

Carbon Footprint Standard Qualification Requirements

1 January 2017



# **Quality Control**

Version number: 1.0

Date: 1 January 2017

Report produced by: John Buckley

Managing Director, Carbon Footprint Ltd

Report reviewed by: Rebecca Pattison

Senior Environmental Consultant, Carbon Footprint Ltd

Director approval: John Buckley

Managing Director, Carbon Footprint Ltd



# **Table of Contents**

Preface		Error! Bookmark not defined.
1.	Introduction	
2.	Carbon Footprint Standard – CO₂e Assessed	3
3.	Carbon Footprint Standard – Reducing CO <sub>2</sub>	6
4.	Carbon Footprint Standard – Carbon Neutral	8
5.	Transparency & Verification	10
6.	Apply for the Carbon Footprint Standard	
7.	Glossary of terms	12
8.	Useful links for	



## 1. Introduction

### 1.1. Carbon Footprint Standard

The carbon footprint standard draws on and pulls together the leading standards in assessing, reporting and offsetting emissions.

It is an internationally recognised standard that enables business to promote their low carbon credentials, whilst giving their customers confidence that an internationally approved process has been followed and verified against.

The standard can apply to organisations, services, products and events.

There are three levels of the standard:

- 1. Carbon Footprint Standard Assessed
- 2. Carbon Footprint Standard Reduced
- 3. Carbon Footprint Standard Carbon Neutral





### 1.2. The Two Key Principles of the Standards

- 1. Improve the accuracy of assessments and reporting
- 2. Improve transparency associated with communication

### 1.3. Benefits for a Company Implementing the Carbon Footprint Standard

- Give consumers and business confidence
- Give qualifying companies confidence in their own processes
- Demonstrate environmental credentials
- Enhance market reputation
- Motivate employees

### 1.4. How to Achieve certification

The requirements for each level of certification are explained in the following sections of this document. If your company already follow the appropriate methodology, then the final step of qualification is verification by Carbon Footprint Ltd.

#### 1.5. Use

Once a company has achieved the standard for their business whether for their organisation, product, service or event, they can use the Carbon Footprint Standard logo in their marketing materials to demonstrate their carbon credentials.

The Carbon Footprint Standard logos are trademarks of Carbon Footprint Ltd and can only be used under licence from Carbon Footprint Ltd. Licences are usually provided for a period of 12 months.

### 1.6. About Carbon Footprint Ltd

Carbon Footprint Ltd has been a leading provider of carbon calculations, carbon reduction strategies and neutrality standards since 2004.

Their website carbonfootprint.com is the home to the most popular freely available online carbon calculator tools for individuals, households and small businesses.

Carbon Footprint Ltd provides calculation and verification services to companies of all sizes including multinational organisations for their compliance greenhouse gas reporting or voluntary reporting on systems such as the CDP (previously known as the Carbon Disclosure Project).

Carbon Footprint Ltd is a founding member of the Quality Assurance Standard (QAS) for Carbon Offsetting. The QAS continues to give confidence to businesses and individuals that the calculation methodology being used has been independently verified and the offset project meets the highest standards available in the offsetting industry. In addition the scheme includes an audit process to verify that offset providers are following this standard and fulfilling the full offsetting obligations for their customers.

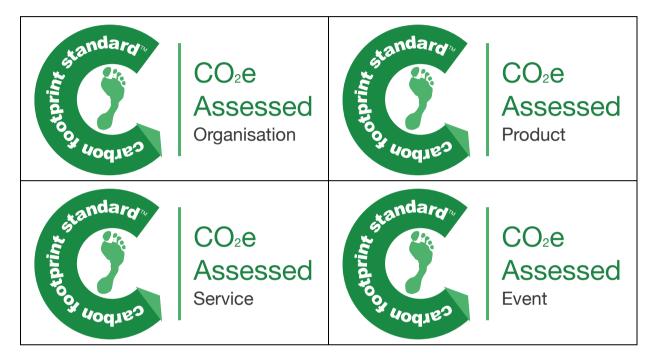
Carbon Footprint Ltd's own Quality Management System (QMS) is certified by BSI to ISO 9001:2015 and their own Environmental Management System is certified by BSI to ISO 14001:2015.



# 2. Carbon Footprint Standard – CO<sub>2</sub>e Assessed

### 2.1. Introduction

The Carbon Footprint Standard – CO<sub>2</sub>e Assessed can be applied to organisations, products, services and events. It shows that an appropriate assessment methodology has been followed. It will have either been independently assessed by an approved assessor or verified by Carbon Footprint Ltd's team of specialist greenhouse gas emission assessors.



## 2.2. Methodologies approved

To qualify for the Carbon Footprint Standard – CO<sub>2</sub>e Assessed, the footprint assessment must have been completed against one of the leading internationally recognised methodologies. The Carbon Footprint Standard – CO<sub>2</sub>e Assessed recognises these standards as being robust methodologies:

- For Organisational Footprinting
  - WRI Greenhouse Gas reporting
  - BEIS Voluntary Reporting Guidelines (previously DECC)
- For Product and Service Footprinting
  - o BSI's PAS 2050:2011
  - o ISO 14001:2015
  - o Greenhouse Gas Protocol Product Standard
- For Events
  - o BSI's PAS 2060
  - o ISO 20121

### 2.3. Assessment Scope and Boundaries

An early stage of any assessment is to clearly define the boundaries and scope of the assessment, to be made publically available.



The Carbon Footprint Standard branding must only be used to promote the credentials of the subject(s) included within the assessment scope and boundary.

#### Example

For a multinational company with offices and factories in USA, UK and China. If the assessment only covers the offices in the USA then this must be clearly defined. The Carbon Footprint Standard branding in this case can only be used for the USA offices and must not be used to promote the full organisation as having achieved the Carbon Footprint Standard, or any of the overseas offices or factories.

The boundaries statement shall also include which sources of greenhouse gas emissions have been included in the assessment.

For an organisation this would typically include:

All of Scope 1 and Scope 2 emissions as defined by WRI's Greenhouse Gas Protocol. Plus Scope 3 emissions that are easily calculated. The table below shows the typical Scope of emissions for an organisation.

The assessment <u>must</u> as a minimum include all emissions from buildings, fuel and transport that are under the direct control of the entity.

The assessment should also define which greenhouse gases have been included. As a minimum, the following greenhouse gases should be included:

- Carbon Dioxide
- Nitrous Oxide
- Methane

If any of these are not included then a statement must clearly define which are not included in the assessment and why this is the case.

### 2.4. Product and Services

The boundary definition should as a minimum include Cradle to Factory Gate, however in many instances it could also include Cradle to Customer, Cradle to Grave or Cradle to Cradle.

#### 2.5. Emissions Factors

Emissions factors must be used from leading sources, and must be the most recently available versions of these factors. The **Carbon Footprint Standard – CO₂e Assessed** recognises these sources of emissions factors as being suitable.

For Organisational Footprinting:

- BEIS (previously DECC)
- WRI's GHG Protocol



- Nationally produced factors by government bodies (e.g. Environmental Protection Agency (EPA))
- IEA for international country specific electricity factors

For product footprinting, the approved factors are those included for the organisational footprinting plus other product and material lifecycle factors. Approved international databases include:

- Ecoinvent
- Bath University ICE factors

### 2.6. Communication

All communications relating the footprint assessment must be clear and include the scope and boundary of the assessment. It must not overstate the assessment that has been made.

#### 2.7. Verification

The assessments need to either be carried out or verified by an approved verification body.

Independent verification is highly respected and often results in extra points being awarded for reporting (e.g. with CDP).



# 3. Carbon Footprint Standard – Reducing CO<sub>2</sub>e

### 3.1. Introduction

The Carbon Footprint Standard – CO₂e Reduced can be applied to organisations, products, services and events. It shows that an appropriate assessment methodology has been followed, and the emissions have been reduced. It will have either been independently assessed by an approved assessor or verified by Carbon Footprint Ltd's team of specialist greenhouse gas emission assessors.



## 3.2. How to qualify

To achieve the **Carbon Footprint Standard – Reducing CO<sub>2</sub>e** the requirements for the **Carbon Footprint Standard – CO<sub>2</sub>e Assessed**, will have been achieved at least twice over multiple years (this principle applies to organisational footprinting as well as Product and Services footprinting).

There are three ways of showing Emission Reductions:

- Reducing Absolute Emissions (i.e. the total carbon footprint)
- Reducing Emissions by per unit of turnover (e.g. reductions of x tonnes of CO₂e on a per Million USD turnover basis). Note reductions against turnover should also be corrected for inflation.
- Reducing Emissions by per unit of production (e.g. reductions of x tonnes of CO₂e on a per widget basis)

Note: One off events are not able to achieve **Carbon Footprint Standard – Reducing CO<sub>2</sub>e** status. However, events that are repeated on a regular basis e.g. annual conferences, may qualify for this standard if they can show a reduction in emissions compared to the previous year or baseline year.



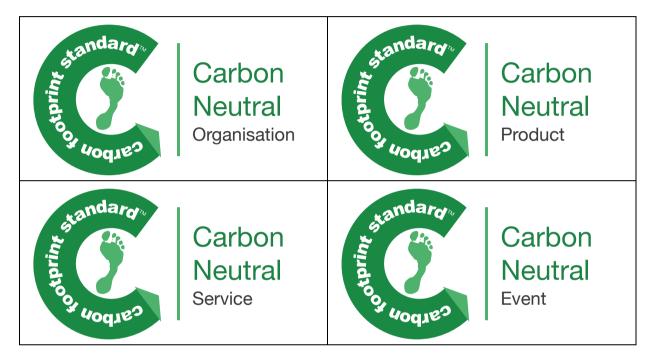
Although not a specific requirement of the standard we strongly recommend to set a carbon reduction target, and measure against this target on an annual basis.



# 4. Carbon Footprint Standard – Carbon Neutral

### 4.1. Introduction

To qualify for the **Carbon Footprint Standard – Carbon Neutral** an organisation, product, service or event must have first achieved the **Carbon Footprint Standard – CO₂e Assessed** status. Following this all emissions must then be offset using carbon credits that have been generated by projects that meet the requirements outlined in this section.



### 4.2. Qualifying Carbon Offset Standards

Following an assessment of the emissions using the standards and methodologies defined earlier in this document, the emissions can be offset through carbon offsets projects that meet the leading international standards. The standards currently approved are defined by the Quality Assurance Standard (QAS) for Carbon Offsetting. In general, the standards include:

- Verified Carbon Standard (VCS)
- Gold Standard Verified Carbon Reduction (Gold Standard VER)
- Certified Emission Reductions (CER)
- Gold Standard CERs







United Nations Framework Convention on Climate Change



The following project examples are **excluded** from meeting the QAS and hence also excluded from the **Carbon Footprint Standard – Carbon Neutral** requirements:

- large scale Hydropower projects (>20MW)
- use the destruction of trifluoromethane (HFC-23) or nitrous oxide (N2O) from adipic acid production project methodologies;
- forestry-related unless based on sustainable REDD+ project methodologies which include adequate mitigation to cover project failure.



More information on the Quality Assurance Standard can be found at www.qascarbonneutral.com

## 4.3. Carbon Credit Retirements

All carbon credits must be either be purchased via a QAS approved carbon offset provider or be able to demonstrate that carbon credits have been retired on behalf of the company, and relating to the product and assessment period being offset against. The carbon offset retirements must also be completed within a 12 month period of the entity the offsetting relates to.



# 5. Transparency & Verification

For all levels of Carbon Footprint Standard, transparency is a key factor.

To achieve the three levels of the standard covered in this document, the organisation applying for the standard must be able to show transparency.

As a minimum requirement transparency should include:

#### For the **Assessment**:

- 1. The methodology followed/used for the assessment
- 2. The definition of the Scope and Boundaries of the assessment
- 3. The results of the assessment

### For the **Reduction**:

- 1. The Assessment transparency (as shown above)
- 2. Tracked emissions over two or more years

### For Neutrality:

- 1. The **Assessment** transparency (as shown above)
- 2. Information about the project used:
  - a. The name of the project
  - b. The standard it is verified against
  - c. The amount of emissions offset



# 6. Apply for the Carbon Footprint Standard

To apply for the Carbon Footprint Standard, please contact our team of consultants who will explain the process for your specific organisation, product, service or event.

Email: info@carbonfootprint.com

Tel: 01256 345645



# 7. Abbreviations / Acronyms

Abbreviation	Definition
BEIS	Department for Business, Energy and Industrial Strategy
BSI	British Standards Institute
CDP	Previously known as Carbon Disclosure Project
CER	Certified Emission Reduction
DECC	Department for Climate Change
DEFRA	Department for the Environment, Food and Rural Affairs
EMS	Environmental Management System
EPA	Environmental Protection Agency
GHG	Greenhouse Gas
IEA	International Energy Agency
ISO	International Organisation for Standardisation
PAS	Publicly Available Specification
QAS	Quality Assurance Standard
QMS	Quality Management System
REDD	Reducing Emissions from Deforestation and Degradation
VCS	Verified Carbon Standard
VER	Verified Emission Reduction
WRI	World Resources Institute



# 8. Glossary of terms

There are many terms that are specifically used in measuring and offsetting emissions that many will be unfamiliar with. The table below aims to help provide information on some of the most common terms used in carbon management.

Term	Meaning
Carbon Credit	Relates to one tonne of CO₂e
Carbon Footprint	The amount of CO₂e released into the atmosphere as a result of the
·	activities of a particular individual, organisation or community
Carbon Neutral	Having a net zero carbon footprint by balancing emissions released
	with an equivalent amount sequestered, avoided or offset
Carbon Offsets	Compensating emissions produced by funding an equivalent carbon
	saving elsewhere
Carbon Reduction	Reducing carbon emissions from the previous measurement or
	compared to a base line measurement
Carbon Registry	An electronic registry system which records offsets, purchases, sales
	and retirements of project based carbon offsets
CER	Certified Emissions Reductions – carbon credits issued by the CDM
	Executive Board from emissions reductions achieved by CDM projects
	under rules of the Kyoto Protocol
CDM	Clean Development Mechanism – defined in the Kyoto Protocol that
	provides for emissions reduction projects which generate CERs to
	help countries meet part of their emission reduction commitments
CO <sub>2</sub> e	under the Kyoto Protocol  Carbon Dioxide Equivalent. This is the common unit for describing
CO2E	GHG's – for any quantity and type of GHG it signifies the amount of
	CO <sub>2</sub> which would have the equivalent global warming impact
EMS	Environmental Management System - a set of processes and
	practices that enable an organisation to reduce its environmental
	impacts and increase its operating efficiency
Emissions Factors	Values used to convert activity data, such as distance travelled, litres
	of fuel used or tonnes of waste disposed into carbon emissions
Growth Metric	Used to examine a company's historical growth – which can be used
	to calculate and compare emissions e.g. per USD million turnover
ISO 14001	Sets out criteria and maps out a framework that an organisation can
	follow and be audited and certified against for their EMS
ISO 9001	Sets out the criteria for a quality management system and the
	standard is based on a number of quality management principles
Kyoto Protocol	An International Agreement under which industrialised nations
	commit to reducing their GHG emissions
Paris Agreement	An International Agreement within the United Nations Framework
	Convention on Climate Change (UNFCCC) dealing with greenhouse
	gases emissions mitigation, adaptation and finance starting in the
	year 2020. This aims to follow on from the Kyoto Agreement



PAS 2050	A public available standard produced by BSI, defining a methodology for carbon lifecycle assessments of products
QAS	Quality Assurance Standard – provides a methodology and independent assurance for carbon offset providers
Retirements (carbon)	Involves cancelling and thus effectively removing carbon credits from emissions trading schemes (or carbon registries) as a method for offsetting carbon emissions
VCS	Verified Carbon Standard – standard for voluntary carbon offsetting, ensuring that all project based voluntary emission reductions that are independently verified meet its criteria
VER	Verified Emission Reduction – provide additional social and community benefits in addition to high quality carbon offsetting. One VER is the equivalent of 1 tonne $CO_2$ reduced.



# 9. Useful links

The following links are provided for convenience. These are to external sources – these links were checked and valid when this document was first published. If these external links have changed, then please notify Carbon Footprint Ltd, so they can be updated in subsequent issues.

Useful links	URL
ICE	www.circularecology.com/embodied-energy-and-carbon-
	footprint-database.html#.WH41abGcZgc
Carbon Footprint Ltd	www.carbonfootprint.com
CDM Registry	cdm.unfccc.int
CDP	www.cdp.net/en
IEA	www.iea.org
ISO	www.iso.org/iso/home.html
PAS 2050	shop.bsigroup.com/en/forms/PASs/PAS-2050/
PAS 2060	www.bsigroup.com/en-GB/PAS-2060-Carbon-Neutrality/
QAS	www.qascarbonneutral.com
VCS Registry	www.vcsregistry.com
WRI Greenhouse Gas Protocol	www.ghgprotocol.org