999, IETA's members include global leaders in energy, cement, aluminium, chemical, mining, technology, standards, verification, broking, trading, legal, finance, accounting and consulting industries.

Our vision is a single global carbon price produced by markets of high environmental integrity. We pursue this vision by working to build international policy and market frameworks for reducing greenhouse gases at low cost.

We support the Paris Agreement and its goal of holding temperature increases to well below 2°C whilst pursuing efforts to hold temperatures to 1.5°C. To deliver this goal, we agree on the need to achieve a balance between emissions sources and removals by sinks in the second half of the century<sup>1</sup>.

## ABOUT CMI

With a 2050 vision for a prosperous, climate-resilient, net-zero emissions world, the Carbon Market Institute (CMI) is the independent, industry association at the centre of business and climate action in Australia. CMI speaks for business leading the transition to a net-zero emission economy, sharing knowledge, building capacity and catalysing opportunities. We are the stewards of Australia’s carbon markets and related effective policies, supporting their continued evolution while working to ensure the integrity of the market, participants and outcomes.

CMI actively champions the UNFCCC Paris Agreement and its climate and net-zero emission goals, market-based mechanisms for increasing ambition, international cooperation and investment. Engaging leaders, shaping policy and driving action, we speak for business leading the transition to a regionally and internationally linked net-zero emission economy.

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<sup>1</sup> [IETA Council Guidance on Net Zero Climate Ambition](#). 1 June 2020

## MARKETS FOR NATURAL CLIMATE SOLUTIONS

Markets for Natural Climate Solutions is a new IETA initiative which was launched at COP25 in Madrid. Its mission is to maximise business investment in NCS to ensure it plays the fullest role possible in delivering the goals of the Paris Agreement.

NCS are one of the most cost-effective forms of CO<sub>2</sub> management<sup>2</sup> and can make a critical contribution to meeting the goals of the Paris Agreement whilst also delivering sustainable development benefits. However, significant investment will be needed to realise the full benefits that NCS can provide, and currently only about 3% of total climate finance is directed towards these solutions.

At the same time, there is a growing awareness from the private sector of the need to take climate action. For instance, Climate Action 100+, an initiative representing over 450 investors with more than USD \$40 trillion in assets under management, has committed to tackling climate change through their investment policies. Developments such as this open up significant potential to direct finance to NCS, and we believe carbon markets can be a vehicle to deliver this investment.

The use of markets is also expanding around the world as countries seek to increase their ambition and deliver their NDCs. In 2019, the world's carbon markets soared to a record value of \$215 billion<sup>3</sup>. The inclusion of NCS within these systems can enable greater ambition whilst offering flexibility to participants. It can also help build knowledge, confidence and demand for credits originating from nature and we believe this can lead to a virtuous circle. Well-functioning markets for NCS credits – that are international in scope, have liquidity and depth, and provide price transparency – will encourage more countries to utilise their NCS resources to deliver more ambitious NDCs. They will also enable the private sector to deliver greater levels of investment; either to help meet their own voluntary targets or as part of their compliance strategies in expanding emissions trading systems.

Markets for Natural Climate Solutions is a global initiative and its current membership comprises: The Arbor Day Foundation, BHP, BP, Chevron, Global Carbon Council, Radicle, Shell and Woodside. The initiative is engaging the Governments of Canada, Colombia, Mexico, UK, South Africa and Singapore in dialogue on measures they can implement and support to help increase private sector investment into NCS. These measures range from options to increase the role of NCS in domestic carbon pricing through to ways to pilot NCS activities within Article 6 of the Paris Agreement.

We believe these measures and more can help create robust and efficient market structures that enable private sector investment in NCS at scale and help ensure it plays the fullest role possible in delivering the goals of the Paris Agreement.

## CLIMATE POLICY AND NCS IN AUSTRALIA

Australia is uniquely positioned to be a global leader in NCS. As the only country in the world that covers an entire continent, Australia encompasses land ranging from tropical and subtropical rainforests, grasslands, wetlands, mangroves, and agricultural land. Much of Australia's unique natural landscape

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<sup>2</sup> Natural Climate Solutions: Griscorn et al (2017). PNAS, October 31, 2017 114 (44) 11645-11650

<sup>3</sup> Carbon Market Year in Review. Refintiv, January 2020

offers a great opportunity to provide natural climate solutions and create sustainable development benefits.

Consequently, Australia is well positioned to enable large scale investment from the private sector towards activities that reduce or remove GHG emissions through nature. In doing so, these activities can also deliver a variety of other benefits including job creation, conservation of fragile ecosystems, biodiversity and ecosystem benefits and restoration of landscapes.

### **Growing interest from private sector investors in natural climate solutions**

Many businesses are showing increasing interest in NCS as an important tool to help deliver emissions reductions. This includes Woodside<sup>4</sup> and BHP<sup>5</sup> who have both financed significant NCS projects and programs. Australian, and global businesses with operations in Australia, are looking to identify options to invest in NCS at scale as they seek to raise their climate ambition and increasingly adopt net zero targets.

### **Australian experience in NCS**

Australia has a very strong history of developing carbon abatement opportunities in NCS. It operates the world's largest domestic offset programme which has, to date, focussed on the land and agricultural 'carbon farming' sectors, which have significant potential to contribute to lasting abatement solutions.

Community and land holder engagement projects have achieved carbon abatement across a broad range of approaches including agriculture, landfill and waste management practices, fire management practices, vegetation and sequestration methodologies.

With a history dating back to the early 2000s, Australia's standards and methodologies are widely regarded as robust and of high integrity. Australia also has deep experience in engaging indigenous communities and landowners and has an industry code of conduct – managed by the Carbon Market Institute – to outline best practices in these areas.<sup>6</sup> These solid practices around monitoring, reporting and verification of climate activities with oversight from the Government mean there is a well-established avenue to enhance private investment in NCS across Australia.

Sub-national markets are emerging, namely in Queensland, where the establishment of the State Government's \$500m Land Restoration Fund is driving direct investment in the local carbon farming industry. Both Western Australia and South Australia are looking to at similar approaches.

As guided by the *CMI Carbon Farming Industry Roadmap*, Australia's domestic capability can be scaled up to become a strong export market of the future, where Australian abatement, technology, knowledge and expertise become part of internationally linked carbon markets, assisting other nations, organisations and communities to increase ambition and meet their own Paris targets.

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<sup>4</sup> <https://www.woodside.com.au/sustainability/climate-change>

<sup>5</sup> <https://www.bhp.com/environment/climate-change/>

<sup>6</sup> Australian Carbon Industry Code of Conduct. Version 1.0, June 2018

## **The King Review and Technology Investment Roadmap**

During 2020, the Government published these two important documents which highlight the excellent potential for carbon storage in the land sector and outline plans to invest significant government finance to deliver it.

The King Review noted “considerable opportunities for carbon to be stored in its forests, soils, coastal ecosystems (like mangroves and seagrasses) and subsurface geology. Biological and geological sequestration can play an important role in offsetting emissions from sectors where abatement technologies remain costly or do not yet exist.” It also states that measures such as strengthening current carbon market infrastructure like registry systems and reporting of co-benefits would stimulate further demand. It goes on to add that there is growing momentum from businesses and industry sectors to adopt net zero targets that could lead to additional domestic carbon abatement.

The findings from the King Review were supported by comments from Hon Angus Taylor MP, Minister for Energy & Emissions Reductions, advocating for the role of voluntary market development, underpinned by a focus on land sector enabling technologies outlined in the Government’s recently released Technology Investment Roadmap and First Low Emissions Technology Statement. Soil carbon was one of five priority low emissions technologies highlighted in the Statement because Australia has a globally significant abatement potential in its soils. The Statement notes that Australia’s crop and grazing lands could draw between 35 and 90 million tonnes of CO<sub>2</sub> per annum from the atmosphere while improving agricultural productivity and soil resilience. Accordingly, the Government wants to invest a share of a potential \$18 billion into soil carbon development, with a focus on reducing carbon measurement to under \$3 per hectare per year.

## **Supporting Australia’s regional partners**

The Australian Government is financing institutional strengthening (particularly MRV capacity building), resilience and development activities to support the climate mitigation and adaptation partners in the Asia Pacific region – particularly low-lying Pacific Island nations as part of the Prime Minister’s Pacific Step Up strategy. This includes support through direct aid, capacity building and the trade of low-carbon products and services into the region via bilateral relationships. Integration of these aid, trade and diplomatic relationships will further enable and support the region’s transition to a low-carbon economy under Paris.

Australia has also embarked on sharing a unique NCS-related capability with the world. Indigenous leaders and communities are now sharing their traditional knowledge, and ancient land and fire management techniques with other first nations peoples in Africa (Botswana Projects) and North America. Australia remains well positioned to continue its support of these initiatives and scale up the export of this and other knowledge in a way that helps to accelerate NCS developments in other countries.

# **OPTIONS TO ENHANCE NCS IN AUSTRALIA**

Given the context outlined above, Australia is well placed to capture the benefits that NCS can provide and build on the significant domestic knowledge and capacity of crediting emissions reductions in the land sector that has developed over the last decade. Consequently, there are number of NCS options that Australia could consider. We outline three high-level options below:

## 1. Supporting bilateral agreements on NCS through Article 6 pilot activities

Australia is in a strong position to take regional leadership on NCS to Asia Pacific countries through its current and future trading relationships. This could be enabled through developing Article 6 NCS pilot projects with countries in the Pacific region. This would support Australia’s current work with countries such as Papua New Guinea, Fiji and Indonesia on climate change mitigation and adaptation through the [Pacific Step Up](#) programme. These pilot activities could be a vehicle for delivering climate and development aid to projects in the land and forestry sectors in these countries. This would help these countries become more resilient to the effects of climate change and deliver multiple benefits such as job creation, sustainable livelihoods and ecosystem services. Additionally, by using high quality NCS methodologies developed in Australia, pilot projects could also provide a supply of high-integrity mitigation units for meeting future climate targets.

Australia has been a leader in the development and roll out of NCS methodologies, with innovation now taking place in the blue carbon sector. Article 6 NCS pilot projects could be an opportunity to share best practice and help build carbon market capacity in the region, in preparation for markets of the future under the Paris Agreement. The development underway of an MOU between CMI and the Government of Fiji to support the creation of their carbon market, is one possible entry point into expanded regional public/private engagement.

## 2. Article 6 industry Task Force

New international market linkages under Article 6 of the Paris Agreement will help drive higher levels of private investment into NCS by increasing both the supply and demand sides. However, Article 6 will create new market risks – notably around corresponding adjustments – and close cooperation between the public and private sectors will be needed.

Corresponding Adjustments will prevent double counting of Article 6 units by ensuring that the emission reductions associated with the units cannot be claimed by the exporting country. With corresponding adjustments in place units can be; traded internationally, used in compliance markets, and provide the end buyer with the assurance that they are sole owner of the underlying emission reduction.

However, given what we know of how corresponding adjustments will work, the situation creates significant risk for private sector entities wanting to generate and trade international NCS units. This largely stems from the fact that corresponding adjustments will only be applied at the end of each NDC implementation period, which is typically in 5 or 10 year increments. This exposes the private sector to sovereign risk and can be highlighted through an example using CORSIA. The First Phase of this new market will run from 2024 – 2026 and will require airlines to buy correspondingly adjusted emissions units. However, they will not need to retire them until 31 January 2028. It is likely, though, that airlines will buy units over an extended time period and well in advance of this date to manage their compliance obligations. This scenario then raises several questions:

- What is the entry point for airlines to purchase units that have been correspondingly adjusted?
- What happens if the corresponding adjustment of a particular unit is only due to occur after it has been submitted for compliance in CORSIA?
- What happens if an exporting country reneges on its commitment to apply corresponding adjustments and units already in the marketplace are no longer deemed “compliance grade”? What legal recourse would the private sector have with the exporting country?

Given these issues outlined above, for Article 6 to flourish, it will require close cooperation between Governments and the private sector, along with the development of new market infrastructure to track units and manage risks.

To explore this issue in more detail and consider the role the Australian Government and carbon market community could play, an industry Task Force could be established. For instance, this could investigate the evolution and expansion of Australia's registry and national inventory structures that will be required to facilitate Paris-era linked markets under Article 6.

IETA could contribute to this process via a research project which has recently commenced. This will be carried out with Pollination and will identify the areas of potential legal risk that private market participants would need to address in Article 6, for instance via contract, structural risk mitigation and strategic partnerships with key governmental partners.

### **3. Public-Private NCS Fund**

Building on the pilot projects ideas above idea, the Australian Government could investigate the development of a public-private fund to invest in a range of domestic and regional NCS activities at scale to purchase international NCS credits in larger volume. The fund could be capitalised with a mixture of public and private finance, with international and Australian based companies invited to contribute. A range of returns could be considered, including financial co-benefit and carbon credits. Donors would be allocated credits in proportion to their contribution to the fund. This may prove a popular option for the rapidly growing number of Australian headquartered companies who have made large scale voluntary commitments to net-zero and who consider NCS to be an important component of their strategies. These companies are keen to deploy significant capital into NCS, and by creating this type of co-financed structure, the Government can provide a de-risked platform for Australian private sector companies to take the lead.

The fund could be structured to incentivise private sector participation whilst providing financial guarantees to exporter countries. For example, within the Fund, the Government could act as an offtaker of last resort, thereby helping to de-risk private investment both in the exporter countries and with private buyers. The fund could also bring in experience of debt-finance (including green bonds) and institutional investors to provide opportunities to engage capital institutions in the development process (simultaneously building their capacity to engage with NCS in a more sophisticated way).

In the design of a fund like this, Australia could learn from other similar structures such as the World Bank's Forest Carbon Partnership Facility and Japan's experience with the Joint Crediting Mechanism. This is a present-day example of how Article 6.2 could function in the future. As part of the establishment of this mechanism, Japan has signed bilateral agreements with 17 partner countries. Credits are generated from a variety of emission reduction and removal projects, and those credits are then used towards the NDCs of both Japan and the host countries.

## **IETA SUPPORT**

Around the world, IETA contributes to global, regional and domestic climate policy design, thought leadership, capacity building, best practice and knowledge transfer. For example, in our 20-year history, we have:

- Co-founded Carbon Expo with the World Bank and partners in 2004, which evolved into the Innovate4Climate event, the world's largest annual gathering of carbon market professional
- Developed the leading Master Trading Agreements for commercial transactions in the EU ETS, CDM and California market, which have helped to harmonise transactions and reduce risks.
- Designed and built the Voluntary Carbon Standard in 2006 to prompt voluntary action beyond the Kyoto Protocol mechanisms. IETA spun off the VCS as an independent organisation in 2007
- Fostered growth of the International Carbon Offset and Reduction Alliance (ICROA), an initiative to promote quality standards and a code of conduct in service offerings to voluntary markets
- Operate the Business Partnership for Market Readiness (B-PMR), which has provided business-to-business training events in China, South Korea, Mexico, Chile and Brazil
- Co-hosted a series of expert workshops with IATA and ATAG to train aviation professionals on successful market operation as they prepared for implementation of CORSIA
- Represented the private sector as official observers to both the World Bank's Forest Carbon Partnership Facility (FCPF) and the Green Climate Fund (GCF)
- Commissioned the University of Maryland to conduct modelling on the economic impacts of rules for international cooperation under Article 6
- Operate the Advisory Committee of the World Bank's Climate Warehouse; a programme to help registries communicate with each other to enhance the transparency of market activity and address double counting risks by tracking carbon assets across different markets

Additionally, IETA has considerable collective expertise within our NCS Working Group. This group of members focuses on advancing the private sector's engagement and interactions with NCS policy with the UNFCCC and at a domestic level, and with non-state initiatives. It promotes market-based approaches – and the role of the private sector within them – as being critical to generating the levels of finance necessary to maximise carbon storage in the land sector, halt global deforestation and safeguard communities, livelihoods and biodiversity.

The group has around 400 participants from 80 companies, from standards, developers and intermediaries, through to consultants, think-tanks and investors.

IETA has a long history and deep knowledge of helping to develop market opportunities. We do this by facilitating knowledge transfer, building institutional capacity, providing market training, and enabling the private sector to demonstrate climate leadership. Through our diverse membership IETA has a wide range of expertise to offer and is enthusiastic to support the Australian government as more NCS options are examined.

## REGIONAL BUSINESS AND NGO INTEREST

There is significant business interest both in Australia and globally to develop private sector opportunities to invest in NCS. In the last 12 months, many companies have voluntarily made large scale commitments to reduce emissions or reach net zero, and NCS is often an important component of their strategies. This includes companies such as AGL, BHP, BP, Shell, Telstra, Wesfarmers, Woodside and Qantas amongst others.

For example, Shell recently bought Select Carbon, an Australian carbon offset developer specialising in NCS projects such as regeneration, soil carbon and forestry. This includes a portfolio of more than 70 projects on about 9 million hectares of land.

In Australia and the rest of the world, there are also a number of important NGOs who are actively promoting the use of carbon markets as a tool to drive investment into NCS. This includes Environmental Defense Fund, Conservation International, and The Nature Conservancy. Representatives from these NGOs and others, such as the Earth Innovation Institute, are members of the Advisory Panel of Markets for Natural Climate Solutions. They provide independent advice on a range of topics within the work program of the initiative.

## RECOMMENDATIONS

Australia is well positioned to capitalise on the growing global interest in NCS, both from companies and countries. As home to the world's largest domestic offset market – which is primarily focussed on the land and agricultural sectors – Australia should consider how best to leverage the knowledge and capacity that has developed within its carbon market community.

As a starting point, both IETA and CMI could form a joint Task Force in partnership with the Australian Government. The Task Force could be a platform to enable dialogue between companies with expertise in NCS and the public sector. A number of options could be examined in the Task Force to scale private sector investment into NCS such as:

- Actions that other governments are taking to support private sector investment in NCS around the world, and particularly in the Asia Pacific region.
- Sharing knowledge and building capacity between Australian public and private sectors in accessing Article 6 and investing in regional NCS.
- Investigating the evolution and expansion of Australia's registry and national inventory structures that will be required to facilitate Paris-era linked markets under Article 6.
- Exploring Australian and Pacific Article 6 pilot projects focusing on NCS. This could deliver multiple policy goals such as deploying finance for development and climate mitigation to regional partners; exporting Australian carbon crediting expertise in the land sector; and building public and private sector knowledge of Article 6.
- Creating of a public-private fund as a powerful vehicle to deploy finance into NCS in greater volume. In the design of such a fund, the Australian Government could draw on other similar structures such as the World Bank's Forest Carbon Partnership Facility and Japan's Joint Crediting Mechanism. Such funding mechanisms could be used to leverage further private-sector investment in domestic NCS/carbon farming activities, as well as driving uptake in regional activities.

IETA and CMI welcome further dialogue with the Australian government in order to support enabling conditions to enhance NCS investments through the private sector.