

**NORTHERN TERRITORY  
ABORIGINAL CARBON  
INDUSTRY STRATEGY**

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## INTRODUCTION

The Northern Territory Government is committed to supporting land management and economic development on Aboriginal land through its Protecting Country – Creating Jobs policy, specifically supporting the expansion of the Aboriginal carbon industry through the establishment of an Aboriginal Carbon Unit. The unit will play a key role in implementing the Northern Territory Aboriginal Carbon Industry Strategy (the Strategy).

The Strategy establishes the Territory Government's approach to supporting the continuation and development of greenhouse gas emissions abatement and carbon sequestration activities on Aboriginal land (as defined in the *Aboriginal Land Rights (Northern Territory) Act 1976* across the Territory. Collectively, these activities have come to be known as the Aboriginal carbon industry (the Industry).

This rapidly evolving industry relies on the Commonwealth Government providing financial incentives for landowners and businesses to reduce greenhouse gas emissions. Benefits generated through the reduction of emissions are sold to the Commonwealth in the form of carbon credits. The carbon credit market exists within a complex policy and regulatory environment encompassing; international agreements, Commonwealth regulatory and funding frameworks, and state/territory policy and support arrangements. A voluntary secondary market is emerging which provides another avenue for carbon credit and economic generation.

Fire abatement projects, in particular savanna burning, provide unique opportunities for employment and economic development on Aboriginal land. Projects largely align with traditional land management practices and utilise locally available land management skills and knowledge. The peculiarity that projects are best suited on

remote, undeveloped or under-managed land, with little or no existing infrastructure, is of significant advantage to the Territory.

The sustainability and growth of the industry is not just in the hands of the Territory Government, it also rests with the Commonwealth and other states, carbon project enterprises, Traditional Owners, Aboriginal land management organisations, education and research institutions, communities and individuals. The Strategy has been developed with advice, experience and input from these entities and organisations.

The Strategy is the Government's plan to meet the challenge of a changing economy by creating a stronger environment for Aboriginal carbon based projects to establish and expand. The Strategy commits Government to actions that will both address impediments to industry development, and identify and develop new opportunities. These actions include:

- working with researchers and the regulators to support development and approval of new methodologies;
- identifying new opportunities by investigating and connecting with new emissions offsets and environmental services markets; and
- investigating opportunities to create markets for offsets associated with the social, cultural and environmental benefits that flow from emissions reduction projects.

One of the challenges in developing a strategy for the Industry is the limited understanding of the carbon market across the wider Territory community. The Strategy provides a brief overview and history of the development of the carbon industry in Australia and specifically the Northern Territory.



## THE CARBON INDUSTRY – HISTORY AND OVERVIEW

In December 2015, an historic global climate agreement was agreed at a conference of parties held in Paris under the United Nations Framework Convention on Climate Change. The Paris Agreement sets in place a framework for all countries to take climate action designed to limit average global temperature increase to below 2°C.

Australia formally ratified the Paris Agreement in November 2016. The mechanism for limiting global temperature increase is the reduction of greenhouse gas emissions. Industry, agriculture, transport, energy production, bushfires and many other anthropogenic and natural processes produce these gases.

Greenhouse gases are so named because, at higher concentrations in the atmosphere, they contribute to the 'greenhouse effect'. This effect traps heat in the atmosphere, causing the average global temperature to rise. Carbon dioxide is one of many gases that contribute to the greenhouse effect; in public discussion and debate the description of greenhouse gases is often simplified by referring only to carbon or carbon dioxide. In order to simplify emissions abatement project accounting, greenhouse gas production or abatement is measured in units of 'carbon dioxide equivalent', and the currency of these projects is 'carbon credits'.

Australia has agreed to an emissions reduction target of 26-28 percent below 2005 levels by 2030. The primary policy device to achieve this target was the establishment of the Emissions Reduction Fund (ERF). The fund provides incentives for Australian land-owners and enterprises to reduce greenhouse gas emissions.

Carbon farming activities provide a significant proportion of the emission reductions required to meet Australia's 2030 target. In an approved emission abatement project, historic data is used to determine a baseline level of greenhouse gas production. The actual production of greenhouse gases is then compared with the baseline production, and one Australian Carbon Credit Unit (ACCU) is issued for each one tonne of verified emission reduction. These credits can then be sold to the Commonwealth through the ERF, or sold through a secondary 'voluntary' market.

Many carbon industry projects in the Territory are contractually required to achieve and document emission reductions through land and fire management activities. In achieving those contractual targets, it is often the case that significant environmental, social, cultural and economic benefits are also generated. Better understanding of the nature and value of these associated benefits has potential to trigger new income streams associated with other offset arrangements.

The voluntary carbon credit market is currently considerably smaller than the formal market hosted by the ERF, but there is potential for significant growth. Offset providers negotiate directly with the purchasers, and there is potential for the agreed value of these offsets to, in time, better reflect the associated social, cultural and environmental benefits that can flow from emissions abatement projects on Aboriginal land. There are significant opportunities to market these offsets as a solution for corporations seeking to comply with corporate social and environmental responsibility policies.

Photo source: J. Klein, ALFA (NT) Limited.



## CARBON FARMING IN THE NORTHERN TERRITORY

The term carbon farming refers to activities that reduce greenhouse gas emissions through agricultural or land management practices, either storing carbon in the soil or vegetation, or reducing emissions. Under the ERF, projects must use an approved emission reduction method. Many of the 25 approved projects in the Northern Territory, and all of the projects on Aboriginal land, use approved methods associated with reducing emissions generated by bushfires. These are known as savanna burning methodologies.

Savanna burning projects reduce greenhouse gas emissions by implementing a strategic fire management program. These methodologies are based on the principle that strategic, early season burning, which is characterised by 'cool' planned burns and relatively low greenhouse gas emissions, can prevent, or reduce the scale of, unplanned late season fires. Late season fires are much more destructive, and generate much higher greenhouse gas emissions, than early season planned burning.

Historically, uncontrolled savanna burning is estimated to have produced around 40 percent of greenhouse gas emissions in the Territory. The strategic fire management practices used in savanna burning projects can reduce emissions from an area by up to 50 percent. There is clearly significant potential for the industry to contribute to improved environmental outcomes in the Northern Territory.

The Territory has an established history of successful carbon industry projects. The West Arnhem Land Fire Abatement project (WALFA) commenced in 2006. This project is based on an agreement between traditional owners, the Northern Territory Government and Darwin Liquefied Natural Gas Pty Ltd (DLNG). Five Western Arnhem Land land management groups were funded by DLNG to reduce greenhouse gas emissions by 100 000 tonnes CO<sub>2</sub> equivalent each year.

The impetus for this agreement was a one-off regulatory requirement for DLNG to offset greenhouse gas emissions and other environmental impacts associated with the establishment and operation of its Darwin Harbour gas plant. This project predated emissions abatement policy and regulatory frameworks, and was the forerunner of a new and important industry in the Territory, and beyond. There are now 25 approved savanna burning projects operating in the Northern Territory.



WALFA utilised pioneering techniques for emissions reduction using fire management practices developed through collaboration between traditional owners and Territory based researchers in 1990s and early 2000s. Northern Territory researchers and fire management research outcomes have remained at the forefront of methodology development for the industry. The ongoing existence of a strong fire management research capacity continues to benefit the wider Territory community.

Current approved savanna burning methodologies can only be used in areas with greater than 600 mm mean annual rainfall; this takes in approximately 30 percent of the Northern Territory land area. More than 50 percent of this currently 'eligible' area is Aboriginal land. At the core of the savanna burning methodologies is the principle that carbon credits are produced by reducing emissions to levels below the baseline. Ironically, the need to show improved emission outcomes means that projects are much more likely to be economically viable on land that has not been subject to consistent land and fire management in the past. Land that has been managed for, say, cattle production or conservation is much less likely to provide a viable project site as previous fire and asset management has been undertaken.

## THE NT ABORIGINAL CARBON INDUSTRY STRATEGY

Long term Government support for the industry, along with continuing strong relationships between Government, industry and researchers, has been central to the success of the industry. Territory emission abatement projects on Aboriginal land are recognised nationally and internationally as providing outstanding examples of successful Aboriginal engagement and participation, and best practice operational and project governance structures. Indeed, there is some potential to commercialise and export this knowledge and capacity.

There is opportunity for further expansion of the industry in a number of areas. New methodologies based on carbon sequestration are under development. There are also proposals to investigate the potential for fire management and sequestration methodologies that could be applied in lower rainfall areas. Perhaps the area of greatest potential for industry growth is related to development of the voluntary market and recognition of attendant benefits that flow from emissions reduction projects. This could also involve development of corporate sponsorship arrangements to support relevant projects.

In developing this Strategy, the Department of Environment and Natural Resources consulted widely with industry, who consistently presented the following clear messages:

- The industry is keen to work with Government on policy development in the key areas of climate change impacts, emissions offsets, recognition and commercialisation of attendant benefits, and industry support arrangements.
- There is a role for Government in consulting and representing industry views to Commonwealth and other jurisdictions. This could include establishing a consultative and information sharing network, and providing a point of contact for the Industry in Government.
- There is a role for Government to raise awareness and understanding of the industry; promoting industry benefits both within Government and to the wider community.
- A major impediment to industry development is the lack of clarity around 'carbon rights' – there is a need to clarify the right to conduct an emissions abatement project across the various land tenure and native title arrangements that apply on land in the Territory. This will reduce risk and improve certainty for project proponents.
- Industry needs support to identify and develop new markets for carbon credits and associated benefits, particularly with national and international corporations in the voluntary offset market.
- Industry needs a point of contact with Government, and access to reliable information about support available, and related developments.



### PRIORITY AREAS FOR ACTION

The Strategy has been built on the foundation provided by existing policy and guided resolutely by advice received from industry. As a result the Strategy focuses on five areas of action:

1. Developing a policy framework to provide certainty and a stable base for industry development.
2. Improving awareness to promote the industry across Government and the wider community.
3. Addressing impediments to long term growth and project development.
4. Identifying new opportunities for industry development and growth.
5. Streamlining access to support services for industry start up and development.

### THE ABORIGINAL CARBON UNIT

The Aboriginal Carbon Unit has been established within the Department of Environment and Natural Resources. The unit will coordinate Government support for the Aboriginal carbon industry, and serve as a point of contact for industry in dealing with Government. It will consult widely and continually with industry and related organisations and individuals in order to build a strong understanding of the industry, and to represent industry views and circumstances within Government.

The Aboriginal Carbon Unit will monitor the implementation of this Strategy, and ensure support for the industry as opportunities arise. The Aboriginal Carbon Unit will report annually to Government on the state of the industry and the implementation of this Strategy.



## 1. DEVELOPING A POLICY FRAMEWORK

### TO PROVIDE CERTAINTY AND A STABLE BASE FOR INDUSTRY DEVELOPMENT

The Territory Government played a pivotal role in the development of early emission reduction projects in Arnhem Land. Important contributions included direct support for research and methodology development, and direct involvement as a party to the project agreement. The Government's participation in the agreement provided certainty and mitigated risk for the other parties. Another key Government action was the introduction of a one-off regulatory requirement (in the form of an operating licence condition) for emissions and other environmental impacts to be offset.

The regulatory environment around climate change and emissions reduction has shifted significantly over the last decade. The Commonwealth's commitment to meeting substantial emissions reduction targets has seen rapid evolution of regulatory and project support frameworks at the federal level. There have been significant policy shifts along the way, largely driven by strongly held and strongly divergent views about the causes and extent of climate change. This polarised public debate creates uncertainty and impacts directly on confidence within the industry. There is an opportunity to mitigate at least some of this uncertainty by developing policies and setting targets around climate change and related areas at the Territory level, and ensuring that the Territory's position is clearly represented in Commonwealth policy development processes.

### ACTIONS

The Northern Territory Government will:

- Investigate policy options for offsetting greenhouse gas emissions and other environmental impacts associated with the conduct of Government business. This will include consideration of ways to achieve carbon neutral status. Offset arrangements will ensure maximum benefit for Territory carbon credit producers.
- Investigate ways to provide incentives for business entities, organisations and individuals to offset greenhouse gas emissions and other environmental impacts.
- Investigate policy options for mandatory offset requirements for high environmental impact activities.
- Investigate the impact on the carbon industry of existing Northern Territory legislation and policy, and consider options to reduce any identified existing negative impacts.
- Investigate policy options for improving certainty for investment in the industry, including the development of policies around climate change and environmental offsets.
- Provide Territory input into review and development of Commonwealth climate policy, ensuring that Northern Territory submissions reflect industry views.



Photo source: J. Klein, ALFA (NT) Limited.

## 2. IMPROVING AWARENESS

### TO PROMOTE THE INDUSTRY ACROSS GOVERNMENT AND THE WIDER COMMUNITY

Amongst the wider Territory community, the nature and scale of the Territory's carbon industry are not well understood. The industry is relatively new, and most industry activities take place in remote and little travelled areas. To many Territorians the industry's output is hard to understand (what is a carbon credit?), and the principle on which the industry is based is counter-intuitive (how do you reduce emissions by lighting fires?).

Even within Government and land management organisations, understanding of the industry and its value to the Territory and its economy is limited. This lack of understanding adversely impacts on the industry in a number of ways. Potential investors, project participants and land owners are missing opportunities, and industry growth and expansion is being stifled. Government support and policy development opportunities are being missed, and in some cases decisions that adversely affect the industry are being made with little knowledge or consideration of those adverse impacts.

The low industry profile across the wider community also prevents better understanding of the direct and well documented co-benefits (attendant benefits) that flow from carbon industry activity. These benefits include positive economic outcomes through creation of employment and flow-on economic opportunities on project land; cultural benefits through opportunities to manage land and for younger generations to learn about traditional land management practices; environmental benefits through reduced emissions and protection of landscapes and biodiversity; and social benefits through creation of opportunities to work and live on traditional lands.

Better understanding of these positive outcomes will create more compelling reasons for government, corporations and individuals to support projects by using carbon credits to offset their carbon emissions. Better understanding will also add momentum to the development of enabling and supportive public policy.

### ACTIONS

The Northern Territory Government will:

- Develop and implement a communication strategy to improve awareness and understanding of the carbon industry on Aboriginal land in the Territory. The Strategy should target Government, Territory business and enterprises, and the wider Territory community.
- Identify and promote investment and partnership opportunities, including opportunities to buy Territory produced carbon credits.
- Commission research to better quantify the industry's beneficial economic, social and environmental impacts on the Territory economy.
- Create an online presence showcasing the nature of carbon based industries in the Territory, and to promote the range of beneficial impacts of these industries.



### 3. ADDRESSING IMPEDIMENTS

#### TO LONG TERM GROWTH AND PROJECT DEVELOPMENT

The carbon industry grew rapidly with the arrival of a largely beneficial Commonwealth regulatory framework and support system. As the industry looks to consolidate and mature, a range of challenges to its continuing development are emerging. Poor understanding of the industry and the benefits that it brings is a major impediment, as is the lack of certainty stemming from polarised views on climate change. To the extent possible, these issues have been addressed elsewhere in this Strategy. Through consultation with industry, a number of significant challenges have been identified.

Determining the right to conduct carbon industry projects on land is not always straightforward. Fire management projects involving early season strategic burning combined with late season fire exclusion and suppression are seen as equating to usual land management practices. Their impact is immediate, and the benefits are realised over a short period. The right to conduct regular land management activities is not in doubt, although the situation is less clear if the activity generates direct income.

New sequestration methodologies rely on 'storing' carbon by preventing the burning of dead material. This can involve the storing of carbon on the surface or in soil, and the approved methodologies require long term commitment (25 years or more) to the ongoing storage of that carbon. This required term of commitment may, in some cases, exceed the usual term for a land use agreement or similar arrangement. It is important to clarify the rights of both landholders and Native Title holders in these circumstances.

Sequestration methodologies are expected to provide substantially higher carbon credit productivity than savanna burning methodologies. The Commonwealth is working to clarify the legal right to conduct carbon farming projects on land subject to Native Title.

The great majority of current projects sell carbon credits to the Commonwealth through the Emissions Reduction Fund. There are secondary markets for the sale of credits to corporations or other organisations (including government agencies), although accessing these markets is much more difficult. These markets offer potential to package a range of offsets by identifying the associated social, cultural and environmental benefits that flow from carbon industry projects on Aboriginal land.

#### ACTIONS

The Northern Territory Government will:

- Work with the Commonwealth and other stakeholders to provide clarity around the legal right and necessary approvals to conduct carbon industry activities across a range land tenure arrangements. Defining rights in this area will be a complex task, and may lead to recommendations for legislative remedies. It has been acknowledged by industry that this will be a long and complex process.
- Commission research into secondary offset markets and establishment of channels for Territory projects to access those markets. This will align with research into recognition and evaluation of associated benefits described elsewhere in this strategy.



Ranger groups in Arnhem Land operating savanna burning projects meet together for the ALFA (NT) Limited, end of year fire meeting at Buymarr, East Arnhem Land. Photo source: J Ansell, ALFA (NT) Limited.

## 4. IDENTIFYING NEW OPPORTUNITIES

### FOR INDUSTRY DEVELOPMENT AND GROWTH

The Aboriginal carbon industry provides many benefits for remote communities and land owners. Carbon industry projects to date have provided not only a reduction in greenhouse gas emissions, but dramatic improvements in other aspects of land management and biodiversity values. Projects have also created economic and social benefits; jobs on country in remote areas, meaningful work that uses many existing skills, and infrastructure that can support development of other enterprises such as delivery of environmental services.

While these associated benefits are widely recognised, they are effectively provided by carbon industry projects at no cost to the community. There is potential for the provision of these benefits to generate a supplementary income stream for industry projects. Corporate social and environmental responsibility policies are most often satisfied through individual sponsorship arrangements which are difficult to set up. The lack of easily accessible verification arrangements is a strong impediment to corporations getting involved in arrangements of this kind.

Developing new methodologies will allow the industry to expand into areas within the Territory where no projects currently exist, and identifying new markets for both direct and indirect outcomes of emissions reduction activities has the potential to increase the viability of existing and proposed projects. There is a clear role for government in identifying and supporting the development of opportunities beyond the existing ERF projects.

### ACTIONS

The Northern Territory Government will:

- Investigate opportunities to package emission reduction activities with other environment and land management services in order to achieve economies of scale and better utilisation of skills and resources.
- Investigate opportunities to package and market fire management and project management services. Capacity that has been developed in Territory projects is likely to be of value to other projects within the Territory, or interstate projects, or even in similar projects in other countries.
- Investigate the potential for developing a market for attendant benefits. There is currently no public mechanism for corporations to offset social or cultural costs of business activity. An open market for verified benefits would greatly increase accessibility for the corporate sector. A process for assessment and verification of benefits would need to be established.
- Investigate potential for development of new methodologies suited to regions where current methodologies cannot be used, particularly in lower rainfall areas of the Territory.

## 5. STREAMLINING ACCESS

### TO SUPPORT SERVICES FOR INDUSTRY START UP AND DEVELOPMENT

The Northern Territory Government provides a range of support services to industries in the Territory. For many larger, established industries there are assistance programs tailored to industry needs and established information and support networks dedicated to that industry.

While the carbon industry does not enjoy access to support arrangements that focus specifically on the industry, there are a range of business support programs that could benefit industry development. There is also potential for the industry to request specific support arrangements in some circumstances.

Industry growth and expansion requires strong networks and opportunities for industry learning and collaboration. The emerging carbon industry, even though developing quite rapidly, remains comprised of a large number of discrete projects managed across remote locations by Aboriginal ranger groups and organisations and has resulted in limited opportunity for project managers to co-ordinate access to data, communication with Government and support services.

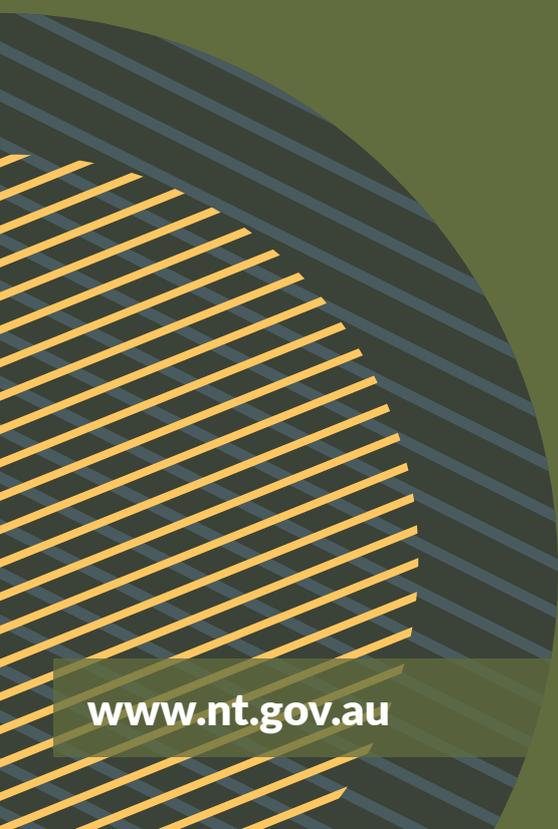
There is potential for greater industry and Government cohesion and development through improved communication and access channels through a central point of contact. Developing a central point of contact for both Government and Industry alike, may assist all stakeholders to find suitable, easily accessible information and increase communication and understanding of both industry and Government needs.



### ACTIONS

The Northern Territory Government will:

- Consult with the Aboriginal carbon industry about how to best deliver existing support programs for carbon industry projects.
- Investigate the support needs of industry and consider ways to provide tailored support programs, which may include working with existing Northern Territory and Commonwealth government indigenous employment services.
- Establish a dedicated website of information regarding carbon based industries and associated activities in the NT.
- Identify the Aboriginal Carbon Unit as the primary point of contact within the Government.
- Collaborate with the Commonwealth and states to support and sponsor the Indigenous Carbon Industry Network.
- Support and sponsor annual carbon industry forums in the NT to connect stakeholders and strengthen industry relationships.



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