



SUSTAINABLE LIVING TASMANIA

Carbon Offsetting

Sustainable Living Information

With so much publicity about climate change, there has been a lot of talk about 'carbon offsetting' and going 'carbon neutral'. Businesses who offer people the chance to pay money to 'offset' their carbon emissions have sprung up everywhere.

What is carbon offsetting?

Carbon offsetting involves a business, organization or individual paying another party or acting themselves to 'offset' their carbon emissions by things like planting trees, investing the money in renewable energy projects, methane recovery projects and energy efficiency projects. Offset websites will calculate the carbon emissions from your car, home energy use and air travel and charge you to offset these emissions.

Is it effective in combating climate change?

In reality, on it's own, small scale voluntary offsetting is not capable of counteracting our ever increasing emissions and destruction of carbon sinks. The unavoidable reality of climate change is that we need to drastically reduce our greenhouse gas emissions, as well as increase offsetting activities, and fast. This involves a combination of individual action to reduce household emissions, government action to shift towards sustainable energy and transport systems, action from businesses to clean up emissions from industry and an end the destruction of carbon sinks such as forests. It is clear that mandatory emission reductions are needed to curb our addiction to emitting GHG's.

It is for this reason that carbon offset schemes invite some skepticism. They send the message that it is acceptable to carry on with 'business as usual', and pay someone else to 'fix' the problem of your carbon emissions.

We advocate doing everything you can to actually reduce your carbon emissions (see separate sustainable living guides on household energy use, passive solar house design, and sustainable shopping, or visit our Environment Challenge website www.up2me.com.au). This being said, if you have made greenhouse gas emissions, it is better to offset your emissions than not to offset them. There is also the added benefit that once we pay to offset GHG we become more keen to reduce the amount we have to offset!

We need to ultimately achieve below zero green house gas emissions on a daily basis which means becoming good at reducing emissions and becoming good at offsetting. Ideally we would stop emitting all together and conduct offsetting to counteract our past lifetime of GHG emission. And maybe even our forefathers.

When you consider the effort that is needed to fight climate change, even when GHG emissions become more stringently regulated, there will probably always be a place for voluntary offsetting. People going beyond what the government of the day is doing and taking responsibility for their emissions. It seems that there are many solutions that need to be embarked on simultaneously and in support of each other, to combat the multifaceted issue of climate change. So if used as a complimentary measure to reducing individual emissions as far as possible, offsetting projects are a part of the solution to tackling climate change.

The National Carbon Offset Standard (NCOS), 2010



The National Carbon Offset Standard (NCOS), 2010 provides guidance on what

constitutes a genuine, additional voluntary offset. It also provides guidance for calculating the carbon footprint of an organisation or product for the purpose of achieving 'carbon neutrality' as administered by the Australian Carbon Trust, or developing carbon neutral products. Trade marks shown above.

Eligible offset credits under the Standard, include: Carbon pollution permits, including those from forestry projects opting into the Carbon Pollution Reduction Scheme when introduced; Eligible international units accepted for compliance under the Kyoto Protocol; Credits issued under the internationally recognised Voluntary Carbon Standard and Gold Standard; and Credits issued by domestic offset projects that reduce emissions from sources not counted towards Australia's Kyoto Protocol target.

The NCOS replaced the Federal Government Greenhouse Friendly program and was intended to complement the Carbon Pollution Reduction Scheme (CPRS). Since this did not go ahead, there is currently no standard for Kyoto-compliant forest sink abatement projects in Australia. Some companies who provide offsetting services of this kind are clinging to the superseded Greenhouse Friendly requirements since they have been left high and dry. Other components of the failed CPRS which are not covered by the NCOS include: GreenPower and other renewable energy purchases (such as Renewable Energy Certificates) and NSW GGAS scheme from which NGACs originate.

Which scheme?

In the case where a company is not covered by the National Carbon Offset Standard. Or Greenhouse Friendly program it pays to do a bit of research first. Don't just choose the cheapest! We are after all trying to undo the harm we are causing by our travel.

First, you need to be sure that the offset project is 'additional' to 'business as usual'. Otherwise you will be simply funding a project that, however worthy, will not actually 'cancel' the additional carbon that you are releasing.

Guidance on choosing offsetting providers may be found at:

www.australiancarbontrust.com.au

www.carbonoffsetguide.com.au

<http://cdmgoldstandard.org>

www.carbonoffsetwatch.org.au

www.carboncatalog.org

www.cdmbazaar.net

Tree-planting

The most popular form of offsetting is planting trees. Seeing as most tree-planting involves clearing of grasses, this soil gets disturbed and releases carbon. It is thought that 3-4 times as much carbon in forests is actually stored in the soil rather than the vegetation above. Carbon is also stored in water. This release can exceed the carbon absorbed by growing trees for at least the first 10 years. Trees can take sixty years to reach maturity, and absorb relatively little carbon in the establishment phase, so carbon saving is being 'deferred' for several decades.

Tree planting is still a positive step in the right direction. It will help future generations to replenish the sinks that have been so drastically reduced in the past. Giving some protection against climate change they have been robbed of for generations of deforestation, claiming about a half of the worlds forests. Considering it takes so long for the trees to start to capture carbon, this could be seen as a reason to plant now rather than later. In addition, reforestation can lead to less soil erosion and loss of water in soil, which also holds carbon. Research suggests that as forests become more established they store more carbon. For this reason it is more effective to protect old growth forests than to grow new forests, however it is best to do both.

It is important to investigate what the future will be for the trees planted on your behalf. Will they be replanted if they die from drought or fire etc.

Also check where the trees *are* being planted. Many offset schemes involve planting in developing countries. This scenario, whereby affluent citizens in the West take up land in poorer countries to compensate for our fossil fuel consumption, raises serious ethical issues. This land might otherwise be used for food crops, and may lead to the clearing of forests elsewhere. Similarly, offsetting by avoided deforestation projects can lead to deforestation elsewhere. Once again, the need for adequate policing of offsetting schemes is apparent. Also, does the scheme have other positive effects on the environment? Some tree planting schemes simply involve plantation style 'tree farms', whereas others involve native revegetation of vulnerable sites, having the additional benefits of reducing erosion and salinity.

Renewable Energy

Other offset schemes will put your money towards renewable energy projects such as wind, solar, tidal / wave, geothermal and micro-hydro. Given the debate over the value of tree planting as a carbon sink, these energy schemes appear to be a more straight forward option. Not only are you offsetting your emissions but you are helping to fund the energy systems of the future, thereby reducing carbon emissions at source. Check that a scheme is not funding nuclear, 'clean coal' or large-scale hydro projects.

How much does it cost?

Fortunately the Federal Government is supporting some offsetting companies by making them tax deductible. Unfortunately buying green energy is not tax deductible.

There is a lot of scientific uncertainty about the carbon cycle, making exact calculations about the amount of carbon offset by a particular project difficult. For this reason, there is significant variability between different offset websites.

It is easy to get caught up in offsetting for our current lifestyle and ignoring our lifetime of emitting GHG's. Why not offset you / your family's emissions for a lifetime rather than the usual trip or yearly offset!

DIY Offsetting

Offset websites are useful for calculating how much carbon your activities are emitting, but then you might choose to avoid the 'middle-man' of the offset company and invest your money directly in carbon-saving.

There are a few options. Some people are choosing to plant their own trees, or spend their money on installing a solar hot water system or other carbon saving technology. Others are choosing to donate to environment groups campaigning on climate change or forest protection (as well as planting trees, you could help to keep trees in the ground!). Another idea is to invest through ethical investment schemes in renewable energy companies.

Links

(Sustainable Living Tasmania does not necessarily endorse these offset providers).

Australian Carbon Trust

www.australiancarbontrust.com.au

Administers the National Carbon Offset Standard Carbon Neutral Program

Carbon Catalog is a free and independent directory of carbon credits, listing carbon providers and projects worldwide.

www.carboncatalog.org

Carbon Offset Guide

www.carbonoffsetguide.com.au

Tasmanian Environment Centre Inc. trading as
1st floor, 71 Murray Street, Hobart, Tas 7000, Phone (03)
info@sustainablelivingtasmania.com.au
www.sustainablelivingtasmania.com.au

Aims to provide an independent directory of Australian carbon offset providers with information on costs, offset projects and contacts.

Climate Friendly

www.climatefriendly.com.au/

Australian based, funds renewable energy projects. Used by WWF Australia to offset their travel and events

Greenfleet

www.greenfleet.com.au/index.asp

Australian based, carries out native revegetation planting

Greening Australia

www.greeningaustralia.org.au

Australian based, planting of a mix of species for carbon offsets, landscape transformation and nurtured biodiversity.

Carbon Neutral

www.carbonneutral.com.au/

WA based, carries out native revegetation planting

Elementree www.elementree.com.au/

Australian based, uses revegetation professionals and claims 90% survival rates for trees

Origin Energy

<http://www.originenergy.com.au/carbon/>

Australia's leading Green Energy supplier. Funds offset projects

Cheat Neutral

<http://www.cheatneutral.com/>

excellent spoof site, which highlights the moral issues involved in carbon offsetting

National Carbon Offset Standard

<http://www.climatechange.gov.au/en/government/initiatives/national-carbon-offset-standard.aspx>

UNFCCC CDM Bazaar

www.cdmbazaar.net

The UNFCCC CDM Bazaar is a web-based facility which links buyers, sellers and service providers for Clean Development Mechanism (CDM) offsets.

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