

Recognition for real carbon reduction

Agenda



09.30 - 10.00 Registration

10.00 - 10.10 Welcome - Brendan Reid, Carbon Trust

10.10 - 10.35 CTS benefits & methodology - Adam Leaver

10.35 - 11.00 Case Study: David Stutchfield, University of St Andrews

11.00 - 11.20 Coffee Break (20 mins)

11.20 - 12.20 CTS assessment walk-through - Adam Leaver

12.20 - 12.45 Case Study: David Currie, Scottish Court Service

12.45 - 13.00 Closing remarks - Brendan Reid

13.00 - 14.00 Lunch and Networking

The Carbon Trust

Brendan Reid

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Account Manager 19th October 2009

Our mission is to accelerate the move to a low carbon economy



We cut carbon emissions now

- By providing business and the public sector with expert advice, finance and accreditation
- By stimulating demand for low carbon products and services

We cut future carbon emissions

- By developing new low carbon technologies through project funding and management, investment and collaboration
- By identifying market barriers and practical ways to overcome them

Advice



- Customer helpline 0800 085 2005
- 12 free half day or full day events each year
 - www.carbontrust.co.uk/events
- Carbon Times newsletter on energy and carbon topics
- Carbon Surveys to find energy and CO2 savings at sites or organisations
 - www.carbontrust.co.uk/survey
- Feasibility studies into specific projects/investment areas
- Carbon Management Programme
- Carbon Management Lite Programme

Finance



- > From the Carbon Trust
 - Interest free loans for SME's, SMB's and charities
 - www.carbontrust.co.uk/loans
 - Salix funding for HE sector
 - www.salixfinance.co.uk
- From other sources
 - CEEF for LA sector (Scottish Government)
 - Small Business Loan for SME's and charities (Scottish Government)
 - Enhanced Capital Allowance (HMR&C)

Accreditation



- > The need for accreditation
- Carbon Trust Standard

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Business Benefits

Benefits of The Carbon Trust Standard



- Corporate reputation
- Motivation for ongoing reduction
- ➤ CRC

The Carbon Trust Standard: demonstrating ongoing reduction year-on-year

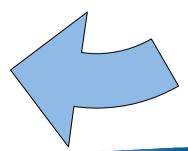


Measure

Manage



Certify



Reduce

Example certifications to date

- 150+ certifications
- 180+ customers























Go-Ahead

Trinity Mirror plc

How is the Carbon Trust Standard used? CARBON



- Advertising
- Website
- Email
- Annual report
- Branding
- Press releases
- Carbon Trust Standard advertising
- etc.

How is the Carbon Trust Standard used?





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- etc.

How is the Carbon Trust Standard used? CARBON



Regards

Name Here

Facilities Manager Centrica - Group Property

Mob: 0123 456 7891 Email: name.here@centrica.com

ISO 14001







- Advertising
- Website
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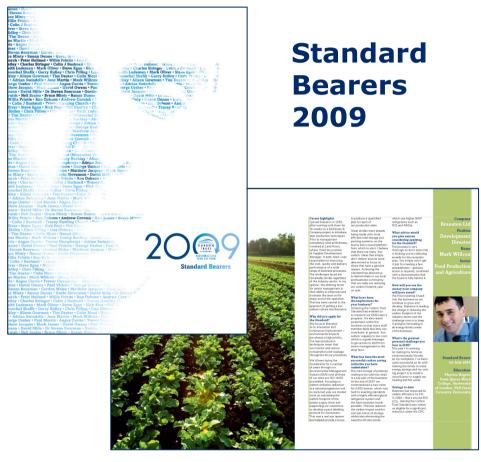






Our recent marketing campaign featured some of our achievers......





The University of Manchester, London Fire Brigade and Fife Council have schieved the Carbon Trust Standard by proving that they've reduced their carbon footprint. Earning it isn't easy, but it's worth it. It's a benchmark that stakeholders and staff are looking for and, as the only scheme recognised by the government's Carbon Reduction Commitment, can also mean reduced costs. Show that you're tackling ofinate change and join the low carbon world.

Join in. Stand out.







Available to download from the website:

www.carbontruststandard.com/UsingtheStandard/Showcase.aspx

Comment from our Clients



"Achieving the Standard is a clear sign that your business is serious about reducing the impact it has on the environment."

Chris Pilling, Head of Direct Banking at HSBC (firstdirect)

"You simply won't get it just for creating a few spreadsheets – genuine action is required, combined with a demonstration that the board is fully behind it."

Mark James, MD, Branstons

"The Carbon Trust Standard allows us to demonstrate real carbon reductions year-on-year, unlike other environmental award schemes."

David Owens, Chief Executive – Thames Water



Preparing for the CRC

What is the CRC?

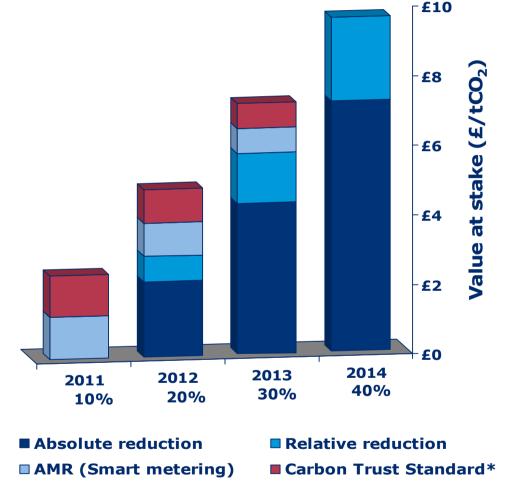


- Mandatory emissions trading scheme focusing on large non-energy intensive organisations
- Organisation based scheme, including direct and indirect emissions
- > HMT revenue neutral design
- Final stage of consultation just completed
- ➤ Key date for Standard bearers is 31st March 2011

The Carbon Trust Standard is linked to initial CRC recycling payments



- 10,000 tCO₂e footprint (~£1m-£1.5m energy bill)
 - £120k allowances p.a.
 - £120k 1st purchase
 - £24k at stake (2011)



* Or 'equivalent'

N.B. Figures are based on draft legislation



Carbon Trust Standard methodology & criteria

The Carbon Trust Standard: demonstrating ongoing reduction year-on-year

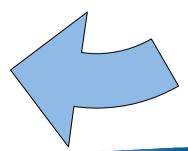


Measure

Manage



Certify



Reduce

Key decisions to make



- Boundary
 - Organisation
 - Business Unit
 - Sites
- Approach
 - Equity Share
 - Financial Control
 - Operational Control

Measurement rules

Based on GHG protocol terminology



Scope 1: Direct

Fuels Combustion

Owned Transport

Process Emissions

Fugitive Emissions

Scope 2: Utilities - indirect

Purchased electricity*, heat and steam

Scope 3: Other indirect

Transport – business

Transport – purchased product**

Transport – product distribution**

Waste disposal

Transport - commuting

Franchises and outsourcing

Production of purchased materials

Use of products



Minimum for Level 1 (initial certification)



= Minimum for Level 2 (re-certification)

^{*} Green tariffs are treated using average grid emissions factors

^{**} From/to point of ownership transfer

Regular areas of concern

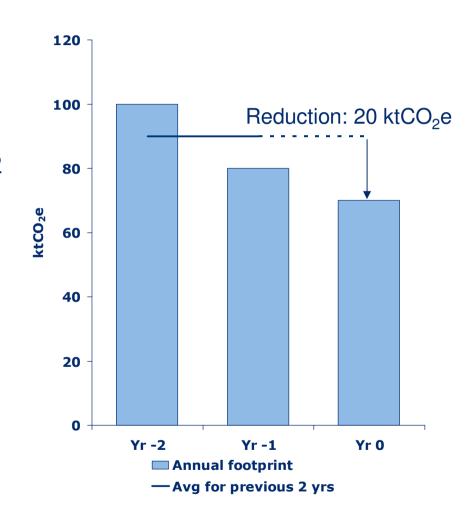


- Owned Vehicles
 - Information from Fleet Manager
 - Leased vehicles
- Fugitive Emissions
 - Maintenance schedules
- Business Travel
 - Information requirements

Reduction rules



- All organisations must show a footprint reduction
- Current emissions are compared to the average for the previous 2 years
- Reduction must be shown in one of:
 - Absolute footprint in tCO₂e
 - A relative benchmark such as tCO₂e/£m turnover (min 2.5% per annum improvement required)



Carbon management rules



Qualitative assessment with a 60% pass mark

Governance

- Is there a low-carbon policy?
- Who has overall responsibility for climate change matters?
- How are emissions and reductions performance reported to stakeholders?

Carbon accounting

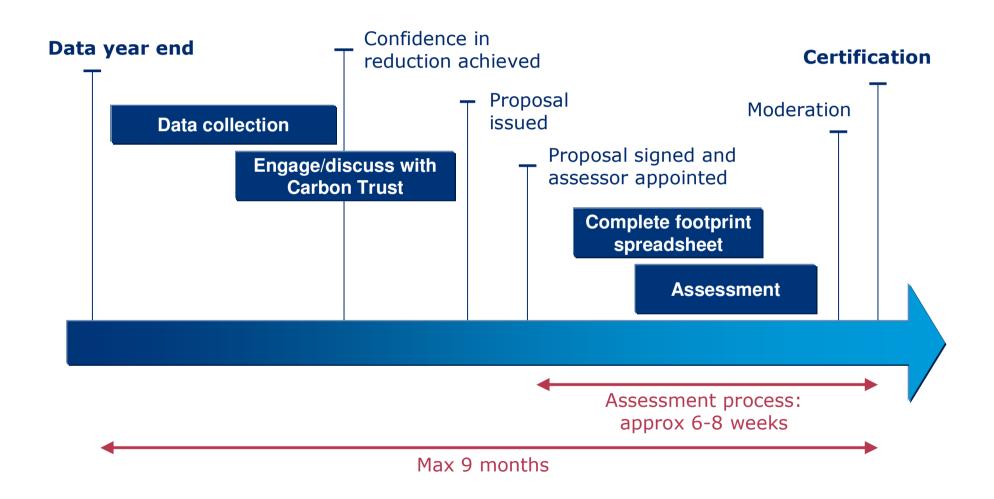
 Are there procedures for checking and documenting emissions and ensuring data accuracy?

Carbon management

- Does the firm actively monitor energy use?
- Are there carbon reduction targets?
- What programmes are in place to ensure operating procedures minimise carbon impact?
- Are there awareness programmes and training for all staff?
- What capital investments have been made and are planned to reduce carbon impact?
- What programmes are in place to reduce lifecycle impacts of products and services?
- Evidence of good practice from site visit?

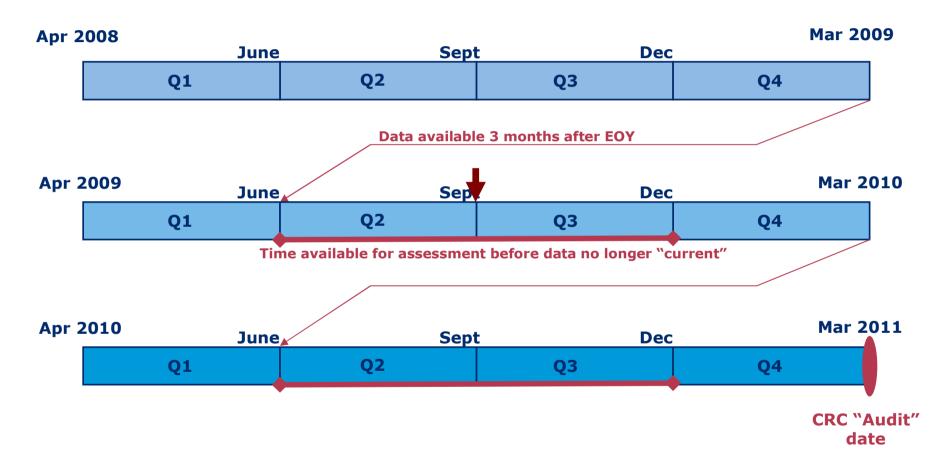
Achieving the Standard: engagement timeline example





Planning your assessment timelines





The Carbon Trust Standard: demonstrating ongoing reduction year-on-year

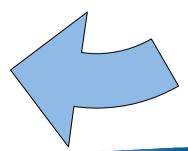


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Application Workshop

Carbon Trust Standard Offerings



Certification Only

- Assess your completed application
- Perform site visits

Assisted Certification

- Project manage the process
- Assist in completion of Assessment forms
- Assess the completed application
- Perform site visits

Certification consultancy

Gap Analysis

Purpose of this session



- > Four main objectives of this session:
 - Clarify assessment process
 - Demonstrate application
 - Provide helpful advice
 - Build the confidence to apply

This session

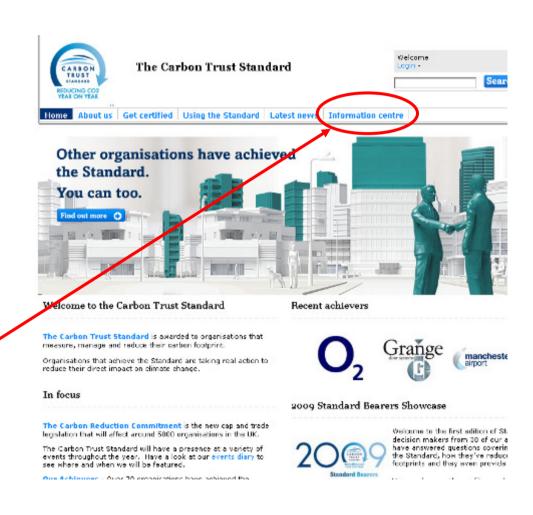


- Overview of assessment process
- The forms
 - Footprint spreadsheet
 - Qualitative assessment
 - Evidence pack
- Hints & Tips
- Q&A

Introduction to the process

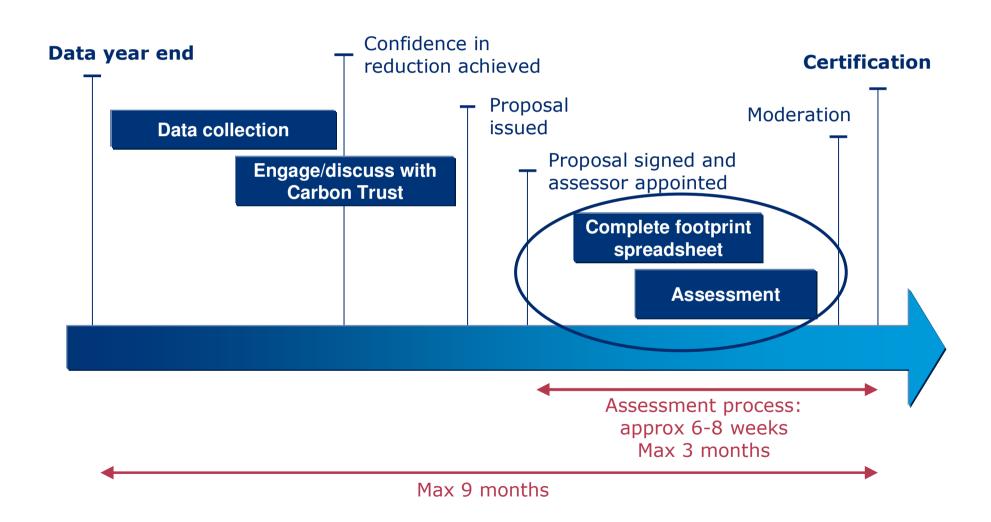


- An application for the Carbon Trust Standard contains:
 - The carbon footprint spreadsheet
 - Assessment form qualitative questions
 - The evidence pack
- Documents are available on the website



Overall Process Timeline





Assessment Activities



- Assisted Certification or Certification Only
- Initial discussion with your assessor
 - Clarify boundary & understand the organisation
 - Set out the way forward
- Complete the forms
 - Raise questions and clarifications with your assessor
 - Submit the forms & evidence before on-site audit
- Undertake on-site audit
 - Audit trail for data, confirm qualitative aspects
 - Ensure availability of key people & infrastructure
 - Receive initial feedback
- The assessor will finalise forms and submit for moderation

This session



- Overview of assessment process
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Carbon footprint spreadsheet



- ➤ Level 1 (pale blue cells) are compulsory:
 - Electricity
 - Gas
 - Other on-site fuel
 - Fuel used in vehicles
- ▶ Level 2 (pink cells) are optional at initial certification
- Any assumptions made should be qualified
- Common emissions factors are included in spreadsheet; others should come from govt source if possible i.e. Defra in the UK

	Emission factor	Year -2
	(kgCO ₂ e /	Year end date
Units	unit)	31-Dec-06

Direct Emissions (scope 1)

Stationary sources			
Gas	kWh	0.1850	17,361,465
Oil	kWh	0.2520	3,586,192
Biomass	kWh		
Other (specify)			

Owned transport			
Diesel	litres	2.6304	22,604
Petrol	litres	2.3154	10,066
Other (specify)			

Process / Fugitive (specify source):

	Refrigerant gas - R404a	kg	3260	1,466
ı				

Imported power/utilities (scope 2)

iniberted berreit demen	-3 (300 PC Z		
Purchased Grid Electricity	kWh	0.5370	8,925,676
Green Tariff Electricity	kWh	0.5370	

Carbon footprint spreadsheet



- Basic data you will need:
 - Annual consumption data in kWh for each fuel or energy stream covering each year over the 3 year period
 - 3 years data on benchmark e.g. annual turnover, product output volume etc
 - Owned or leased vehicles annual fuel consumption by type of fuel
- Potential extra data requirements:
 - Acquisitions or divestments made during the period (if applicable)
 - Imported power or heat from CHP (if applicable)
- Reduction is calculated on a relative and absolute basis

Carbon footprint spreadsheet

Instructions

Please fill in the sheets with BLUE TABS. Grey tabs are for information or assessor use only

Footprint calculation

Enter energy use data on the 'Footprint Calculation' sheet.

Blue cells are 'level 1' emissions. This information is required to achieve the Standard.

Pink cells are 'level 2' emissions. This information is optional for the first certification.

Reduction

The reduction in footprint over 2 or 3 years is calculated on the 'Reduction' sheet.

Enter turnover and/or benchmark information on this sheet to calculate a relative reduction.

Data sources

Please enter data sources for audit / verification purposes

Full spreadsheet

You are using this spreadsheet in a simplified view, which is suitable for 80% of applicants for the Standard.

Organisations with a more complex footprint should click the button below to switch to the full view. This is designed for organisations that:

- import or export power or heat from CHP
- have undergone structural changes that significantly impact the footprint (acquisistions, divestments, outsourcing, insourcing)
- have more emissions sources than will fit in the 'footprint calculation' sheet (e.g. petrol, diesel, LPG and aviation fuel)
- wish to include process, fugitive or other emissions sources
- are SMEs using the 2% project reduction rule

(You need to enable macros for the button to work. If you have any problems using this please contact your account manager)

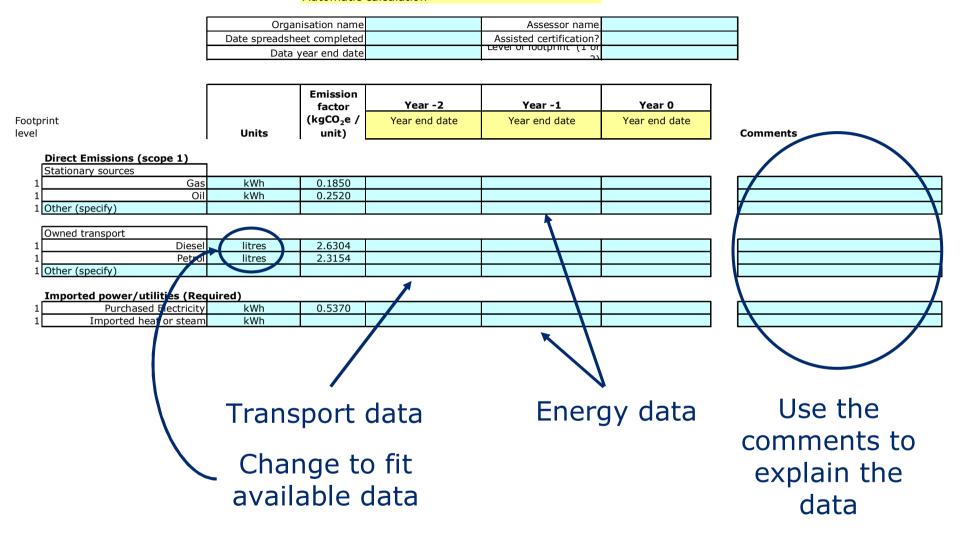




Switch to full version

FOOTPRINT CALCULATION

Complete for level 1 footprint Additional requirements for level 2 footprint Automatic calculation



Footprint Calculation

FOOTPRINT CALCULATION

Complete for level 1 footprint Additional requirements for level 2 footprint Automatic calculation

Organisation name	Assessor name	
Date spreadsheet completed	Assisted certification?	
Data year end date	rever or roorbuilt (1 or	

		Emission				
		factor	Year -2	Year -1	Year 0	
print		(kgCO₂e /	Year end date	Year end date	Year end date	
ĺ	Units	unit)				Comments
•		' <u> </u>				!
Direct Emissions (scope 1)						
Stationary sources						
1 Gas	kWh	0.1850				
1 Oil	kWh	0.2520				
1 Other (specify)						
						· · · · · · · · · · · · · · · · · · ·
Owned transport						
1 Diesel	litres	2.6304				
1 Petrol	litres	2.3154				
1 Other (specify)						
Imported power/utilities (Req						
Purchased Electricity		0.5370				
1 Imported heat or steam	kWh					
Other Indirect Emissions (Opti	onal)					
Business travel						
2 Travel by hire car	km	0.1200				
2 Travel by taxi	km	0.2580				
2 Travel by taxi 2 Travel by bus	km passenger km	0.2580 0.1073				
2 Travel by taxi 2 Travel by bus 2 Travel by rail	km passenger km	0.2580				
Travel by taxi Travel by bus Travel by rail Travel by plane:	km passenger km	0.2580 0.1073				
2 Travel by taxi 2 Travel by bus 2 Travel by rail Travel by plane: Long haul:	km passenger km passenger km	0.2580 0.1073 0.0602				
Travel by taxi Travel by bus Travel by rail Travel by plane: Long haul: First Class	km passenger km passenger km	0.2580 0.1073 0.0602				
Travel by taxi Travel by bus Travel by rail Travel by plane: Long haul: First Class Business Class	km passenger km passenger km passenger km passenger km	0.2580 0.1073 0.0602 0.3519 0.2551				
Travel by taxi Travel by bus Travel by rail Travel by plane: Long haul: First Class Business Class Premium Economy	km passenger km passenger km passenger km passenger km passenger km	0.2580 0.1073 0.0602 0.3519 0.2551 0.1407				
Travel by taxi Travel by bus Travel by plane: Long haul: First Class Business Class Premium Economy Economy	km passenger km passenger km passenger km passenger km	0.2580 0.1073 0.0602 0.3519 0.2551				
Travel by taxi Travel by bus Travel by plane: Long haul: First Class Business Class Premium Economy Short haul:	km passenger km passenger km passenger km passenger km passenger km passenger km	0.2580 0.1073 0.0602 0.3519 0.2551 0.1407 0.0880				
Travel by taxi Travel by bus Travel by plane: Long haul: First Class Business Class Premium Economy Economy	km passenger km passenger km passenger km passenger km passenger km	0.2580 0.1073 0.0602 0.3519 0.2551 0.1407 0.0880				
2 Travel by taxi 2 Travel by bus 2 Travel by plane: Long haul: 2 First Class 2 Business Class 2 Premium Economy 2 Economy 3 Short haul: 2 Business Class 2 Economy 2 Economy 3 Short haul: 4 Business Class	km passenger km passenger km passenger km passenger km passenger km passenger km	0.2580 0.1073 0.0602 0.3519 0.2551 0.1407 0.0880				
Travel by taxi Travel by bus Travel by plane: Long haul: First Class Business Class Premium Economy Economy Short haul: Business Class	km passenger km	0.2580 0.1073 0.0602 0.3519 0.2551 0.1407 0.0880				

Footprint Calculation

Input required **REDUCTION** Automatic calculation **Annual Footprint** Year -2 Year -1 Year 0 Units Year end date Year end date Year end date Comments Notes Footprint and benchmarks (unadjusted) Absolute footprint (after exports) Benchmark denominator (specify e.g., FTEs, tonne product, no. of items Turnover £mn Footprint relative to benchmarks tCO₂e Absolute footprint Benchmark data Relative benchmark Turnover benchmark tCO2e / £mn Reduction Reduction calculation Historic data Base year data Reduction % requirement Absolute footprint 0.0% Relative benchmark 2.5% Turnover benchmark 2.5% Reduction Pass / Fail Measures One 'Pass' Required

Reduction

This session



- Overview of assessment process
- > The forms
 - Footprint spreadsheet
 - Qualitative assessment
 - Evidence pack
- Hints & Tips

Assessment form



- Qualitative questions to assess the following areas
 - Governance
 - Carbon accounting
 - Carbon management
- Filled in by the applicant and assessed by assessor
- All questions should be supported by evidence
- Pass mark is 60% (48 / 80)



Qualitative Criteria



- Section I: Governance
 - **1. Policy** does the organisation have a policy on carbon?
 - **2. Responsibility** who is responsible for managing carbon?
 - 3. Reporting & Communications what internal / external, formal / informal communication on carbon exists?
- Section II: Accounting
 - **4. Accounting Process** how is carbon accounting delivered and managed?

Qualitative Criteria (cont.)



- Section III: Carbon Management
 - **5. Monitoring** what ongoing management of emissions is undertaken?
 - **6. Targets** what targets exist? Are they appropriate and linked to policy and carbon management plans?
 - **7. Reduction Programmes** what are the planned activities that have / will deliver emissions reductions?
 - **8. Investments** what are the investments that have been made that have delivered carbon reductions?
 - **9. Training** what training and awareness activities are delivered to staff?
 - 10.Products & Services how is the organisation influencing the wider community (eg customers & suppliers)?

Example question: Governance



- **1. Policy:** Does your organisation have a low-carbon/energy policy?
- Social responsibility programme (attached as evidence) sets goals to reduce carbon emissions
- Action plans are set and performance indicators reviewed annually

Assessor comments:

- Recognise their environmental impact both operationally and through their products
- Environmental issues integrated in day to day running of business
- Long term social responsibility objectives include aim of zero carbon

Mark:

5 / 5

Example question: Carbon Accounting



- **4. Accounting process:** Are there procedures for preparing, quality checking and documenting an accurate carbon footprint?
- Energy consumption data collected monthly
- Reported monthly via a web portal
- External review of sustainability report

Assessor comments:

- Energy figures for customer are based on bills. Metered energy figures would be more accurate
- Fleet emissions are based on expenses and estimated price.
 Litres of fuel bought should be recorded

Mark:

7 / 10

Example question: Carbon Management



- **9. Training:** Are there awareness programmes for all staff and appropriate training for those with responsibility for carbon emissions?
- New staff training soon to include carbon management
- Staff engagement activities relating to transport are planned

Assessor comments:

- Room to improve on current practice
- Interest in environmental issues at management level but no staff awareness training
- No mention of issues in employee handbook
- Courses should be identified for staff involved in energy management

Mark:

1 / 5

Evidence Pack



- Electronic documents only
- Keep it focussed (20 pages)
- Make more available for the assessor to review



Hints & Tips



Data:

- Make all assumptions & calculations clear
- Document sources and ensure they are available for audit

Qualitative Criteria:

- Overlaps but distinct criteria, each must be addressed
- Use the assessment criteria to focus answers & evidence
- Make sure key people are available for audit
- Get value from the process, assessor feedback
- Use, but don't abuse, your assessor!

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Contact details and more information



- Website: www.carbontruststandard.com
 - Case studies
 - Rules and tools
 - **Enquiry form**
 - News + updates
- Helpline: 0800 019 1443
- Dedicated account management team





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