Carbon credit purchasing guide

(Information valid as at July 2009)

The following information been produced by the Carbon Reduction Institute (CRI) to inform and provide its clients with assistance regarding the purchase of carbon credits. Clients within the NoCO2 certification program must purchase credits that adhere to minimum standards outlined here. While we will endeavor to provide clients with the best value credit, for numerous reasons, they may elect to purchase their credits elsewhere. To ensure these credits comply with our standards, we provide guidance and information below regarding the many different carbon credit accreditation programs; where these credits can be purchased and whether they comply with our minimum standards. CRI has had experience trading many different types of credits; selling compliance and voluntary units to power companies, SMEs and sole franchisors.

Carbon Credits are a mechanism that allows organisations to fund and trade climate change actions on an open market. Carbon credits come from a range of projects that reduce emissions; examples include energy efficiency and renewable energy programs (that reduce the amount of fossil fuels mined and combusted for energy), methane destruction/avoidance projects (composting and flaring), sequestration projects (through afforestation) as well as projects that avoid greenhouse gases (such as Nitrous Oxide and HCFCs and PFCs in manufacturing processes).

Whilst some projects may never verify the emissions that they reduce, there are a number of programs that outline standards for validating and verifying the emission reductions created by projects. Project accreditation gives comfort to the buyer in that there is guarantee that the project meets a minimum standard.

Unfortunately, many of these programs have differing standards for ensuring the veracity of the carbon savings deemed from the projects that they accredit. This is why CRI always maintains that it is the project and not the accreditation program that must be judged in order to determine whether a credit is suitable.

The section below outlines minimum standards that carbon credits must meet to be valid under CRI's NoCO2 certification program. We recommend that clients contact us prior to purchasing carbon credits to ensure that the projects meet our standards. For all credits that we authorise, we will provide a summary of how the project stacks up against the standards outlined below.

Standards for Carbon Credit Projects

It is important that carbon credit projects are tested against standards so that the buyer can be sure that they are funding a reduction of greenhouse gas from the atmosphere that would not otherwise have occurred. Any carbon credit used by an organisation to meet emission reduction requirements under the NoCO2 certification program must meet the following standards.

1. Financially additional

For a carbon credit to be financially additional, the money from the credits must have been required to make the project happen beyond business as usual. Projects often fail this test where they are cheaper than their more polluting equivalent, or their energy savings pays back in time frames that make it a 'business as usual' proposition.

2. Environmentally additional

The project must be additional to the environment. Carbon Credits cannot be claimed on projects that would have occurred anyway. A good example is the natural growth of a forest or the implementation of an activity that would have occurred anyway through legislation or through a shift in market demand.

Furthermore, carbon savings from a carbon offset must be additional to a country's mandatory Kyoto target. For countries/states with a binding target, such as Australia, NZ and the EU, (from 2008-2012), this can be achieved through the Joint Implementation mechanism, or through sourcing carbon credits that pre-date the Kyoto commitment period.

3. Permanent

Permanence is a very important requirement for a voluntary credit. Carbon savings that have been forward claimed or carbon emissions that have been stored can present a liability risk for any party using them to make a claim. If the emissions fail to happen, or are released into the atmosphere, and the project proponent does not make good this reduction, then the liability may fall back on the purchaser who made a claim, to rectify the issue.

4. Leakage

Leakage is where a project results in an increase of emissions elsewhere. This is a major risk in avoided deforestation projects where the removal of one section of forest product from the market encourages the destruction of forest in another due to inelastic demand.

5. Validated and Verified Savings

The project must use a methodology that conservatively quantifies its emissions reductions through a scientifically valid approach. The project must be audited by an independent third party to quantify the number of tonnes of greenhouse gas that it has saved. This can occur through ISO 14064.3 and 14065; through a GHG program, or through using an approved methodology from a GHG Program.

Any credit from projects that satisfy the 5 criteria above can be used within the NoCO2 certification program.

Carbon Credit Accreditation Programs

The following section provides a summary of five different carbon credit accreditation programs:

1. Greenhouse Friendly™
2. NSW Greenhouse Gas Reduction Scheme
3. Clean Development Mechanism
4. Voluntary Carbon Standard
5. Gold Standard
6. Carbon Reduction Scheme

The section outlines any issues that projects accredited under these programs face in meeting the five criteria outlined earlier.

1. Greenhouse Friendly™

The Greenhouse Friendly™ program is an Australian Federal Government accreditation program that provided quantification and verification for carbon savings made by projects that reduce greenhouse gas emissions within Australia.

Compliance issues:
Australia's post 2008 emissions are capped through its compliance to the Kyoto Protocol. This means that the government must not exceed its emissions level of 598 Mega-Tonnes of CO_2-e per year, or 2.99 Giga-Tonnes over 5 years from 2008 to 2012 as per its Kyoto requirements. In order to comply with this target, through legislation, the government will delineate responsibility for meeting this cap to major emitters and harness market mechanisms (i.e a cap and trade system that commodifies carbon) to ensure that this responsibility is met at the least cost. The government then reconciles its greenhouse gas accounts by collaborating information from all sectors that emit greenhouse gases at the end of each year. It then checks to see whether the suite of policies that it has implemented have achieved the end goal of meeting the country's Kyoto target.

This is important to the future of Greenhouse Friendly credits and their usefulness as an offset. Remembering that the function of a carbon credit is to fund projects that reduce a tonne of greenhouse gas the reduction of which would not have occurred in the project's absence. Hence, in order for Greenhouse Friendly credits to fulfill this function, the Australian government will need to have a way of separating and not including the reductions that are traded as Greenhouse Friendly credits from its inventory when metering its compliance to the Kyoto protocol, as these reductions will have occurred in the absence of the projects due to Australia's compliance to the protocol.

Failure to do this will mean that the reduction caused by the GHF project will have been met by another activity elsewhere (through the government's compliance to the protocol), thereby failing the definition of a carbon credit.

All commentary from the government in relation to the design of its emissions trading system suggest that offsets in sectors covered by the ETS will not be taken into consideration. This is mentioned in the early action abatement paper 2 and again by the Department of Climate Change in its Green Paper on the Carbon Pollution Reduction Scheme. Hence, Greenhouse Friendly credits utilised under the NoCO2 program must be from activities that occurred prior to 2008 (in otherwords, be of pre-2007 vintage).

Beyond this requirement (Vintage 2007), Accreditation of a project through the Australian federal government's Greenhouse Friendly scheme does not necessarily mean that the project's credits can be used for NoCO2 certification. Whilst CRI does not have concerns about the compliance of credits from composting, landfill gas combustion, waste gas combustion and fuel switching, there are concerns about its forestry projects and its energy efficient light bulb projects.

Forestry projects guarantee carbon savings for 70 years rather than the industry accepted average of 100 years (which aligns with the industry average for deeming the radiative forcing effects from an amount of carbon dioxide over its life cycle in the atmosphere). It is unclear why the program uses this methodology – project proponents will have to verify how this affects the veracity of their carbon saving calculations.

Furthermore, as the carbon savings from these projects can be reversed, the credits carry a liability in the case where the carbon is released, and the project proponent does not make good the re-sequestration savings. NoCO2 certified clients must acknowledge responsibility for this liability if using forestry credits for their NoCO2 certification claim.

Light-bulb installation projects under Greenhouse Friendly cannot be claimed as a reduction under the NoCO2 certification program in any instance. The GHF program allows for the full lifecycle greenhouse gas savings made by the installation of a 15,000 hour energy saving light bulb in place of an incandescent to be claimed upfront at the time of installation. At an average of 4 hours of usage per globe per day (which is very generous, CRI's experience at the coal face of such projects is that many of the lights replaced will be in obsolete and non-heavily utilised areas) the lights will last for around 10 years. Given that the federal government has legislated a ban on the retail of the inefficient bulbs by 2010, and allowing a further 1,000 hours of bulb lifetime for any incandescent bulbs purchase on the cut off date, then this means that there are around 10,000 hours, or 7 years of the bulb's life where non additional carbon savings are being claimed.

Furthermore, the ratification of Kyoto, and the fact the electricity sector is accounted in this means that the emissions savings sold as an offset will be non-additional.

The Greenhouse Friendly low flow showerhead project allows 3 years of lifecycle greenhouse gas savings (resulting from energy savings from reduced electricity or gas needed to heat water) to be claimed in the first 3 years. This project's savings claim are also abolished by the ratification of Kyoto as these savings will be included by the government in metering compliance with Kyoto.

According to the guidelines from the Australian Competition and Consumer Commission (ACCC), there are serious implications for using such credits for a marketing claim and the Greenhouse Friendly program should provide clarification to its own clients as to why these credits are legitimate for offsetting purposes. Please refer to the Communication section of this guide from more information about the ACCC guidelines.

2. NSW Greenhouse Gas Reduction Scheme

The NSW GGRS is a cap and trade system binding large electricity generators to emissions caps. Large users of electricity can volunteer to partake in the scheme also. The caps are set on a TCO2-e per capita basis and the absolute caps applied to the participants are determined by the share of generation/usage of the site compared to the state as a whole.

To meet compliance under the scheme, the sites can reduce their emissions through onsite activities, or through purchasing NSW Greenhouse Gas Abatement Certificates (NGACs). NGACs can be made through reducing emissions intensity of generation; through energy efficiency, forestry and through combustion of landfill gas for electricity.

Compliance Issues:
NGACs from energy efficient light bulbs face the same issues as those under Greenhouse Friendly and are therefore not included. These credits were used in the early stages of the NoCO2 certification scheme, though when the Labor government re-affirmed Turnbull's stance on the banning of the bulb, then the light bulb NGAC was no longer offered to clients and has been banned for acquittal as an offset under the NoCO2 scheme for the 2008/2009 financial year.

Forestry NGACs do not require additionality assessment nor assessment against leakage. Any client wishing to use these credits should ask their provider to describe how the projects are additional and whether they address issues of leakage. For example, a large number of credits created under this scheme are from forests planted by Forests NSW between 1996 and 2000 – before the NSW scheme had been designed. In 2005, the NSW scheme permitted carbon sequestered in post 1990 NSW forests to be tradable in the scheme.

However, when Forests NSW trades this carbon into the GGAS scheme, one must look at the effects of this against the hypothetical business as usual situations. Forests NSW's business as usual mandate is to manage forests sustainability, and so there are 2 main outcomes from their management practices; the first that part of the timber would be harvested and sold at a sustainable rate. The second; that the timber would remain unharvested. In the second instance, there can be no additional carbon claim as it would have happened as a matter of business as usual activity.

Assuming the first of these instances to be true, Forests NSW will withdraw (i.e. not harvest and supply) a timber product from the market to lock up the carbon that is eventually traded. As this timber will have been harvested sustainably, one can assume that it is carbon neutral, as it will be replanted as part of Forest NSW's business as usual mandate. The withdrawal of this carbon neutral product from the market means that another timber product will be supplied to replace it. In this instance, there is potential for leakage, as the product replacing it may have come from an unsustainably managed resource.

The only perceivable way to avoid this problem is to ensure the delivery of a sustainably managed forestry product to satisfy the demand created through the withdrawal of the initial timber product that was taken from the market for carbon sequestration purposes.

3. The Clean Development Mechanism

Kyoto ratified countries and their major polluters can meet their mandated emission caps through the purchase of carbon credits created in developing countries. The CDM is an accreditation program that allows project proponents that register carbon savings from projects in developing countries to validate/verify and register the carbon savings from their projects and trade them. The credits created under the CDM are called CERs – Certified Emission Reductions. The CDM is administered by the United Nations.

Compliance Issues:
In principle, all CERs can be used within the NoCO2 certification scheme, though clients interested in doing this should check with CRI first. In instances where the carbon savings from a CDM credit can be reversed (forestry CDM), the client may have to make good any reversed carbon saving should the project proponent fail to do so on their behalf.

4. The Voluntary Carbon Standard

Launched by the Climate Group in 2005, the VCS provides validation and verification for projects that reduce greenhouse gas emissions. It accepts projects that have applied CDM methodologies, as well as those that have been double verified against their own 'VCS Standard,' which is largely referenced from ISO 14064.2. The VCS is used by many CDM project developers to claim carbon credits from projects that commenced prior to their official CDM registration date. As VCS units are much cheaper than CDM units, most projects only claim VCS units for the time up until their CDM registration.

Compliance Issues:
In principle, all VCS units can be used within the NoCO2 certification scheme, though clients interested in doing this should check with CRI first. In instances where the carbon savings from a VCS credit can be reversed (forestry CDM), the client may have to make good any reversed carbon saving should the project proponent fail to do so on their behalf.

5. The Gold Standard

The Gold Standard is an accreditation for carbon credits (be they CERs or credits used for voluntary offsetting) that ensure that the project proponent has consulted the community in the planning of the project; and that the projects deliver positive outcomes for the communities and local environments that they work within.

Compliance Issues:
In principle, all GS units can be used within the NoCO2 certification scheme, though clients interested in doing this should check with CRI first. In instances where the carbon savings from a GS credit can be reversed (forestry CDM), the client may have to make good any reversed carbon saving should the project proponent fail to do so on their behalf.

Of particular interest - the Te Apiti Wind Farm in NZ was one of the first projects delivering Gold Standard credits. The Wind Farm was developed by Meridian Energy and was accredited to create carbon credits under the Gold Standard since 2005. However, Meridian Energy have announced that they are carbon neutral as they are electricity generation company, then they have a business as usual mandate to operate at zero emissions. Hence, any new generation is required through their mandate to carry zero emissions and therefore, any credits claimed from their zero emissions power plants require explanation as to how they are beyond business as usual for the company.

6. The Carbon Reduction Scheme (CRS)

The Carbon Reduction Scheme is administered by Origin Energy and is an accreditation program for the verification and validation of emission reduction projects. Many of the credits from within the CRS are created from projects carried out by Origin Energy themselves.

Compliance Issues:
According to its website, The Carbon Reduction Scheme accredits projects that follow the frameworks of a number of suitable schemes (ISO 14064.2-3 and ISO 14065, the VCS, CDM), and a few (namely the NSW GGRS and GHF scheme) that do not meet our criteria. Clients that wish to use credits from the CRS will be required to obtain appraisal from Origin Energy (or the project proponent if not Origin Energy) as to how the projects comply with CRI's 5 criteria. CRI will also require a comment from the auditor to verify (or the project proponent if not Origin Energy) the project's compliance with the 5 criteria above, or the auditing framework applied when verifying the emissions savings delivered from the credits. CRS will also be required to provide a notice of surrender/acquittal/retirement of the credits that it retails to ensure that the credits are not re-sold.

Please view our 'Projects we Support' webpage to learn about the specific carbon credit projects we support.

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· *Monitoring Report, above, p. 4.*
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