

The CarbonNeutral® Protocol 2006

a framework for effective action on climate change

Document History

Version	Date	Notes
1.1	2 nd April 2006	Adopted by TAG Nov 2005, effective from 2/4/2006
1.2	11 th July 2006	Minor changes to offset project scale & additionality requirements. Removal of TAG membership

Contents

1. Introduction	4
Figure 1. The CarbonNeutral® Journey	5
3. Use of the CarbonNeutral® Protocol	7
<i>Option 1. The CarbonNeutral Company Group Scheme</i>	7
<i>Option 2. Independent Route</i>	7
<i>Option 3. CarbonNeutral Protocol Approved Group Scheme</i>	7
TCNC is in the process of approving a number of 3 rd party group schemes that will operate on the same basis as the TCNC group scheme.	7
4. Governance of the CarbonNeutral® Protocol.....	8
5. Planning for CarbonNeutral®	8
5. Planning for CarbonNeutral®	9
5.1. Quantification	9
<i>Why quantify GHG emissions?</i>	9
<i>Approach and guiding principles</i>	9
<i>How to Quantify Greenhouse Gas Emissions</i>	10
<i>Requirements for Registration under the CNP</i>	10
<i>Performance Benchmarks for Quantification and Monitoring of GHGs</i>	10
5.2 Reducing.....	12
<i>Why Reduce?</i>	12
<i>Approach and Guiding Principles</i>	12
<i>How to Reduce Greenhouse Gas Emissions</i>	13
<i>Performance Benchmarks for Actions to Reduce GHG Emissions</i>	14
All GHG reduction actions should take account of local environmental and sustainability impacts.	14
5.3 Offsetting.....	14
<i>Why offset?</i>	14
<i>Approach & Guiding Principles for Offsetting</i>	15
5.4 Communication	19
<i>Why Communicate?</i>	19
<i>Approach & Guiding Principles</i>	19
<i>How to Communicate</i>	19
<i>TCNC Communication Requirements</i>	19
6. Verification Process	20
This section sets out the specific items that are covered by the TCNC Group Certification scheme. Table 6 lists those aspects of the scheme that will be routinely verified, and those that may be verified in response to specific requests by users.....	20
Appendix 1. Definition of Boundaries for the Main Uses of CarbonNeutral® Logo	21
CarbonNeutral® Organisation:	21
CarbonNeutral Product:.....	21
6.4.3 CarbonNeutral Service:	23
6.4.4 CarbonNeutral Operation:	23
6.4.5 CarbonNeutral Event:	23
Appendix 3. Project Attribute Profiles	29
Table 6.1: PAP Criteria and Ratings.....	29
Appendix 4. Definitions for the Purposes of Verification	30

1. Introduction

The CarbonNeutral Company - TCNC (formerly Future Forests) recognises that human-induced climate change is probably the greatest threat faced by society in the 21st century. The immediate causes are emissions greenhouse gases from energy conversion and industrial processes.

Businesses and individuals will need to make radical changes to the way they use energy if we are to stabilise atmospheric concentrations of greenhouse gases at levels that avoid serious damage to the ecosystems on which we depend.

Governments worldwide are developing policies to address climate change, but we believe that much more needs to be done to ensure an effective transition to a sustainable low carbon economy.

Sufficient progress can only be made if organisations and individuals decide to “own the problem”, and to act accordingly. Businesses have an interest in early action to minimise exposure to market or regulatory pressures arising from climate change impacts.

The founders of TCNC developed the “CarbonNeutral®” concept over 10 years ago to help raise awareness of Climate Change among organisations and individuals through the following actions:

“owning the problem”.....	Recognising that my actions have a consequence.
“quantifying the impact”.....	Understanding which actions create emissions and how much.
“reducing emissions wherever possible”.....	Reducing waste. Investing and managing with carbon in mind. Taking advantage of cleaner products and technologies.
“offsetting the remainder”.....	Doing something to address my impact. Accepting a cost for my impact.
“communicating effectively”.....	Telling people about the journey we are on. Being transparent. Encouraging others.

CarbonNeutral® has developed as a flexible tool that has been used by a wide range of businesses, public sector organisations and individuals to take early action on climate change.

The aim of the CarbonNeutral® protocol is to provide a framework for effective action on climate change for a wide range of businesses and organisations.

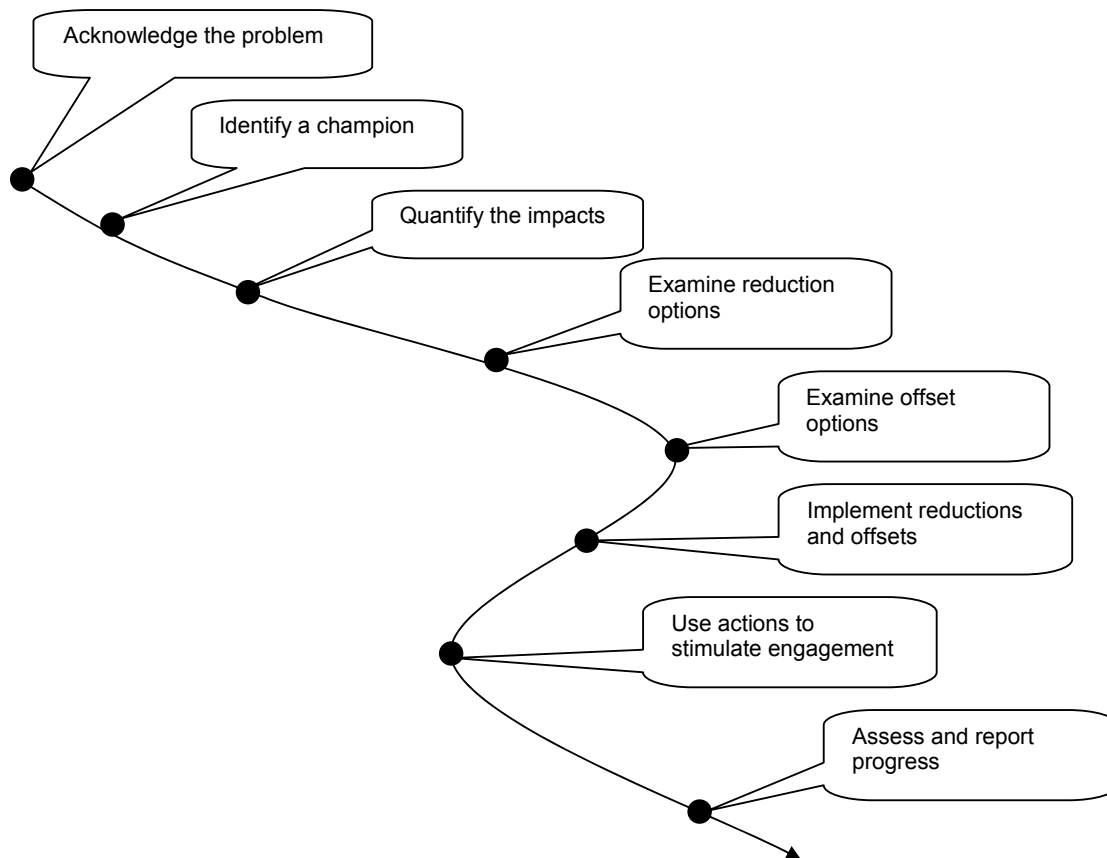
This document sets out the recommended framework for employing CarbonNeutral® within your organisation, the requirements for applying the CarbonNeutral® logo in a range of different situations, according to the boundaries and scope of emissions being offset. The document also sets out the requirements for offsetting projects and provides guidance on how to approach key aspects of your programme. For further details on how to proceed contact The CarbonNeutral Company to arrange an initial consultation.

Going CarbonNeutral® should be viewed as a journey, rather than a quick solution. Figure 1 illustrates the main stages in the process.

The long-term objective of this process is to achieve an organisation with zero net carbon emissions, at source (not reliant on indirect offset activities to neutralise emissions). However, given the limited availability of zero carbon energy and materials, TCNC recognises that carbon offsets are likely to be a significant part of the solution for most organisations in the short-term.

Users of the CarbonNeutral® Protocol are required to commit to public disclosure of information about their greenhouse gas emissions, their activities to reduce these emissions, the activities being offset (made CarbonNeutral®) and the projects used for offsetting. This information will be published on the CarbonNeutral® Registry.

Figure 1. The CarbonNeutral® Journey



2. CarbonNeutral® Definition, Logo and Applications

The CarbonNeutral Company owns the following logo:



Definition of “CarbonNeutral®”:

The term CarbonNeutral means that the net greenhouse gas emissions associated with an organisational unit, product, service or process are zero, through a combination of direct (internal) emission reducing actions and indirect (external) offsetting actions.

The logo should always be used in conjunction with explanatory text denoting what aspects of the business are “CarbonNeutral®”.

The main applications of the CarbonNeutral® Logo are as shown in Table 1. Details on the boundaries of the GHG emissions to be offset for each of these applications are contained in Appendix 1 (page 20).

Table 1. Main applications of CarbonNeutral® logo and definitions	
Application	What it means
Organisation	<ul style="list-style-type: none"> The organisation has quantified its GHG emissions. The organisation has a plan to reduce GHG emissions. All significant GHG emissions associated with the activities of the organisation have been included in the assessment and have been offset (See boundaries in Appendix 1) The organisation has published its estimate of GHG emissions, its emission reduction plan and its offset portfolio, and relevant verification statements on the CarbonNeutral® registry.
Product	<ul style="list-style-type: none"> The producer has quantified GHG emissions associated with the production and/or use of the product. The producer has a plan to reduce GHG emissions from production processes and/or future products. All significant GHG emissions over the quantifiable parts of the product life cycle production have been offset (See boundaries in Appendix 1). The organisation has published its estimate of product-related GHG emissions, its emission reduction plan and its offset portfolio, and relevant verification statements on the CarbonNeutral® registry.
Service	<ul style="list-style-type: none"> The service provider has quantified GHG emissions associated with the delivery of the service. The producer has a plan to reduce GHG emissions from facilities or process associated. All significant GHG emissions associated with the production and/or use of the product have been offset (See boundaries in Appendix 1). The organisation has published its estimate of product-related GHG emissions, its emission reduction plan and its offset portfolio, and relevant verification statements on the CarbonNeutral® registry.
Process	<ul style="list-style-type: none"> The organisation has quantified GHG emissions from a defined set of activities (e.g., a part of a production process) The organisation has a plan to reduce GHG emissions from the defined set of activities All significant GHG emissions associated with a defined set of activities have been offset (See boundaries in Appendix 1) The organisation has published its estimate of GHG emissions, its emission reduction plan and its offset portfolio, and relevant verification statements on the CarbonNeutral® registry.
Event	<ul style="list-style-type: none"> The event organiser has quantified the GHG emissions associated with the event All significant GHG emissions associated with the event have been offset (See boundaries in Appendix 1). The event organiser has published the estimate of GHG emissions, the offset portfolio, and relevant verification statements on the CarbonNeutral® registry.
Promotion	<ul style="list-style-type: none"> An organisation undertaking an initiative to promote the concept of going CarbonNeutral® No specific requirements for assessment or offset

3. Use of the CarbonNeutral® Protocol

The CNP is a public document that may be used by any business or other organisation as a basis for planning actions to address climate change.

However if your organisation wishes to register its actions on the CarbonNeutral® Registry or use the official CarbonNeutral® logo then you must follow one of the following options.

Note that TCNC has a trademark for the term “CarbonNeutral”, so any unauthorised use of this term may result in prosecution. If your organisation uses the CNP as a basis for an action plan but does not wish to formally register a CarbonNeutral initiative it should not make any claims implying that its initiative is compliant with the CarbonNeutral® Protocol.

Option 1. The CarbonNeutral Company Group Scheme

FF operates its own group scheme as follows:

- TCNC organises climate change assessment / monitoring system
- TCNC co-ordinates emission reduction plan;
- TCNC co-ordinates development of a carbon offset plan;
- TCNC sources and allocates carbon credits, as required to offset the emissions specified in the offset plan;
- TCNC organises verification procedures for all organisations within the group;
- TCNC provides use of CN logos and communications package;
- TCNC organises registration on CN Registry.

Option 2. Independent Route

Through the independent route, an organisation will need to undertake the following actions:

- Organise its own climate change assessment / monitoring system;
- Establish and maintain its own emission reduction plan;
- Develop and maintain a plan to offset specified unavoidable emissions;
- Organise acquisition of carbon credits necessary to offset the emissions specified in offset plan;
- Organise verification of its compliance with the requirements of the CarbonNeutral Protocol (verification statement by any ISO 14000 accredited auditor, or CNP accredited auditor will be accepted¹);
- Submit verification statement and relevant registration information to TCNC;
- Sign agreement for use of CN logos (standard terms needed);
- TCNC organises registration on CN Registry.

Option 3. CarbonNeutral Protocol Approved Group Scheme

TCNC is in the process of approving a number of 3rd party group schemes that will operate on the same basis as the TCNC group scheme.

¹ See Template / example verification statement in Appendix

4. Governance of the CarbonNeutral® Protocol

This document is known as The CarbonNeutral® Protocol (CNP). The CNP is a proprietary protocol owned by The CarbonNeutral Company Ltd (TCNC). Development of the CNP is led by a Technical Advisory Group, appointed by TCNC, consisting of a number of independent expert members, and representatives of organisations interested in promoting effective action on climate change.

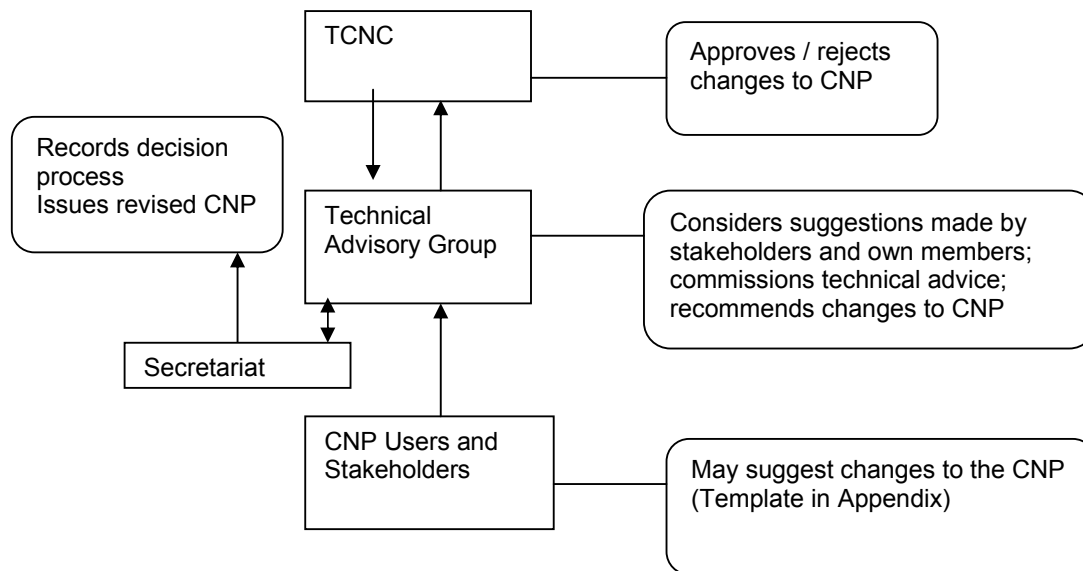
The current members and observers of the Technical Advisory Group are listed on The CarbonNeutral Company's website.

The Technical Advisory Group will consider suggestions² made by users and other stakeholders and make recommendations to TCNC for changes to the CNP.

The Technical Advisory Group may commission / seek technical advice regarding the implications of changes to the CNP prior to making a recommendation.

A secretariat will publish records of the Technical Advisory Group meetings and decisions taken.

Figure 1. Management of the Carbon Neutral Protocol



² See template for suggestions to changes to the CNP (Appendix)

5. Planning for CarbonNeutral®

Organisations wishing to use CarbonNeutral® should develop and maintain a plan that addresses the following points:

- **Leadership** Who is going to act as the leader of the initiative, Which parts of the organisation are involved? What are the roles and responsibilities?
- **Quantification** Which activities of the organisation are going to be assessed? What systems for monitoring and reporting are going to be developed?
- **Reducing** Which sources of GHG emissions are going to be the focus of emission reduction efforts? What sorts of technologies or practices will be used? Who will be involved?
- **Offsetting** Which emissions are going to be offset? What types of offset projects are preferred?
- **Communication** Who are the main targets of communication? What are the main messages? What channels of communication will be used?

Recommendations and suggested benchmarks for each of the quantification, reducing, offsetting and communication components of the plan are set out in Sections 5.1 to 5.4.

While TCNC aims to assist companies in the development and maintenance of CarbonNeutral® Plans, the responsibility for these plans rests with each organisation.

TCNC has developed a number of performance benchmarks for each of the main components of the CarbonNeutral® Plan. Organisations using the CNP should assess their progress against these benchmarks.

Once a CarbonNeutral® Plan has been developed and approved, a summary of the plan should be posted in the CarbonNeutral® Registry.

5.1. Quantification

Why quantify GHG emissions?

Quantification of GHG emissions is an essential part of any climate change initiative because decisions on what reductions can be made and what action to take in relation to any unavoidable emissions need to be based on credible evidence.

Approach and guiding principles

Most organisations approach quantification through an initial assessment of the GHG emissions associated with their business. This initial assessment can provide a basis for establishing on-going monitoring systems and for setting targets for reducing emissions. Early assessments can also provide benchmarks to compare relative greenhouse gas performance between business units or competitors.

Increasingly, companies are interested in the climate change impacts of their products and services. TCNC recommends extending monitoring systems to quantify the lifecycle greenhouse gas impacts of products and services. As

awareness of the greenhouse gas impacts of alternative products increases, so consumers may be encouraged to select lower carbon intensity³ goods and services.

Guidelines for quantification and monitoring of greenhouse gas emissions are as follows:

- use a methodology that is appropriate to the scale and complexity of the organisation;
- be clear and transparent about the scope of the assessment;
- be aware of the uncertainties and variability associated with quantifying emission from alternative types of data;
- provide feedback to information providers within the organisation, so that they understand the relevance of the data being provided;
- keep a clear record of all the assumptions and calculations used in the quantification of emissions;
- establish a regular process to repeat data collection and assess changes over time relative to a benchmark or starting point.

How to Quantify Greenhouse Gas Emissions

The CarbonNeutral® Protocol does not prescribe a specific methodology to be used for the quantification of greenhouse gas emissions. However, there are a number of well-developed and widely accepted methodologies available. It is strongly recommended that companies should use one of the following standard methodologies⁴:

- The WBCSD-WRI Greenhouse Gas Protocol;
- ISO 14064;
- DEFRA's corporate greenhouse gas accounting methodology.

Requirements for Registration under the CNP

The existence of a relevant GHG assessment is a requirement for Registration under the CNP (see verification checklist, section 7 for details), however, independent verification of the data and calculation methods is optional.

Organisations are also required to declare how their verification process compares with the following performance benchmarks.

Performance Benchmarks for Quantification and Monitoring of GHGs

Table 5.1 sets out suggested performance standards for quantification and monitoring of greenhouse gas emissions within a CarbonNeutral® Plan.

Note that independent verification of performance against these benchmarks is not *required* and will not be undertaken within TCNC's group verification process. However external verification of performance against these benchmarks is recommended, especially for larger organisations.

³ Carbon Intensity is a measure of the amount of GHG produced per unit of product, service or utility.

⁴ users should note that these methodologies are revised from time to time.

Table 5.1 Performance Benchmarks for Quantification of GHG Emissions

Benchmark		Relevance
PBQ1	Organisational GHG assessments are undertaken annually and progress is assessed relative to benchmarks or reference points. The relevance of benchmarks is re-assessed every 2 years.	All organisations
PBQ2	Organisation obtains independent verification ⁵ of their assessment/monitoring system within 2 years of starting a CarbonNeutral initiative.	Recommended for all large organisations and publicly quoted companies
PBQ3	GHG assessments covers Scope 1 and 2 CO2 emissions according to the WBCSD-WRI GHG Protocol.	All organisations
PBQ4	All buildings housing >50 staff display report on annual CO2 emissions associated with fuel and electricity use	All organisations with buildings housing >50 staff
PBQ5	Businesses supplying CarbonNeutral Products should undertake a Product Lifecycle GHG Assessment in conformance with ISO 14042 / ISO 14043. All Product Lifecycle Assessments should be subject to a periodic review on a frequency not less than 2 years.	All organisations supplying CarbonNeutral® products.

⁵ Independent verification to be conducted by a company accredited to award either ISO9000 or ISO14000, or EMAS

5.2 Reducing

Why Reduce?

TCNC recognises that in order to stabilize atmospheric concentrations of greenhouse gases at levels that avoid the risk of serious and irreversible damage to the environment, GHG emissions will need to be reduced by at least 60% over the next 50 years. The main emphasis of climate change initiatives should therefore be on seeking and implementing cost-effective measures to reduce GHG emissions at source.

Approach and Guiding Principles

TCNC recognises that the practical and economic feasibility of actions to reduce greenhouse gas emissions are highly variable between different types of organisations. Low carbon technologies are constantly evolving, so organisations must take various economic and technical considerations into account in deciding when, where and how to adopt new technologies [e.g., incremental replacement of equipment or wholesale restructuring]. The CNP does not, therefore, prescribe specific emission reduction actions to be undertaken over specific timeframes. Neither does the CNP impose specific emission reduction targets, as what may be straightforward for one organisation may be impossible for another.

Emission reducing actions that may be considered include:

For Buildings...

- Energy efficiency in buildings (E.g., heating, cooling, lighting)
- Refitting of buildings to improve efficiency
- Design and construction of new buildings
- Use of renewable energy (E.g., Wind, hydro, wave, biomass, geothermal)
- Use of lower carbon intensity energy (E.g., switch from oil / coal to natural gas; or electricity to fuel)

For Manufacturing Processes...

- Measures to increase the efficiency of energy used in manufacturing (heating, cooling, compression, drying, sorting, cutting, shaping, chemical processes)
- Measures to reduce the emission of greenhouse gases from manufacturing processes (methane, nitrous oxide, HFCs, SF6)
- Use of renewable energy (Wind, hydro, wave, biomass, geothermal)
- User of lower carbon energy (switch from oil / coal to natural gas or nuclear; or electricity to fuel)

For Extractive Processes...

- Minimise disturbance of soils and rocks
- Design features to reduce energy requirements (drilling, pumping)
- Capture, re-inject or use methane

For Transportation / logistics...

- Improved logistics, efficiency of transportation
- Modal shift to reduce greenhouse gas emissions (road to rail; air to rail; rail to sea)
- Reduced travel requirements through use of communications/digital technology, more local sourcing
- Use of more efficient vehicles
- Use of lower carbon intensity fuels, advanced lubricants

- Improved vehicle maintenance and driving

For Design of Products...

- Design of products that require less greenhouse gas emissions in their manufacture, use and disposal (E.g., consider the embodied energy, carbon intensity of materials, energy efficiency use, ability to use lower carbon intensity energy sources; reusability, recyclability).

For Agriculture and Forestry...

- Use minimal tillage and other cultivation methods to conserve and increase soil carbon
- Handle farm waste so as to minimise emissions of methane
- Consider technologies to reduce methane emissions from ruminants
- Select and use fertilisers more effectively to minimise emissions of nitrous oxide
- Make effective use of forest and farm residues (E.g., for heating)
- Manage forests to ensure their continued health and carbon storage capacity

When considering which emission reducing actions to adopt, organisations should also consider the potential impacts on local environments, such as air quality, health and safety issues, aesthetic factors and biodiversity.

How to Reduce Greenhouse Gas Emissions

TCNC recommends that all organisations should develop a plan to reduce GHG emissions, taking into consideration the main sources of GHGs from the company and its products and the likely cost-effectiveness of alternative emission reduction actions. The complexity of the plan should be appropriate to the type and size of the organisation.

GHG reduction plans should be reviewed periodically to assess progress against planned actions and to assess the feasibility for further reductions, taking account of the availability of new technologies, enabling policies and incentives provided by government and the overall business context.

Organisations whose products are responsible for significant GHG emissions (either through direct combustion or by use or disposal) should consider actions to reduce the impacts of these products through improved design or formulation.

TCNC recommends that a director or senior manager should be given the responsibility to develop and implement the plan for reducing emissions.

CNP Requirements

The publication of an action plan to reduce GHG emissions is a requirement under the CNP, and the existence of a relevant document is a part of the core verification programme (See section 7 for details). However, the content of the plan is not prescribed and independent verification of the extent of implementation is optional.

GHG reduction plans are not required for carbon neutral events or promotional activities. However, it is recommended that measures are taken to identify ways of reducing emissions from these activities.

Organisations are also required to declare the extent to which their emission reduction plans meet the performance benchmarks described below.

Performance Benchmarks for Actions to Reduce GHG Emissions

Table 5.2 sets out suggested performance standards Actions to Reduce GHG Emissions within a CarbonNeutral® Plan.

Note that independent verification of performance against these benchmarks is not *required* and will not be undertaken within TCNC's group verification process. However external verification of performance against these benchmarks is recommended, especially for larger organisations.

Table 5.2. Performance Benchmarks for Actions to Reduce GHG Emissions

Benchmark		Relevance
PBR1	Organisations should make an assessment of the costs of reducing their main sources of GHG emissions (all sources over 20% of emissions).	All organisations
PBR2	Existing office buildings should be fitted with efficient lighting, maximum natural ventilation should be employed and heating controls should be adjusted regularly.	All organisations
PBR3	New office buildings should be commissioned to conform to BREEAM "excellent" standards, with at least 20% of energy requirements to be provided by on-site renewable energy or micro-CHP.	All organisations commissioning new buildings
PBR4	Staff should be trained in relevant energy saving measures, such as turning off lights, computers and appropriate use of heating controls. Equipment such as photocopiers should not be left on standby if unused for periods >45 mins.	All organisations
PBR5	Vehicles should use high quality biofuel blends, wherever consistent with warranty.	All organisations with transport fleets
PBR6	Offices should use recycled paper products for all internal print jobs and all paper, card and plastics.	All organisations

All GHG reduction actions should take account of local environmental and sustainability impacts.

5.3 Offsetting

Why offset?

TCNC recognises that, given the limited availability of zero carbon intensity energy and materials, most organisations will be unable to reduce greenhouse gas emissions associated with their activities and/or products to zero in the short-term.

Offsetting allows businesses to recognise and do something positive about those emissions that remain. Undertaking offsetting actions on a voluntary basis can have a number of positive effects: (a) it shows stakeholders that the organisation recognises the full extent of its impacts and is prepared to take action to address them; (b) by putting a price on climate change impacts it adds focus to actions to reduce emissions; (c) communication of the offset initiative can help to engage and educate important stakeholders, such as staff and customers; (d) by supporting projects that offset GHG emissions companies can provide local social and environmental benefits and help to stimulate the take-up of low carbon technologies.

TCNC is aware that the practice of offsetting greenhouse gas emissions has been questioned by some organisations on the grounds that it might be used as an excuse

to avoid reducing emissions. However, TCNC concludes that within the context of a broader climate change plan, offsetting can provide an energising and engaging element within a broader plan to address climate change.

Approach & Guiding Principles for Offsetting

TCNC recognises that there is no “perfect solution” for offsetting⁶ greenhouse gas emissions. A variety of approaches are possible, each with their own strengths and weaknesses. Table 5.3 summarises some typical strengths and weaknesses of alternative offset measures.

Table 5.3. some typical strengths and weaknesses of alternative offset measures

Offset Mechanisms	Strengths	Weaknesses
EU Allowances	Government-backed system Scaleable Simplicity	Not traceable to specific emission reduction measures (Current) relatively high cost
CDM / JI Certificates	Rigorous technical analysis	High transaction costs. Most of the registered tonnes from large-scale industrial projects.
VERs based on renewable energy projects in Annex 1 countries	Good technical basis Low transaction costs Transparent	Most not scaleable Many already undertaken to fulfil legal requirements Potential for double-counting (already supported by renewable legislation)
Forestry and land use in Europe	Readily scaleable Local social and environmental benefits	Risk of permanence Convertibility with and equivalence to reductions if not carefully managed
Renewable energy projects in developing countries	Social benefits (poverty reduction, access to energy)	Technical risks
Forestry projects in developing countries	Social benefits (poverty reduction, access to energy)	Risk of permanence Convertibility with and equivalence to reductions if not carefully managed

TCNC recognises that the definitions of “good practice” in the selection and use of different types of offsets are still under development, and welcomes a diversity of approaches to maximise the potential for “learning by doing”.

TCNC encourages organisations to consider which type of offset method best suits their situation, and organisations should note that it is possible to use more than one type of instrument within an offset plan.

TCNC Offset Requirements

It is a requirement of the CNP to offset relevant GHG emissions with eligible offsetting instruments.

⁶ It is important to distinguish between offsetting for voluntary purposes and trading to meet a compliance requirement. In the case of legal compliance a company may buy or sell whatever legal instruments are most cost-effective to meet a target. In the case of offsetting, projects offsets are purchased to compensate for a specific emission and may not be re-sold.

Table 5.4 lists the instruments that are eligible to be used for offsetting GHG emissions within an organisation's CarbonNeutral® Plan and the necessary documentation that must be provided on the CarbonNeutral® Registry. Note that this documentation is normally compiled as part of the approval process for offset projects.

Table 5.4 Eligible Offset Instruments	Required Documentation		
	Qualification sheet ⁷	Project Description	Attribute Profile
<i>Government-backed instruments</i>			
EU Allowances	No	No	No
Certified Emission Reductions (CERs)	No	Yes	Yes
Emission Reduction Units (ERUs)	No	Yes	Yes
<i>Voluntary Sector Offsets (VERs)</i>			
TCNC Community Renewables Programme	Yes	Yes	Yes
TCNC Community Energy Efficiency Programme	Yes	Yes	Yes
TCNC Small-scale Methane Programme	Yes	Yes	Yes
TCNC European Native Woodland Programme	Yes	Yes	Yes
TCNC Plan Vivo Programme	Yes	Yes	Yes

A qualification sheet is a checklist of all the requirements relevant to a specific type of project. An independent assessor shall complete the qualification sheet, based upon information provided by project developers and other sources. The specific requirements for projects in each of the TCNC's voluntary sector offset programmes are set out in full in Table A2.2 in Appendix 2.

A project description (PDD) is a document, written by a project developer, describing the location, context and specific actions being undertaken in a project. It includes a description of the technology being used, the means by which GHG emissions are being reduced relative to a baseline, the conditions pertaining to additionality, project risks. The PDD is a key source of information used to determine the eligibility of a project.

A project attribute profile is a summary of key characteristics of the project, such as level of additionality, technical risk and local benefits. See Appendix 3 for details.

The purchase of eligible offset certificates sufficient to cover the CarbonNeutral® initiative shall occur within 180 days of the emissions to be offset.

TCNC Programmes for Voluntary Sector Carbon Offsets.

TCNC recognises that many organisations prefer to support small-scale, community based actions to reduce GHG emissions, rather than medium to large-scale industrial projects designed for commercial purposes.

Small-scale projects often provide a more direct link between purchases of carbon offset and additional emission reducing activities. However, at present there is limited availability of government-backed (officially approved) small-scale, community type offset projects. TCNC has therefore worked with a number of organisations to help develop supplies of voluntary offsets that meet key technical requirements while offering a range of local sustainability benefits.

These offsets are available through 5 programmes, with distinctive offerings and eligibility requirements (Table 5.5). The specific requirements for projects in each of

⁷ A Qualification sheet is a checklist of all the requirements for a specific type of project.

the TCNC's voluntary sector offset programmes are set out in full in Table A2.2 in Appendix 2.

Table 5.5 TCNC's Voluntary Sector Carbon Offset Programmes

Programme	Types of Eligible Projects	Definition
Community Renewables Programme	Small-scale Renewable energy projects; includes wind, wave, solar, hydro and biomass	Renewable energy up to 10 MW. Excludes projects displacing grid electricity produced by EUETS generator or projects producing ROCs
Community Energy Efficiency	Small-scale Non-industrial energy efficiency projects	Public, domestic or SME's saving <10 GWh /year. Excludes projects displacing grid electricity produced by EUETS generator.
European Native Woodlands	Non-plantation forestry and land use projects	Non-commercial woodland creation, community forestry, reforestation
Methane Mitigation	Methane capture projects	Community or small farm methane generation and capture for energy Mitigation of fugitive emissions from coal mines
Plan Vivo	Community land use and renewables in developing countries, using Plan Vivo system	Small-farmers and rural communities; agroforestry, reforestation; fuel efficient stoves; and solar PV

Specific technical requirements that apply to projects within each of these programmes are set out in Table A2.2

5.4 Communication

Why Communicate?

Communication is an essential part of climate change initiatives because in the long run efforts to reduce GHG emissions are unlikely to be sustainable if they do not get buy in and acceptance from key stakeholders including customers, staff, suppliers and investors.

Approach & Guiding Principles

Clear and accurate communication about CarbonNeutral® initiatives is essential in order to maintain trust in the participating organisations and the credibility of the scheme.

The importance of motivational communication for specific groups of stakeholders, such as staff and customers in order to develop engagement attract interest is recognised.

The CNP Advisory board considers that one of the main objectives of the CNP is to encourage good quality communication by business on climate change issues:

How to Communicate

An organisation's communication should include the following key points:

- Climate change is a significant threat to our prosperity, the welfare of future generations and natural ecosystems
- The main means to address climate change is to reduce GHG emissions from fossil fuel combustion and other industrial processes
- Combating climate change is everyone's responsibility
- The GHG impacts of the organisation
- The GHG impacts of products (if known)
- What the organisation is doing to reduce GHG emissions
- What projects are being used to offset GHG emissions

TCNC Communication Requirements

The CarbonNeutral® Register

6. Verification Process

This section sets out the specific items that are covered by the TCNC Group Certification scheme. Table 6 lists those aspects of the scheme that will be routinely verified, and those that may be verified in response to specific requests by users.

CarbonNeutral Verification Checklist			
Verification Checks on Emissions Assessment			
Means of Verification			
Existence of a report for relevant time period in prescribed format	Check existence of document for relevant time period	Y	
Clear description of boundaries of assessment	Clarify of description relative to GHG Protocol	Y	
Entry of data in all relevant categories & boundaries	Check that there are data entries in relevant categories	Y	
Completeness of entries	Check that data for all relevant sources have been captured		Y
Use of correct conversion factors for data	Audit of conversion factors against IPCC etc		Y
Accuracy of data inputs	Audit a sample of conversion factors		Y
Calculations correct	Audit all calculations		Y
Assumptions documented and referenced	Check that assumptions are documented and referenced	Y	
Verification Checks on Emission Reduction Actions			
Existence of emission reduction plan in prescribed format	Check existence of emission reduction plan	Y	
Accuracy of progress data	Audit sample of progress data		Y
Accuracy of statement of effectiveness	Check accuracy of description of effectiveness		Y
Verification checks on Certified Offsets			
Copy of PDD	Check existence of correct version of PDD	Y	
Copy of purchase agreement / contract	Check existence of correct version of agreement / contract	Y	
Certificates present	Check existence of certificates to stated amount	Y	
Copy of Offset Attribute Profile	Check copy of offset attribute profile	Y	
Verification checks on EU Allowances			
Allowance certificates present	Check existence of allowances to stated amount	Y	
Verification checks of Non-certified offsets (VERs)			
Copy of PDD	Check existence of correct version of PDD	Y	
Copy of purchase agreement / contract	Check existence of correct version of agreement / contract	Y	
Copy of independent review	Check existence of independent assessment to agreed format	Y	
Copy of independent reviewer qualifications	Check copy	Y	
Verification of underlying data and calculation methods	Project verification exercise		Y
Check accuracy of baseline and additionality statements	Project verification exercise		Y
Verification of social and environmental impact information	Project verification exercise		Y
Copy of Offset Attribute Profile	Check copy of offset attribute profile	Y	
Copy of VER delivery notice	Check existence of certificates to stated amount	Y	
Verification of allocation of correct amounts			
Check total purchases versus amount to be offset during period	Check total purchases versus amount to be offset during period	Y	
Verification checks on Communication			
Existence of CN communication master document	Check existence of correct version of CN communication doc	Y	
Correct statement of emissions from within boundaries and timeframe	Check validity / accuracy of boundary statements	Y	
Correct statement of reductions	Check accuracy of statements on reductions	Y	
Correct statement of projects	Check accuracy of statement on projects	Y	

Appendix 1. Definition of Boundaries for the Main Uses of CarbonNeutral® Logo

CarbonNeutral® Organisation:

The term CarbonNeutral® Organisation indicates that all significant GHG emissions associated with the activities of the organisation have been offset. Organisations describing themselves as CarbonNeutral® should ensure that they offset the following sources of GHG emissions for all sites owned or under direct management control:

- Direct emissions of GHGs from combustion of fossil fuels and other processes emissions from other processes) from sites and company owned vehicles (WBCSD-WRI Scope 1);
- Indirect GHG emissions from the generation of imported electricity and heat (WBCSD-WRI Scope 2);
- GHG emissions associated with business travel and transportation of company-owned goods by non-owned vehicles (WBCSD-WRI Scope 3); and,
- GHG emissions associated with the disposal of waste (WBCSD-WRI Scope 3).

CarbonNeutral Product:

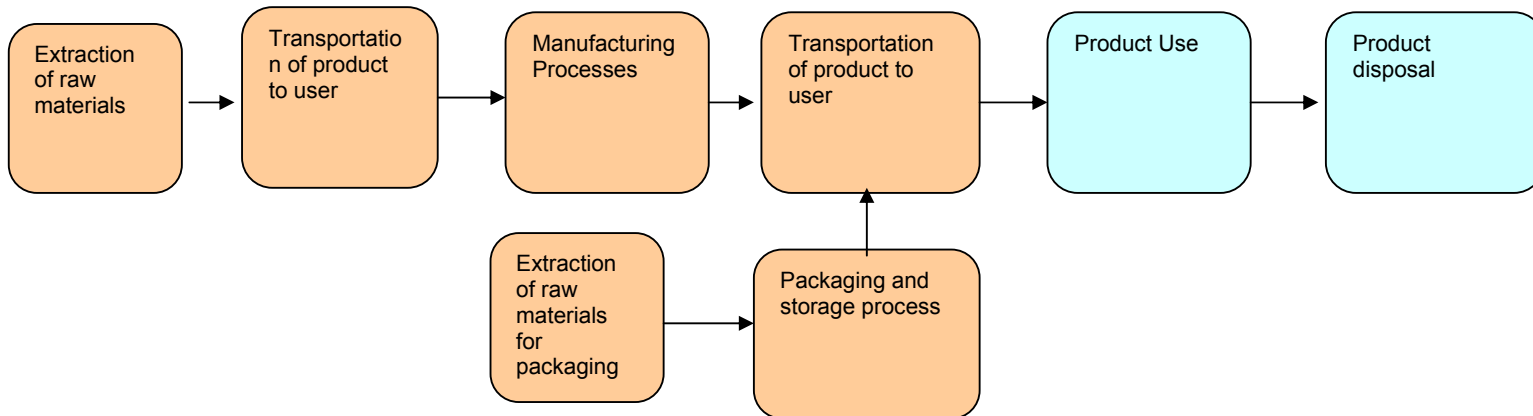
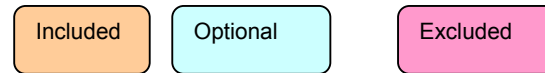
The term CarbonNeutral® Product label indicates that all significant GHG emissions associated with the manufacture and delivery of the product have been offset. Products that have significant GHG emissions associated with their use and/or disposal should indicate whether these have also been offset.

Organisations wishing to apply the CarbonNeutral Product labels should estimate offset the following sources of GHG emissions using a lifecycle assessment process based on ISO 14064:

- GHG emissions associated with the extraction and processing of raw materials
- GHG emissions associated with manufacturing and packaging of the product (including GHG emissions from imported electricity used in the process but excluding emissions associated with the manufacture of processing machinery or infrastructure for processing plants)
- GHG emissions associated with the delivery of the product

Organisations shall indicate whether GHG emissions associated with the use and/or disposal of the product are also offset.

Figure A1.1 Sources of GHG emissions to be offset for CarbonNeutral® Products



Physical infrastructure and machinery used in manufacture and delivery of products should be excluded (e.g. embodied energy in factory equipment and vehicles) unless already considered in existing LCA studies.

6.4.3 CarbonNeutral Service:

The CarbonNeutral Service label indicates that all significant GHG emissions associated with the delivery of a service have been offset.

Organisations wishing to apply the CarbonNeutral Service labels shall offset the following sources of GHG emissions:

- Direct and indirect GHG emissions from sites used to deliver the service;
- GHG emissions associated with transportation involved with the provision of the service;
- GHG emissions associated with the manufacture, delivery and disposal of products consumed in the provision of the service;

6.4.4 CarbonNeutral Operation:

The CarbonNeutral Operation label indicates that all significant GHG emissions associated with a specific set of activities within an organisation or part of a product or service lifecycle have been offset.

Organisations wishing to use the CarbonNeutral Operation label shall define the boundaries of the operation and offset the corresponding sources of GHG emissions

6.4.5 CarbonNeutral Event:

The CarbonNeutral Event label indicates that most of the significant GHG emissions associated with the running of a specific event have been offset.

Organisations wishing to use the CarbonNeutral Event label shall define the boundaries of the event and offset the following sources of GHG emissions:

- Direct sources of GHGs from the event site emissions;
- Transport of artists/performers (if any), support staff, organiser and audience/delegates (to and from);
- Accommodation of artists/performers, support staff and organisers; and, Emissions associated with disposal of waste products arising from the event.

Appendix 2. TCNC Programmes for Voluntary Sector Carbon Offsets.

TCNC recognises that many organisations prefer to support small-scale, community based actions to reduce GHG emissions, rather than medium to large-scale industrial projects designed for commercial purposes.

Small-scale projects often provide a more direct link between purchases of carbon offset and additional emission reducing activities. However, at present there is limited availability of government-backed (officially approved) small-scale, community type offset projects. TCNC has therefore worked with a number of organisations to help develop supplies of voluntary offsets that meet key technical requirements while offering a range of local sustainability benefits.

These offsets are available through 5 programmes, with distinctive offerings

Table A2.1 TCNC's Voluntary Sector Carbon Offset Programmes

Programme	Types of Eligible Projects	Definition
Community Renewables Programme	Small-scale Renewable energy projects; includes wind, wave, solar, hydro and biomass	Renewable energy up to 10 MW. Excludes projects displacing grid electricity produced by EUETS generator or projects producing ROCs
Community Energy Efficiency	Small-scale Non-industrial energy efficiency projects	Public, domestic or SME's saving <10 GWh /year. Excludes projects displacing grid electricity produced by EUETS generator.
European Native Woodlands	Non-plantation forestry and land use projects	Non-commercial woodland creation, community forestry, reforestation
Methane mitigation	Methane capture projects	Community or small farm methane generation and capture for energy Mitigation of fugitive emissions from coal mines
Plan Vivo	Community land use and renewables in developing countries, using Plan Vivo system	Small-farmers and rural communities; agroforestry, reforestation; fuel efficient stoves; and solar PV

Specific technical requirements that apply to projects within each of these programmes are set out in Table A2.2

Requirements	Criteria	Community Renewables: Small-scale Renewable energy projects; includes wind, wave, solar, hydro	Community Energy Efficiency: small-scale, non-industrial energy efficiency schemes	Methane mitigation: capture of methane	EU Native Woodlands: creation and restoration of native woodlands in Europe	Plan Vivo: sustainable land use of renewable energy by communities in developing countries
1. Basic Design						
1.1 Clear statement of project/activity boundaries	PDD must provide a clear statement of the project boundaries, sources of emissions and types of GHGs included in the project	Description of the RE plant, capacity and method of operation	Description of the EE measures, buildings / infrastructure and use	Description of feedstock, method of capture and use.	Site map, vegetation description, soil description and activity plan	Description of project area; current land use and proposed activities. PV's and Technical specifications
1.2 Clear statement of baseline scenario	PDD must provide a clear explanation of the baseline scenario and underlying assumptions.	Description and justification of the fuels being displaced	Description of current energy use and associated GHG emissions	Description of methanogenesis in absence of capture	Description of land use and vegetation cover without intervention	BL assumptions stated in Technical specifications
1.3 Scientifically valid method for reducing GHG emissions relative to baseline	PDD must provide a clear explanation of how the GHG benefits are calculated. The method should be scientifically robust and all assumptions and factors should be presented.	Calculation of avoided GHG emissions per unit of renewable energy produced, with justification of factors used	Calculation of avoided GHG emissions per unit of E saved. Defined method for measuring energy saved	Description of amount of CH ₄ captured and also avoided GHG from fuel.	Carbon uptake and storage models, with transparent assumptions	Carbon uptake and storage models, with transparent assumptions. Renewable component as per CR
1.4 Ownership and non-double counting of GHG benefits	Project developer should establish ownership of GHG benefits and should ensure that benefits are not double counted below the level of national inventories	Owner must declare that renewable energy will not be sold as Green energy in way that would double-count GHG benefit. Should not displace energy from EUETS facilities	Owner of building / facility is assumed to be owner of carbon. Should not displace energy from EUETS facilities.	Assumption that owner of plant / feedstock has ownership of carbon	Assumption in UK is that land owner owns carbon	Ownership established through agreement with land owners or community councils

2. Additionality	Criteria	Community Renewables:	Community Energy Efficiency:	Methane mitigation:	EU Native Woodlands:	Plan Vivo:
2.1 Beyond legal requirements	Declaration by project developer that activity is not a legal requirement	Owner declaration that project not undertaken to fulfill renewable obligation, or equivalent, or Gold Std Cert	Declaration by developer that activity is not a legal requirement, or Gold Std Cert	Declaration by developer that activity is not a legal requirement, or Gold Std Cert	Declaration by developer that activity is not a legal requirement	Declaration by project administrator that activity is not a legal requirement
2.2 New activity	Carbon purchase agreement signed prior to activity starting				Carbon purchase agreement signed prior to activity starting	Limited carry-forward allowed for scale-up
2.3 Carbon finance helps overcome financial hurdle	Carbon finance must provide >10% of capital costs over first 3 yrs.	Assessment that C finance provides >10% of capital costs over first 3 yrs, or Gold Std Cert	Assessment that C finance provides >10% of capital costs over first 3 yrs, or Gold Std Cert	Assessment that C finance provides >10% of capital costs over first 3 yrs, or Gold Std Cert	Assessment that C finance provides >10% of capital costs over first 3 yrs, or CCBA cert	Assessment that C finance provides >10% of capital costs over first 3 yrs, or CCBA Cert
2.4 Additionality fund (if condition 2.3 not met)	If carbon finance provides <10% of capital costs over first 3 yrs then project must establish an additionality fund in which carbon funds are used to scale up, increase access to outputs or improve social benefits of project.	Description of additionality fund operation	Description of additionality fund operation	Description of additionality fund operation	Description of additionality fund operation	N.A.
2.5 Programme-specific technical additionality requirements	PDD must contain a description of other ways in which project is additional - e.g. provision of new technology or training	None	EE should achieve/exceed best practice for type of operation according to relevant national benchmark	None	None	Assessment that C finance provides >50% of implementation costs (excluding R&D/ capacity building) over first 3 yrs

3. Risk Management	Criteria	Community Renewables:	Community Energy Efficiency:	Small-scale Methane:	EU Native Woodlands:	Plan Vivo:
3.1 Risks of loss of GHG benefits within project boundary should be assessed and managed	PDD must contain a description of the risks of reversal or loss of GHG benefits and how the risks are being managed	Assessment of risk of increased GHG if project fails (e.g. diesel generators)	Assessment of risk of "comfort taking" within project boundary	Assessment of risk of methane leakage, and description of management	Assessment of risk of loss of carbon stocks, and description of management	Assessment of risk of loss of carbon stocks, and description of management
4. Leakage Assessment						
4.1 Activities with potential to cause increase in GHG emissions outside project boundary should be managed	Project management plans should address increases in GHG emissions outside project boundary caused by project activity	No requirement	No requirement	No requirement	No requirement	Project management plan should address possible displacement of agricultural activity
5. Environmental Impact						
5.1 Project complies with local environmental regulations	Project complies with local environmental regulations	Owner declaration that project complies with local env. Regulations	Owner declaration that project complies with local env. Regulations	Owner declaration that project complies with local env. Regulations	Declaration of approval by Forestry Commission for relevant grants	Project management declaration that activities comply with environmental laws
5.2 Activities conserve natural ecosystems and improve biodiversity	Where relevant, project activities should be designed to protect and improve biodiversity	No requirement	No requirement	No requirement	Approval by forestry commission and use of >80% native species	Plans include protection of natural habitats and promotion of native species
6. Social Impact						
6.1 Project is carried out with local consultation and approval	Project development process involves local people through consultation or participatory planning	Project has been approved by local authorities after statutory consultation process	Project has been approved by local authorities after statutory consultation process	Project has been approved by local authorities after statutory consultation process	Planning for public / communal land involves local consultation	Planning is led by community groups and individual farmers
6.2 Project improves livelihoods / security of local people	PDD explains ways in which activities and outputs improve local livelihoods, income and security	No requirement	No requirement	No requirement	No requirement	PDD explains ways in which activities and outputs improve local livelihoods, income and security

7. Monitoring and Reporting

7.1 Project has a clearly documented monitoring plan

Criteria

PDD includes a description of the monitoring plan

Community Renewables:

Annual monitoring of renewable electricity supplied

Community Energy Efficiency:

Annual monitoring of performance of equipment

Small-scale Methane:

Annual report of methane capture

EU Native Woodlands:

Projects are included within a Programme-wide monitoring scheme

Plan Vivo:

Projects are included within a Programme-wide monitoring scheme. Each project provides an annual report.

Appendix 3. Project Attribute Profiles

To provide organisations with a greater understanding of the relative strengths and weaknesses of alternative projects, TCNC has adopted a method of summarising key project characteristics, known as the Project Attribute Profile (PAP)⁸.

PAP assessments are conducted by experienced, independent assessors based upon desk reports and communication with project staff.

Table 6.1: PAP Criteria and Ratings

Project additionality	■	Non-additional: within normal practice or legal requirements
	■	Partly additional: beyond legal requirements; but viable without C finance
	■	Additional: beyond normal practice; overcomes sig. barriers
Consumer additionality	■	Offset purchase has no significant impact on scale of project activity
	■	Carbon purchase has some impact on scale of project activity
	■	Carbon purchase has direct impact on scale of project activity
Reliability	■	Highly risky or questionable reliability
	■	Risk of failure if management not adequate
	■	Very low risk of failure
Permanence	■	Significant risk of complete reversal of project benefit
	■	Significant risk of partial reversal of project benefit
	■	Very low / zero risk of reversal of project benefit
Poverty reduction	■	Little or no direct impact on poverty reduction
	■	Some impact on poverty reduction
	■	High impact on poverty reduction
Biodiversity	■	Little or no direct impact on biodiversity conservation
	■	Some impact on biodiversity conservation
	■	High impact on biodiversity conservation
Land degradation	■	Little or no contribution to combating land degradation
	■	Some contribution to combating land degradation
	■	High contribution to combating land degradation
Sustainable energy	■	Does not provide a sustainable source of energy
	■	Provides some contribution to sustainable energy needs
	■	Significant contribution to sustainable energy needs
	■	Reasonable availability

⁸ Developed by ECCM

Appendix 4. Definitions for the Purposes of Verification

Relevant GHG assessment	An assessment of GHG emissions to atmosphere arising from a defined set of business/organisational activities. The relevance of the assessment is determined by its timeframe, scope and boundaries in relation to the type of carbon neutral claim.
Action plan to reduce GHG emissions	A document that sets out a number of specific measures that an organisation intends to undertake to reduce GHG emissions. Where an action plan has been in place for >18 months it must include a report on the delivery and effectiveness of previous measures.
offset relevant GHG emissions	Offset = to purchase and register offsets on the CarbonNeutral Registry, so that they are retired and not available for re-sale. Relevant GHG emissions = those emissions defined in the GHG assessment as being relevant to the specified CarbonNeutral® initiative.
Eligible offsetting instruments	Allowances or offset credits from eligible sources listed in Table 5.4 for the CNP.