

information sheet

SUSTAINABLE LAND USES

Carbon emissions information sheet

Please note: While all care has been taken in the preparation of this information sheet, it is not a substitute for legal advice in individual cases. The content of this information sheet is current as of July 2011.

This information sheet is one of a series on sustainable land uses which have been developed for Local Aboriginal Land Councils (**LALCs**) by the NSW Aboriginal Land Council (**NSWALC**). Copies of the information sheet are available from www.alc.org.au or by calling the NSWALC Policy and Research Unit on **(02) 9689 4444**.

What are carbon emissions?

When fossil fuels (such as gas, coal or oil) are burned, carbon dioxide is released into the atmosphere. In a natural carbon cycle, carbon dioxide is transferred back to plants and trees. However, fuels are being burned at such a rapid rate that the levels of carbon dioxide being produced cannot be soaked up by plants and trees that are alive now. The two primary sources of carbon emissions are from burning fossil fuels used for electricity generation and petroleum used for transport.

Terminology and abbreviations

The terms “carbon emissions” and “greenhouse gas (GHG) emissions” are used interchangeably in everyday speech. Similarly, sometimes the term “carbon” is used as shorthand for either carbon dioxide or carbon dioxide equivalent (**CO₂e**).

“Carbon credit” is a generic term that describes a specified unit of reduction or absorption of carbon compared with the normal way of doing things. A credit is “created” or “awarded” when an approved action is taken which reduces GHGs in the atmosphere.

For example: 1 carbon credit = 1 tonne reduction/absorption of carbon dioxide.

What is climate change?

Over the past 100 years, the global temperature has increased by about 0.7°C. Since 1910 Australia’s average temperature has risen by about 1°C.⁽¹⁾

Although these increases seem small, they have a big impact on the world’s climate. Many scientists consider temperature increases to be related to human production of GHGs. The GHGs absorb heat from the sun and reduce the amount of heat escaping into space. This extra heat is the main cause of changes in the climate.

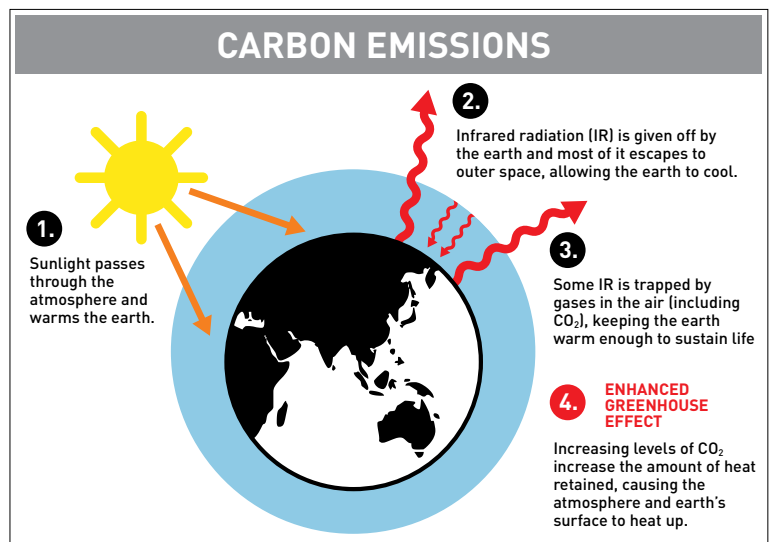
Today, much of what we consume is created by an industrial process, which in turn produces GHG emissions. Everything from clothing to cars has GHG emissions associated with them.

Impacts of climate change

Some changes include increases in the air and ocean temperatures, melting of snow and ice and rising global sea levels. Ten of the hottest years ever recorded were in the last 14 years and the hottest was in 2005.

Considerable research has shown that Australia is very vulnerable to the effects of climate change. Australia is already the driest inhabited continent on earth, heavily exposed to the dangers of extreme heat and drought.

Over the next 40-80 years climate change is predicted to increase average temperatures in NSW by 0.7-6.4°C and rainfall is likely to decrease. Projections suggest an increased incidence of hot days, bushfire and intense storms.



Carbon Management

Australia is participating in international and regional activities that contribute to the global effort to respond to climate change. Some of these actions are listed below:

- Australia joined an international treaty called the United Nations Framework Convention on Climate Change (**UNFCCC**).
- Australia ratified the Kyoto Protocol, which is an international agreement that sets targets for reducing carbon emissions.
- Australia joined the Reducing Emissions from Deforestation and Forest Degradation (**REDD**) project.
- Supporting climate change science research activities through a \$31 million Australian Climate Change Science Program.

Carbon trading

In response to rejections of a carbon emissions trading scheme, the Australian Government established a Multi-Party Climate Change Committee in September 2010. This committee consulted, negotiated and reported to the Government on options for setting up a carbon market and price in Australia. In July 2011 the Australian Government launched the *Clean Energy Future Package* which puts a price on carbon pollution and establishes a suite of funding and offset mechanisms relating to renewable energy. Carbon trading policy is currently the subject of much political and scientific debate and more information regarding this package can be found at www.cleanenergyfuture.gov.au.

In 2003 the NSW state government independently established the NSW Greenhouse Gas Reduction (Abatement) Scheme to reduce emissions by forcing electricity generators and large consumers to purchase carbon credits known as NSW Greenhouse Abatement Certificates (NGACs). Carbon credit certificates can be sold or traded to other companies wishing to offset their carbon emissions. More information can be found at www.greenhousegas.nsw.gov.au.

Opportunities for Aboriginal landholders

An opportunity exists for LALCs to offset carbon emissions through undertaking certain land management practices. For example, the Carbon Neutral Program that is run by the Australian Government allows businesses and organisations to be certified under the National Carbon Offset Standard (NCOS) as “carbon neutral”. Aboriginal landowners may choose to voluntarily join this program. By planting trees landowners can create carbon credits. In turn, businesses and organisations can buy these credits from the landowner to offset their carbon emissions and gain a carbon neutral certification.

Carbon Farming Initiative (CFI)

The CFI is an initiative that assists landowners to earn income from reducing emissions by changing land management practices. To engage in this initiative, LALCs would need to identify methods that qualify for the CFI and create profitable projects that generate carbon offsets for sale. Some examples of projects include

- Reforestation and carbon sink forests;
- Management of methane from livestock; and
- Biochar production used for carbon sequestration in soil.

NSWALC has written a number of submissions to the CFI, that outline key concerns relating to the initiative and its relationship to the *Aboriginal Land Rights Act 1983* (NSW) (**ALRA**). The latest submission summarising all relevant points is available from www.aph.gov.au/house/committee/ccea/24March2011/subs.htm

The carbon economy setting is always changing and there is a risk that landowners may be lured into bad schemes by not being provided with enough information or being provided with misleading information. Aboriginal landowners need to research potential opportunities thoroughly, exercise caution in any financial dealings and seek professional advice. Landowners should seek advice to determine how development of carbon programs will interact with the ALRA and prevailing land rights. In particular, it is important to determine:

- Whether carbon programs constitute land dealings requiring NSWALC approval under Part 2 Division 4 of the ALRA.
- Whether changing land use (to a commercial or residential purpose) will result rate changes, levies or charges in relation to the land as described in Part 2 Division 5 of the ALRA or Clause 7 of the *Aboriginal Land Rights Regulation 2002*.

NSWALC can assist with answering any questions.

Further information can be found online at:

www.dpi.nsw.gov.au/forests/carbon

www.carbonfarmersofaustralia.com.au/CarbonFarmers/index.html

Benefits to Aboriginal landowners

Opportunities are available for LALCs to generate carbon credits from activities such as bushfire control, weed management, improving soil organic carbon and agroforestry.

Some methods of carbon offsetting that may be specifically interesting for LALCs, and include utilising Traditional Ecological Knowledge, include dry-season fire abatement and participating in the FarmReady Program run by the Australian Government Department of Agriculture, Fisheries and Forestry.

mythbusters

myth: Global warming has stopped.

fact: All measurements of the climate system indicate the long term warming trend is continuing.

myth: Nothing I do will stop climate change.

fact: Individual action is required to make the impact needed on a global level. You can reduce your emissions with big changes such as driving less, or small changes such as changing the lights in your home to efficient bulbs.

myth: Why should Australia take action if nobody else is?

fact: Many developed and developing countries are taking action to reduce their emissions and adapt to change that is unavoidable. Many countries have set long term emission targets. The Kyoto Protocol provides evidence of action taken by the global community.

Available Grants

Grant	Purpose	Contacts and Information
Grants under the Climate Change Fund	Established to help business, households, schools, communities and government save water, energy and greenhouse gas emissions.	Environmental Funding Programs section at the Office of Environment and Heritage. Web: www.environment.nsw.gov.au/grants/ccfund.htm Phone: (02) 8837 6093
Small Grants for Small Rural Communities Program	Open to not-for-profit organisations for projects that offer public benefit for small rural and remote locations in Australia, contributing to their development in social welfare, the environment or cultural areas.	Foundation for Rural & Regional Renewal (FRRR). Web: www.frrr.org.au/programsDetail.asp?ProgramID=4 Email: info@frrr.org.au Phone: 1800 170 020
Community Builders Funding Program	A community strengthening building program. It includes fixed term funding available each year for new projects. Only not-for-profit legal entities and local government authorities which have an ABN may apply.	Department of Family and Community Services. Web: www2.communitybuilders.nsw.gov.au/ Email: askcommunitybuilders@community.nsw.gov.au Phone: 1800 277 994
Various grants under the Environmental Trust	Environmental Trust is an independent statutory body that supports exceptional environmental projects that do not receive funds from the usual government sources.	For information on available grants. Web: www.environment.nsw.gov.au/grants/envtrust.htm Email: info@environmentaltrust.nsw.gov.au Phone: (02) 8837 6093
Indigenous Carbon Farming Fund	The Indigenous Carbon Farming Fund was set up by the Australian Government under the Clean Energy Future Package. The Fund is managed by the Australian Government Department of Energy Efficiency and Climate Change and includes a \$22 million pool of funding for Aboriginal landowners to assist with engagement in the Carbon Farming Initiative.	For information on the Fund. Web: www.cleanenergyfuture.gov.au/clean-energy-future/land-use/supporting-skills-in-land-management/ Phone: 1800 057 590
Remote Indigenous Energy Program	The Remote Indigenous Energy Program was set up by the Australian Government under the Clean Energy Future Package. The Program is managed by the Australian Government Department of Families, Housing, Community Services and Indigenous Affairs and includes \$40 million funding over four years to provide financial support to install renewable energy generations systems in remote Indigenous communities.	For information on the Program Web: www.cleanenergyfuture.gov.au/clean-energy-future/securing-a-clean-energy-future/chapter-8-creating-opportunities-for-farmers-and-landholders/ Phone: 1800 057 590
Biodiversity Fund	The Biodiversity Fund was set up by the Australian Government under the Clean Energy Future Package. The Fund is managed by the Australian Government Department of Energy Efficiency and Climate Change and includes a \$946 million pool of funding over six years to support projects that establish, protect or manage biodiverse carbon stores.	For information available on the Fund. Web: www.cleanenergyfuture.gov.au/biodiversity-fund/ Phone: 1800 057 590

Call: Policy and Research Unit on (02) 9689 4444

Email: policy@alc.org.au | **Web:** www.alc.org.au

