



Corporate Emissions Assessment Protocol

For the measurement, management, and reduction of organisations' greenhouse gas emissions¹

Part 2: Criteria

The Carbon Trust

About the Carbon Trust

The Carbon Trust is an independent company established in 2001 with the support of the UK Government. Its mission is to accelerate the move to a sustainable, low carbon economy by working with business, the public sector, and investors.

The Carbon Trust carries out a wide range of activities, including working directly with business to reduce greenhouse gas emissions, explaining the strategic implications of climate change and investing in new technologies and businesses that will help to tackle climate change.

Foreword

Corporate Emissions Assessment Protocol

The Corporate Emissions Assessment (CEA) Protocol builds on the experience of the Carbon Trust Standard programme in establishing requirements for greenhouse gas (GHG) emission measurement, management and reduction.

The CEA Protocol delivers clear requirements and guidance for organisations seeking to measure and reduce their emissions, and is provided in two parts:

- Part 1: sets the minimum requirements for GHG assessment by organisations; and
- Part 2: establishes country-specific emissions performance requirements over time.

This CEA Protocol is freely available for use by organisations and programme operators to support their continuing efforts to reduce GHG emissions from their activities.

The CEA Protocol has been adopted by the Carbon Trust Standard as the basis for assessing corporate GHG emissions performance for

organisations participating in the Carbon Trust Standard programme.

About the Carbon Trust Standard

The Carbon Trust Standard (CTS) is an organisation-level GHG assessment and reduction programme. The CTS was developed by the Carbon Trust in 2007/08 to encourage and recognise good practice in emissions measurement, management and reduction by businesses and public sector organisations.

The Carbon Trust Standard has adopted the CEA Protocol (including both Part 1 and Part 2 of the CEA Protocol) as the basis of GHG measurement and performance assessment².

Organisations that are assessed as complying with the requirements of the Carbon Trust Standard and successfully certified may apply to the programme operator (The Carbon Trust Certification, or its accredited and licensed

² The CEA Protocol, including both Part 1 (Requirements) and Part 2 (Criteria), may also be adopted by other organisations and programme operators seeking to demonstrate organisation GHG performance over time.

certification partners) for use of the Carbon Trust Standard logo³.

³ Use of the Carbon Trust Standard logo, or other claims of conformance with the Carbon Trust Standard is restricted to those organisations that have achieved certification of their GHG emissions performance by the Carbon Trust Certification or its accredited and licensed certification partners.

1 Introduction

Part 2 of the Corporate Emissions Assessment (CEA) Protocol builds on the core definitions, principles, and requirements described in Part 1 and establishes criteria for assessing good performance in on-going management of organisational emissions.

Part 2 of the CEA Protocol is organised in four sections

1. Emissions measurement
2. Emissions reduction
3. Emissions management
4. Certification

2 Emissions measurement

Part 1 of the CEA Protocol outlines the key principles of GHG emissions measurement for organisations. Part 2 of the CEA Protocol provides organisations with additional requirements and specificity on which activities need to be included in the scope of measurement, the time period for emissions assessment, and data quality requirements to be met.

2.1 Emissions reporting

The form in which emissions assessed under this Protocol are reported to the program operator is important to ensuring data is accurate and consistent with the requirements set out in the CEA Protocol.

The requirements around emissions measurement are detailed in the following three sections of this chapter:

- Measured emissions must cover the baseline and assessment periods specified in Section 2.2.
- Measured emissions must include emissions from all activities specified in Section 2.3.
- Measured emissions must be calculated based on activity data meeting the minimum data quality requirements specified in Section 2.4.

To seek certification under the Carbon Trust Standard, applicants must report their measured emissions to the programme operator in the templates provided.

2.2 Baseline and assessment periods

Part 1 of the CEA Protocol defines the concept of baseline and assessment periods for emissions measurement, management, and reduction. The baseline period establishes baseline emissions, and by comparison with the subsequent assessment period the change in emissions, or emissions intensity (or both), over time is determined.

The CEA Protocol requires that the length of baseline and assessment periods must be multiples of 12 months, and are defined for different organisation sizes in Table 1. Small organisations are not required to measure emissions for the baseline period. Instead, small organisations may choose to demonstrate changes in emissions on a project basis as described in Section 3.66.

For applicants seeking certification under the CTS, this section defines the specific length of the baseline and assessment periods for different organisation sizes in different countries. Following their first certification, organisations must use the assessment period from their previous assessment as the baseline period for subsequent assessment.

Table 1. Required minimum baseline and assessment periods

See the Appendix for a definition of organisation sizes

Country	Organisation size	1 st baseline period	1 st assessment period and 2 nd baseline period	All subsequent assessment and baseline periods
United Kingdom	Large	24 months	12 months	24 months
	Medium	12 months	12 months	24 months
	Small	N/A	12 months	24 months
Other countries	Large	12 months	12 months	24 months
	Medium	12 months	12 months	24 months
	Small	N/A	12 months	24 months

2.3 Operational boundaries

Part 1 of the CEA Protocol specifies different activities that result in emissions and which of those must be included at a minimum within the operational boundaries used for measurement of emissions to comply with the Protocol.

This Part of the CEA Protocol defines which specific activities must be included in the emissions assessment for organisations seeking certification under the CTS.

The minimum operational boundaries described in the CEA Protocol describe the activities included in Level 1 boundary. A Level 2 boundary includes all the activities within the Level 1 boundary and emissions from the following additional activities:

- Process and fugitive emissions (scope 1)
- Employee business travel (scope 3)

The minimum operational boundaries applicable to the applicant to the CTS are defined in Table 2. Other additional activities outside this minimum required operational boundary may be included on an optional basis, such as emissions from waste and

water. These emissions shall be known as Level 3 emissions and may be included in the calculation of emissions reduction if the organisation chooses.

The boundaries for assets leased from other parties by lessees are defined in Table 3. The boundaries for assets leased to other parties by lessors are defined in Table 4.

2.4 Data requirements

Part 1 of the CEA Protocol describes the importance of high-quality data for the accurate measurement of emissions. Organisations must meet the minimum data quality requirements as defined in Part 1 of the CEA Protocol.

This Part of the CEA Protocol sets out specifically what activity data is required for organisations seeking certification under the CTS.

For those activities defined in Table 5, organisations must meet the specific minimum data quality requirements defined in that table. Organisations may choose to use data that exceed these minimum data requirements, including the preferred reporting units specified in Table 5.

Table 2. Required minimum operational boundaries

Country	Organisation size	1 st baseline period	1 st assessment period / 2 nd baseline period	2 nd assessment period / 3 rd baseline period	All subsequent assessment / baseline periods
United Kingdom	Large	Level 1	Level 1	Level 2	Level 2
	Medium	Level 1	Level 1	Level 2	Level 2
	Small	Level 1	Level 1	Level 1	Level 2
Other countries	Large	Level 1	Level 1	Level 2	Level 2
	Medium	Level 1	Level 1	Level 2	Level 2
	Small	Level 1	Level 1	Level 1	Level 2

Table 3. Required minimum boundaries for assets leased by lessees

		Type of lease	
		Finance/capital	Operating
Organisational boundary approach	Equity share	Within operational boundary	Optional
	Financial control	Within operational boundary	Optional
	Operational control	Within operational boundary	Within operational boundary

Table 4. Required minimum measurement of assets leased by lessors

		Type of lease	
		Finance/capital	Operating
Organisational boundary approach	Equity share	Optional	Within operational boundary
	Financial control	Optional	Within operational boundary
	Operational control	Optional	Optional

Table 5. Required minimum data quality requirements

Activity	Minimum data quality requirement	Preferred data quality requirement
Fuel Combustion	Quantity of fuel purchased in reporting period (e.g. tonnes, litres, therms, kWh)	Quantity of fuel consumed in reporting period (e.g. tonnes, litres, therms, kWh) from metered data
Purchased electricity, heat and steam	Quantity of energy purchased (e.g. kWh) – where bills are based on regular meter readings	Quantity of energy consumed on site in reporting period from metered data (e.g. kWh)
Owned transport	Distance travelled and breakdown of vehicle types, OR expenditure on fuel (by fuel type)	Quantity of fuel consumed in reporting period (e.g. litres, kg)
Process/fugitive emissions	Emissions inferred from production levels	Quantity of process emission produced and type of gas
Business Travel – Air	Number of domestic, short and long haul flights	Sum of the emissions from each journey based on no of passenger km/miles
Business Travel – Hire Car	Average distance and number of trips OR expenditure on fuel	Total miles travelled in hire car by company staff on business purpose (non-commuting)
Business Travel – Rail, bus, or tram	Average distance and number of trips categorised by mode of transit OR total expenditure on rail, bus, and journeys categorised by mode of transit	Total passenger km or passenger miles travelled by company staff on business purpose (non-commuting), categorised by mode of transit
Business Travel – Taxis	Total spend on taxis	Total km or miles travelled by company staff on business purpose (non-commuting)
Waste	Waste arisings data provided by waste contractors	Waste arisings data provided by waste contractors
Water	Quantity of water purchased (e.g. m3) where bills are based on regular meter readings	Quantity of water consumed (e.g. m3) in reporting period from metered data

3 Emissions reduction

Part 1 of the CEA Protocol describes different ways of assessing how emissions have changed over time and the basic requirements for showing reduction in emissions or emissions intensity. Part 2 of the CEA Protocol provides greater specificity on how organisations assess emissions changes and set the target level of emissions reduction.

3.1 Operational boundaries

At a minimum, applicants must report changes in emissions based on the required operational boundary for the baseline period (see Section 2.3). Where the required boundary for the assessment period differs from the boundary for the baseline period, then changes in emissions over time must be assessed using the same boundary for both the baseline and assessment periods.

3.2 Emissions reduction targets

The emissions reduction target, and emissions intensity reduction target (or both), are expressed as percentage changes in emissions or emissions intensity in the assessment period relative to the baseline period or reference period (see Section 3.3 for a definition of the reference period). The emissions reduction target and emission intensity reduction target must be calculated using the annual factors defined in Table 6, and examples of calculated targets are shown in Table 7.

Organisations seeking certification under the CTS must demonstrate a reduction in either emissions or emissions intensity that is equal to or greater than the relevant target.

Table 6. Required minimum per annum emissions reduction and emissions intensity reduction targets

Country	Emissions reduction target (per annum)	Emissions intensity reduction target (per annum)
United Kingdom	0%	-3%
Other EU	0%	-3%
USA	0%	-3%
Australia	0%	-3%
South Korea	0%	-3%
China	0%	-3%
Other countries and regions	0%	-3%

Table 7. Derivation of emissions reduction targets for different assessment and baseline periods

		Assessment period	
		1 year (12 months)	2 years (24 months)
Per annum emissions reduction target	0.0%		
Baseline period	1 year (12 months)	0.00%	0.00%
	2 years (24 months)	0.00%	0.00%
Per annum emissions intensity reduction target	-3%		
Baseline period	1 year (12 months)	-3.00%	-4.46%
	2 years (24 months)	-4.48%	-5.91%

3.3 Change over time: emissions, or emissions intensity, basis

For the first assessment period, organisations may choose to calculate reduction on the basis of either a change in emissions, or a change in emissions intensity.

For subsequent assessment periods, where the organisation cannot show the required level of reduction over time using the same assessment basis as in the previous assessment period, the organisation may elect to use a different basis for showing the required level of change in emissions or emissions intensity. That is, the organisation may switch between showing changes in emissions and changes in emissions intensity, or between different indicators for measuring emissions intensity.

Where the applicant uses a different basis than was used for the most recent previous certification, an additional requirement applies. In addition to meeting the emissions target or emissions intensity target relative to the baseline period, the organisation must show changes in emissions relative to the reference period on the same basis, where the reference period is defined as the baseline period from the previous certification. Specifically, relative to the reference period, the applicant must show emissions below the absolute emissions target, or emissions intensity below the emissions intensity target, derived using the factors defined in Table 6.

3.4 Banking reductions

Organisations which have reduced their organisational emissions by more than 5% in any assessment period may choose to bank reductions. Banked reductions may be measured on an absolute or intensity basis. Banked emission reductions may contribute to emission reductions measured in the next assessment period, if a reduction cannot be shown otherwise. The use of banked reductions is restricted to the assessment of the same or similar organisational boundary. Banked emissions will expire after one subsequent assessment period. At recertification the calculated reduction will be the net of

banked reductions and any increases in the current compliance period. Reductions calculated on an intensity basis and using banked reductions must comply with the annual reduction requirement.

For example, a company may make a major investment in a low carbon power plant that reduces its organisational footprint by 12% from the baseline. If, at the next assessment, the organisation's emissions had increased by 1%, the net effect would be to allow the organisation to claim a reduction of 11% against the baseline period from the previous assessment.

3.5 Emissions intensity indicators

Organisations must use the default intensity indicator to measure emissions intensity, where the default indicator is inflation-adjusted revenue or, for public sector organisations, inflation-adjusted revenue expenditure (i.e. non capital expenditure).

Organisations seeking certification under the CTS may seek an exemption to the use of the default intensity indicator in one of two ways.

- 1. The applicant may put forward evidence that the default indicator does not provide a fair reflection of the applicant's emissions intensity performance and that an alternate output indicator would be more appropriate. The program operator will review this evidence and may grant an exception to the use of the default indicator in favour of an output indicator.*
- 2. The program operator may require that the applicant use an output indicator in lieu of the default indicator.*

3.6 Small organisation-specific project-based emissions reductions

As described in Section 2.2, small organisations are not required to measure baseline emissions for the first certification. Instead, they may show a reduction in emissions for a specific project. Two

requirements apply to emissions reductions shown in this way:

1. Emissions reductions from the project must be quantified.
2. Emissions reductions from the project must be greater than or equal to 2% of the applicant's reported absolute emissions.

4 Emissions management

Emissions management is a central aspect of continuous improvement in corporate emissions over time. Proper governance, accounting and management systems will help ensure that organisations not only assess their emissions, but have credible plans for reduction over time, and are able to identify risks and opportunities for further emissions reduction.

Organisations must be scored against the set of carbon management assessment criteria applicable to their organisation, as defined in Table 8. Scoring needs to take into account the size of the organisation.

Organisations seeking certification under the CTS must achieve a passing score or higher on the assessment of sound carbon management practice. Minimum passing scores are shown in Table 9. Assessment will be made on the strength of evidence provided and site visits (where applicable).

Table 8. Carbon management assessment criteria

Organisation size	Topic	Question	Weight
All organisation sizes	Governance	Policy: Does the organisation have a low-carbon policy?	10
		Responsibility: Does the organisation have an internal framework of responsibility for carbon and energy management?	5
		Communication: Does the organisation communicate emissions and energy-related performance accurately to relevant stakeholders?	5
	Measurement	Accounting process: Are there procedures for preparing, quality checking and documenting an accurate carbon footprint?	10
		Monitoring: Does the organisation have systematic procedures for actively monitoring and controlling energy and emissions?	10
		Targets: Does the organisation have a carbon reduction target(s)?	10
	Implementation	Operating procedures: What programmes or quality control mechanisms does the organisation have in place to ensure that the operating procedures of all sites, vehicles and equipment minimise their carbon impact?	10
		Investments: What capital investments to reduce the organisation's carbon impact have been made over the last 4 years? What plans are there for future investment?	10
		Staff engagement: Are there awareness programmes for all staff and appropriate training for those with responsibility for carbon/energy-related matters? Is there a process for staff or those working on behalf of the company to make comments or suggestions on the carbon management strategy?	10
	Upstream Impacts	Supply chain engagement: Does the organisation engage its suppliers and partners on carbon and energy-related matters?	5
		Procurement: Does the organisation have a low-carbon/energy procurement policy?	5
	Downstream Impacts	Customer engagement: Does the organisation engage with customers on low-carbon/energy matters? Does it promote awareness about the issue and encourage low-carbon behaviour?	5
		Products and services: What programmes are in place to reduce the lifecycle carbon impacts of the organisation's products and/or services?	5
	Medium and large organisations only		A site visit must take place.

Table 9. Required minimum passing scores for assessment of carbon management practice

Organisation size	Minimum passing score
Large and Medium	(60%)
Small	(60%)

5 Certification

Certification provides confidence that claims of conformity with this Protocol have been verified by a third party. Where organisations are seeking recognition under the Carbon Trust Standard, certification must be carried out by the Carbon Trust Certification (CTSC) or a CTSC approved certifier.

Organisations seeking certification of compliance with Part 2 of the CEA Protocol must also seek certification of compliance with Part 1 of the CEA Protocol.

Where an organisation claims certification from the Carbon Trust Standard, conformance with both Part 1 and Part 2 of the CEA Protocol must be certified by the Carbon Trust Certification (or a certification partner licensed by the Carbon Trust Certification).

6 Appendix: Definitions

The definitions laid out in Part 1 of the CEA Protocol also apply to Part 2 of the Protocol. Additional definitions apply specifically for the interpretation of Part 2 of the CEA Protocol are given below.

6.1 Organisation size

The definition of a small organisation is country/region specific, as shown in Table 9. For countries which are not listed the definition of 'small' organisations may be defined by the programme operator.

Table 9. Organisation size definitions

Applicant Country/ Region	Organisation size	Definition of organisation size
UK only organisation	Large	£500k energy bill or greater
	Medium	£50-£500k energy bill
	Small	Less than £50k energy bill

6.2 Capital and operating leases

The following summary is based on Appendix F to the *GHG Protocol Corporate Accounting and Reporting Standard* June 2006 v1.0

Finance/capital leases and operating leases are defined as follows:

1. *Finance/capital lease*: This type of lease enables the lessee to operate an asset and also gives the lessee all the risks and rewards of owning the asset. Assets leased under a capital or finance lease are considered wholly owned assets in financial accounting; or
2. *Operating lease*: This type of lease enables the lessee to operate an asset but does not give the lessee any of the risks or rewards of owning the asset. Any lease that is not a finance or capital lease is an operating lease.