Climate Change Agreements Operations Manual

February 2022

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We are the Environment Agency. We protect and improve the environment.

Acting to reduce the impacts of a changing climate on people and wildlife is at the heart of everything we do.

We reduce the risks to people, properties and businesses from flooding and coastal erosion. We protect and improve the quality of water, making sure there is enough for people, businesses, agriculture and the environment. Our work helps to ensure people can enjoy the water environment through angling and navigation.

We look after land quality, promote sustainable land management and help protect and enhance wildlife habitats. And we work closely with businesses to help them comply with environmental regulations.

We can't do this alone. We work with government, local councils, businesses, civil society groups and communities to make our environment a better place for people and wildlife.

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1. Introduction

The Climate Change Agreements (CCA) scheme is a voluntary scheme administered by the Environment Agency on behalf of the Department for Business Energy and Industrial Strategy (BEIS) for the whole of the UK. It enables holders of climate change agreements to claim a discount on the Climate Change Levy (CCL) – a tax on energy use in industry, commerce and the public sector. In exchange, participants are required to meet energy efficiency improvement targets agreed between government and sector associations.

The current scheme started on 1 April 2013 and was scheduled to run until 31 March 2023 in 4 Target Periods. The scheme was extended for 2 years until March 2025 in a fifth Target Period which added new targets and enabled new entrants to apply to enter the scheme. The Operations Manual provides technical advice on how to apply for and maintain your Climate Change Agreement and covers the updated requirements of the extension. It also provides technical advice on the scheme rules and our administration of the scheme.

Some of the scheme rules are mandatory whereas others are optional, depending on your circumstances. You should be aware that once you have signed up to an agreement it may not be possible to change these optional rules, and this may affect the demonstration of performance against your targets. You should seek your own separate advice on whether to apply for an agreement and the type of agreement that is most appropriate for your individual circumstances.

An existing or new operator may take over facilities already included in an agreement. Please keep this in mind when reading this manual, especially sections 2, 4 and 7.

1.1. Using the manual

This manual is intended to be read on-screen as it contains hyperlinks to other sections or to external documents and websites. If you have followed an internal link and wish to return to your previous location, hold down the ALT key and then press the left arrow on your keyboard.

Links to external documents and websites were checked as of January 2022.

This manual will be updated periodically. Please check the Climate Change Agreements Operations Manual webpage to ensure you are using the most recent version.

2. Getting started – important information for all operators

This section outlines the application process for a CCA and what can be done using the CCA register. It explains the role of the operator within the CCA scheme, including the tasks of key personnel, and which processes and products are eligible for a CCA.

2.1. Overview of the application process

The process to be followed by a new operator to obtain an underlying agreement is outlined below and set out in sections 2 to 5:

- Section 2 describes the CCA scheme and outline requirements on getting started. If your site is eligible then move to the next step.
- Section 3 will help you determine eligible energy, how to apportion it and how to calculate your baseline (that is, your performance in the base year).
- Section 4 describes how to set up your target unit.
- Section 5 explains the CCA charges

Once your application is complete your sector association should submit it to the register. The Environment Agency will review the application. If approved, you will receive an email asking you to sign the underlying agreement. Signing is done by giving email 'assent'. After we have processed your email assent, we will add your facilities to the reduced rate certificate, and you will be eligible to claim the CCL relief for these facilities You will then need to work to meet targets and report emissions at the end of target periods.

2.2. CCA register

All underlying agreements for the scheme are managed online via the CCA register. This includes any changes that are needed to the agreement, reporting against targets, banking of surplus and payment of buy-out if the target is not achieved.

Your sector association has access to the register to manage the accounts for each of its target unit operators. Consultants working on behalf of your sector association can also have access to manage target unit information. Access to the register is a dedicated CCA webpage.

Operators aren't able to edit their information in the register – this is done by the sector association or its nominated consultant. However, operators can request read access to view their target unit information. Read access may be granted for up to two users per target unit, one of which must be named on the target unit account. It is possible for an operator to have one contact listed from the target unit and a nominated consultant.

Read-only users can view the following information relating to their target unit:

- the underlying agreement
- any change (known as a variation) made to the information held about the target unit
- the facilities included in the target unit covered by the agreement
- the targets for each target period

A read-only user is not able to make any changes to this information. A user should contact their sector association to make changes to any data held within the register.

Appendix B explains, with the aid of screenshots, what operators need to do to:

- log on to the register as a read-only user
- set up and manage a read-only account
- navigate around the register

A separate register user guide for sector associations and their nominated consultants is available to download from our CCA webpages: Climate Change Agreements: IT user guide.

2.3. Key roles

2.3.1. The operator

Paragraph 65 of the Technical Annex defines who can be an operator.

For more information about the definition of an operator, see our environmental management guidance on environmental permits: Legal operator and competence requirements: environmental permits - GOV.UK.

The operator must be clearly identified as a legal entity. This includes but is not restricted to individuals, partnerships and limited companies. Companies are registered with Companies House and are identified by their registered company number. Only the company which satisfies the definition of operator can be the operator: a parent or other group company will have a different number, is a separate legal entity, and cannot be or act on behalf of the operator in relation to the CCA. This is important as it can affect other issues, including the inclusion and exclusion of facilities (see section 4.5.3), as well as when ownership of the target unit and/or facility changes.

The operator should appoint for each target unit:

- a responsible person to act on their behalf
- an administrative contact – the day-to-day contact for the target unit

The responsible person and administrative contact can be the same person, but this may impact our ability to communicate with you if the sole contact leaves.

Multi-operator facilities

A multi-operator facility (MOF) is a facility where different parts of the installation or installations are operated by different legal persons. An agreement may cover a MOF site, but only one operator can hold the agreement. The operators in the MOF should decide which operator should hold the agreement. The MOF is eligible to be included in a multi-facility target unit if it meets the requirements outlined in section 4.5.3. The nominated operator is responsible for compliance with the agreement at that facility.

2.3.2. The responsible person

As specified in the agreement, the responsible person is someone authorised by the operator to:

- enter into an underlying agreement
- agree any changes to an agreement
- accept any penalty or other notices we serve on the operator

Although the responsible person is the individual on whom we would serve notice, they have no personal liability. Compliance with the terms of the underlying agreement remains the responsibility of the operator. Any act or omission by the responsible person will be held to be an act or omission of the operator.

We would normally expect the responsible person to be an employee of the operator and to have the necessary authority from the operator to enter and make amendments to the agreement. We would not normally expect a consultant to be sufficiently authorised to act on behalf of the operator.

Under Rule 3.1.8 of the agreement, the responsible person must provide us with both a UK postal address and an operational email address that we can use to serve notices on them.

The operator must notify any change to the contact details for the responsible person within 20 working days. In practice, the operator should notify the sector association, who will then update the CCA register.

We do not issue a new agreement when the responsible person changes. This is because the agreement is between the Environment Agency and the operator, not the responsible person, and so the agreement assented to by the previous responsible person is still valid. If they wish, the responsible person can request a new agreement if their details have been updated. To do this they would need to contact the CCA helpdesk.

2.3.3. The administrative contact

The 'administrative contact' is the person who is the day-to-day contact for the target unit and who looks after the day-to-day management of the underlying agreement. The administrative contact will often deal with the sector association on behalf of the operator and with the responsible person for general management of the CCA.

The administrative contact does not hold any authority (within the agreement) for complying with the rules or underlying agreement, but often supports the responsible person (who would sign off any changes to the underlying agreement).

Details for the administrative contact can be updated at any time and will not trigger a new agreement to be issued or signed. It is important that these details are kept up to date so please notify your sector association when the contact changes so that they can update the details held on the register.

2.4. Which processes and products are eligible for a climate change agreement?

2.4.1. What makes a site eligible for a CCA?

To hold a CCA an operator must carry out one or more eligible processes. Appendix A summarises the definitions of the eligible processes that are outlined in primary legislation, Schedule 6 to the Finance Act 2000 (as amended). This specifies eligibility through two pieces of legislation:

- **The Environmental Permitting (England and Wales) Regulations 2010 (EPR) (as amended).** A site will be eligible if it carries out a Part A (1) or A (2) activity listed in Part 2 of Schedule 1. (Note that eligibility for facilities in Scotland or Northern Ireland is also determined by reference to the activities listed in the EPR for England and Wales.) For the purposes of the CCA scheme, thresholds in the EPR Schedule 1 activity descriptions should be ignored, with the sole exception of the 50 MW limit for combustion plant.
- **The Climate Change Agreements (Eligible Facilities) Regulations 2012 (as amended)**. A facility will be eligible if it carries out an energy-intensive process or activity detailed in the Schedule. The umbrella agreement for each sector lists all the processes and activities carried out within the sector that are eligible for a CCA. You should work with your sector association to determine if you carry out an eligible process.

A list of what an operator will need to provide to prove eligibility when entering the scheme is outlined in section 6.

2.4.2. Changes to eligibility and tax exemptions

2.4.2.1. New sectors

From time to time government may extend eligibility to new sectors or amend it for existing sectors. We will update Appendix A as necessary. The guidance given in this manual applies equally to new and existing sectors.

2.4.2.1 CCL exemption for energy used in metallurgical and mineralogical processes

The Chancellor announced in the Budget in March 2013 that energy used in metallurgical and mineralogical products and their eligible processes would be 100% exempt from CCL from 1 April 2014. The exemption applies to energy used in products and processes covered by the following NACE codes (NACE Rev 2):

- NACE code 23
- NACE code 24
- NACE code 25.5
- NACE code 25.6

For further information, please refer to the HMRC guidance Exemptions from climate change levy for mineralogical and metallurgical processes guidance. Operators of a facility covered by a CCA which includes exempted metallurgical and mineralogical processes can continue to hold their CCA where to do so is consistent with scheme rules. Where an operator chooses to retain their CCA, they can claim 100% relief under the metallurgical and mineralogical exemption and CCA rates of relief for other eligible processes.

Alternatively, operators have the option to voluntarily terminate (see section 8.3.1) their CCA agreement in line with the scheme rules (through contacting the Environment Agency). The termination of the agreement means all facilities within the target unit will no longer be able to claim their CCL discount through the CCA scheme. Operators terminating their agreement for facilities that are regulated under the Environmental Permitting Regulations (EPR) in England and Wales (and the equivalent legislation for the devolved regulators), should refer to the Industrial Emissions Directive Part A1 guidance following termination of their CCA, to ensure they comply with the energy efficiency requirements set out in the EPR.

3. Eligible energy in the CCA scheme

This section outlines the ways for accounting for energy in CCAs. These will help you determine the amount of energy consumed on a site that may be included in an eligible facility. This also forms the basis for determining the energy consumed within the target facility. The eligible facility is the installation or part of a site which is eligible to be covered by a CCA. The target facility is the eligible facility less any part(s) consuming energy covered by the Emissions Trading Scheme, (ETS). The target facility is the part to which CCA targets apply and whose energy use must be reported under CCA.

This section covers:

- how to account for energy use and calculate primary energy consumption
- how to define the eligible facility and target facility on a site
- how to calculate the performance of the target facility in the base year

Note: The Finance Act 2000 (as amended) defines a 'facility that is eligible' [to hold a CCA]. In this manual, when we use 'eligible facility', we mean a 'facility that is eligible' as outlined in the Finance Act 2000 (as amended).

For illustrative purposes, extracts are taken from the Technical Annex. These extracts describe energy accounting as it applies to the determination of the target facility. For the avoidance of doubt, the same accounting protocols apply to the determination of the eligible facility.

3.1. How to account for energy use

The first stage in setting up a CCA is to understand how much of the energy consumed on a site is eligible to be included in the CCA. To do this, the operator must first understand the types of energy and fuels that are accounted for in the CCA scheme.

3.1.1. Fossil fuels

The operator should account for the combustion of fossil fuels on a site. Paragraph 12 in the Technical Annex states:

“The units of fossil fuels used must be calculated on a gross calorific value basis. No correction must be applied to account for the energy consumed in the extraction, processing, and supply of the fossil fuels to a target facility.”

If available, operators should use the gross calorific value (GCV) provided by their energy supplier when working out their energy consumption. Where this information is unavailable, operators should use the GCV given for the particular fossil fuel in Annex 11 of the '2012 Guidelines to Defra’s/DECC’s GHG conversion factors for company reporting'.

These factors can be found at 2012 greenhouse gas conversion factors for company reporting. These 2012 GCV conversion factors should be used for all reporting during the five target periods.

Where the GCV is not available from the supplier and the fuel being consumed is not listed in the company reporting guidelines the operator should email their sector association in the first instance or alternatively the Environment Agency's CCA helpdesk.

3.1.2. General electricity imports

The operator should account for any electricity imported to a site from an external source (third party or a dedicated electricity generator) and consumed on the site.

If this electricity is imported from a licensed supplier, it is treated as 'grid electricity' and the metered consumption is multiplied by 2.6 for accounting and reporting purposes Technical Annex (paragraph 13).

If the electricity imported to the site is generated by a standalone generator (non-CHP) and supplied to the site via a private wire, the total fuel input to the generator and the total electricity output from the generator is used to calculate the efficiency of electricity generation for that generator. The energy recorded by the site is then the metered electricity consumed divided by the efficiency of the generator. This energy would be reported as the fuel(s) to the generator

Electricity imported to the site that is generated in a combined heat and power (CHP) plant is accounted for differently (see section 3.1.6).

All electricity consumed in electrolysis processes is included in the scheme (Technical Annex paragraph 43).

3.1.3. Green electricity tariffs

Most suppliers now offer 'green' electricity tariffs. These tariffs are not CCL exempt and are treated in the same way as any other electricity imports as outlined in section 3.1.2

3.1.4. Renewable electricity

Any electricity from renewable energy sources (such as wind, solar, hydro or through the combustion of a renewable fuel) that is generated on site or supplied directly from an off-site source, and then consumed within the eligible facility, should be counted in the same way as electricity from the grid.

This means that the energy counted is the delivered electricity consumed multiplied by 2.6 (see section 3.1.2).

The CCA scheme is not designed to provide additional incentives for renewables beyond Feed-in Tariffs (FITs), Renewable Obligation Certificates (ROCs) or the Renewable Heat Incentive (RHI). The aim of the CCA scheme is to encourage energy efficiency.

3.1.5. Renewable or waste fuels

Paragraphs 28 to 30 in the Technical Annex describe in which circumstances the energy content of renewable and waste fuels, including fuel which is not 100% renewable, must be determined and reported.

Renewable heat generation, although carbon efficient, can be less energy efficient compared to non-renewable fuels. Therefore, operators of target units with energy targets should consider how renewable heat generation will impact on the ability to meet their improvement targets.

The list of qualifying renewable fuels as set out in the Technical Annex is provided below:

Type	**Fuels**
Biomass (plants or parts of plants)	• Straw • Hay and grass • Crops (for example, maize)
Biomass wastes	• Waste wood • Forestry residues • Landfill gas • Sewage sludge • Biogas produced by digestion, fermentation or gasification of biomass • Animal and fish oils, fats and tallow
Biomass fraction of mixed materials	• Biomass fraction of textile wastes • Biomass fraction of composites containing wood • Biomass fraction of municipal and industrial wastes
Fuels whose components and intermediate products have all been produced from biomass	• Bioethanol • Biodiesel • Biomethanol • Biogas • Syngas via gasification or pyrolysis • Liquid fuels via pyrolysis

Appendix D.1 explains how to account for CHP in the CCA scheme, including scenarios where the fuel input is renewable, non-renewable or a mixture of these.

If available, operators should use the GCV provided by their renewable or waste fuel supplier when working out their energy consumption. Where this information is unavailable, operators should use the GCV for 2012 given for the particular fossil fuel in Annex 11 of 'Guidelines to Defra's/DECC's GHG conversion factors for company reporting' (see section 3.1.1).

3.1.6. Combined heat and power

Combined heat and power (CHP) is an integrated process whereby heat generated during the generation of electricity is recovered and put to a useful purpose. The way in which the consumption of heat and power generated in a CHP plant is accounted for in CCA depends on whether there are renewable fuel inputs to the CHP. There are three different scenarios that can arise regarding the make-up of the fuel inputs:

- all fuel input is non-renewable
- all fuel input is renewable
- fuel input is a mixture of renewable and non-renewable

The procedure for accounting for CHP in the CCA scheme is set out for these three categories in Appendix D.

Special reporting methodology for CHP

There is a special reporting methodology (SRM) for CHP where the following criteria are met.

- all the facility's direct fuel consumption is covered by the UK Emissions Trading Scheme (UK ETS)
- the facility consumes electricity generated in a CHP plant and this CHP plant is covered by UK ETS
- the facility can import electricity from the grid

Where an eligible facility meets all three criteria, the SRM may be used to determine the performance of the facility in the base year and at subsequent target periods. This will ensure that changes in apparent performance at sites meeting the criteria more closely reflect changes in their actual performance. Once a facility opts to use the SRM, it must do so for as long as it meets all three criteria.

Provided their performance can be re-baselined for operation of the CHP SRM, operators of facilities meeting the above criteria may only apply it starting from the current target period. It cannot be applied retrospectively to a target period that has concluded.

The CHP SRM allows for more predictable performance for the operator and a better alignment of reported performance with efficiency of electricity consumption.

The details and calculations for how to apply the CHP SRM are outlined in Appendix D.

SRM may not be appropriate in all circumstances. If you decide to use SRM please make sure that you make the decision in full consultation with your Sector Association.

3.1.7. Steam

As energy is accounted for on a primary energy basis in the CCA scheme, it is the fuel used to generate the steam consumed in the eligible facility that is accounted for, rather than the energy content (enthalpy) of the steam itself.

In the case of steam imports and exports, not originating from CHP, paragraphs 26 to 27 in the Technical Annex state that:

“Imported or exported steam must be accounted for by taking the enthalpy of the steam and dividing by the efficiency of the system that generates the steam and distributes it to the user's target facility boundary; in order to account for the total primary energy consumed (that is. fuel combusted) to produce the steam that is consumed.

Account must be taken of steam pressure – for example, where sites import high pressure steam and return it at a lower pressure.”

3.1.8. Accounting for oxygen imports

Where oxygen is imported by a site for consumption in the eligible facility, an energy equivalent will be attached to this oxygen if the eligible facility also contains plant used to generate oxygen. Operators should contact us via the CCA helpdesk to agree an appropriate value of this energy equivalent.

Oxygen imported by sites for consumption in the eligible facility, where the eligible facility does not include plant for the production of oxygen, will be zero rated for energy.

3.1.9. Accounting for liquid nitrogen or solid carbon dioxide used for cooling

Where liquid nitrogen or solid carbon dioxide (CO_2) is imported to perform a cooling function in an eligible facility, an energy equivalent will be attached to the imported liquid nitrogen or solid carbon dioxide. Operators should contact us via the CCA helpdesk to agree an appropriate value of this energy equivalent.

Liquid nitrogen or solid carbon dioxide imported to a site which is not used to perform a cooling function will be zero rated for energy.

3.1.10. Accounting for transport fuel

Transport fuel can be included within an eligible facility in the following cases. In each instance, it is optional to include it.

- Where a vehicle performs an activity that is directly associated with the stationary technical unit, the operator may choose to include this fuel in the energy consumption of the installation and, therefore, the eligible facility. An example would be forklift trucks consuming electricity.
- Fuel consumed by vehicles not performing a directly associated activity may be included in the eligible facility's energy consumption under the 3/7th provision of the 70% rule as long as this energy is measured.

When choosing whether to include fuel used by vehicles in the eligible facility, operators should consider the following.

- Once the choice has been made to include fuel consumed by vehicles in the base year data, this fuel must be reported at future target periods, and vice versa.
- Only fuel consumed by vehicles operating on site can be included.

Operators must therefore be able to distinguish between fuel consumed by vehicles when they operate on site from that consumed if they operate off site.

If the operator feels unable to meet any of these requirements, fuels consumed by vehicles should be left out of the eligible facility's energy consumption.

3.2. What energy can't be counted in CCAs

3.2.1. Fuel used as a chemical feedstock

Fuels are sometimes not combusted nor used for their reducing properties but are simply incorporated into an intermediary or final product. In such situations, the fuel is said to be used as a chemical feedstock.

Where a fuel is used as a chemical feedstock and becomes part of a chemical product, this fuel must not be counted as part of the energy use of an eligible facility. Where this fuel is used as a reductant (that is, as a reducing agent that chemically reduces other substances within a process), it must be counted within the eligible facility's energy consumption (Technical Annex paragraph 42).

3.2.2. Heat recovered from exothermic reactions

An exothermic reaction is a chemical reaction that involves the release of heat.

Where an exothermic reaction involves the combustion of a fuel, that fuel must be counted in the eligible facility's energy consumption.

Where heat is recovered from exothermic reactions not involving the combustion of fuel, that heat energy is not counted in the eligible facility's energy consumption (Technical Annex paragraph 44).

3.2.3. Electricity generated from recovered heat

Where waste heat is recovered and is used to generate electricity, consumption of that electricity is not counted in the eligible facility's energy consumption (Technical Annex, paragraph 45).

3.3. Defining and calculating the energy consumption of the eligible facility and target facility on a site

Before working through this section, please make sure you have read and understood section 3.1 and section 3.2. This is so you can correctly account for a site's energy consumption and thus correctly define and calculate the energy consumption of the eligible facility and the target facility.

Defining and calculating energy for a site's CCA involves five steps:

1. Define the site boundary (3.3.1)
2. Calculate energy consumed by different categories of activity (3.3.2)
3. Apply the 70% rule (3.3.3)
4. Define the target and eligible facility (3.3.4) – including crossovers with the UK ETS
5. Calculate base year performance (3.3.5)

3.3.1. Step 1: Define the site

Annex B of the Technical Annex defines a site as:

> "A site is an area of land falling within a continuous boundary which encloses the land used in connection with the operation of the installation. For this purpose, however, an area of land can still be regarded as a single site even if it is dissected by a road, railway line or river. Other non- contiguous parcels of land would not, however, constitute a single site."

3.3.2. Step 2: Calculate energy consumed by different categories of activity

Activities on the site should be divided into three categories in terms of their energy consumption. Energy should be calculated and divided based on the site's primary energy consumption (see section 3.1). The three categories are:

- **Stationary technical unit (STU)** – the unit in which the eligible process listed in Appendix A is carried out, that is, the activity or activities which render the facility eligible
- **Directly associated activities (DAAs)** – an activity on the same site which has a technical connection with the activities listed in Appendix A and which could have an effect on emissions and pollution
- **Other activities** – energy consumed within the site boundary that is not related to either the STU or any DAA

The STU and DAAs combined form the installation. It must include all eligible stationary plant.

Activities that are directly associated with the eligible process (STU), and on the same site as the STU, must be included in the installation and the energy consumed in such plant must, therefore, be reported.

Where the directly associated activity is performed by non-stationary plant, such as on-site fork-lift trucks and other vehicles, the operator may opt to include or exclude it from the installation and, therefore, the eligible facility (See Section 3.1.10). We apply this principle to all new entrants and variations.

A full definition of an installation in the CCA scheme is given in Appendix E.

An installation's boundary is a continuous line encompassing all STUs and DAAs. This continuous boundary must encompass all physically connected areas of land that are under the same ownership or occupancy (in terms of legal entity) as the area where the eligible process is carried out. Any connected areas must be areas of land separated only by a road, railway line or river (or similar physical feature). Areas used as domestic dwelling that are separately metered must be excluded from a site boundary. The site boundary cannot be contracted during the agreement to enable eligible processes or DAAs, which still operate and were originally included in the eligible facility, to be excluded from the eligible facility.

Technically connected DAAs that are not on the same site (as defined in section 3.3.1) should be excluded from the installation. Any existing facilities found to have offsite DAAs will be required to revise their base year data and eligibility calculations such that the offsite DAA is excluded. DAAs not within the site, as defined above, which consume

primary energy and generate secondary energy (electricity and heat) which is subsequently consumed by energy consuming plant within the site boundary, can be included within the installation boundary.

Where a site includes a building that has multiple floors with different operators, the installation's parts may be physically separated by spaces operated by other operators, while still being on the same site. This means that the facility can be defined in terms of a series of vertically separate, 2-dimensional boundaries which, collectively, encompass all areas that use energy for the eligible process and DAAs.

See section 3.1 for what energy can be counted within the CCA scheme and section 3.2 for what energy should not be counted within the scheme. All types of energy listed in section 3.1 must be included when determining the energy consumed in each category, including fuel consumed in an ETS Annex 1 activity.

The Climate Change Agreements (Eligible Facilities) Regulations 2012 (as amended) (referred to as the Eligible Facilities Regulations from here on) require that reckonable energy from the following sources consumed in the CCA installation during the previous 12 months must be used to determine the intended supply or use in the following 12-month period:

- energy obtained from the burning or using of relevant commodities in the installation or parts of installations on the site
- electrical energy supplied to the installation, installations or parts of the installations on the site
- energy in cooling supplies
- energy in supplies of steam

Continuous monitoring of data on the amounts of these energy sources is therefore necessary to demonstrate eligibility.

By the end of step 2, the energy consumed on a site should be divided between the STU, DAAs and other site energy. It is important to document the division as this information will be required as part of the application process on the CCA register.

When pulling together the site energy consumption which may be covered by a CCA, you should also include any fuel consumed within plant carrying out an Annex 1 activity (as defined in the Technical Annex (as amended from time to time). The CCL discount can be claimed in respect of this fuel but will be disregarded when establishing the energy consumption of the target facility. This is explained further in section 3.3.5. Although it is not necessary at this stage to remove any fuels covered by the Emissions Trading Scheme, we recommend this energy is identified distinctly to make step 4 easier.

Important point when estimating site energy

When estimating the proportion of the site's energy consumed within the installation for an application for a CCA, we accept use of an actual floor area when estimating proportions of energy used in eligible and non-eligible areas for equipment such as space heating and air conditioning. This must be clearly set out in the application. However, we don't accept use of estimates when sites come to determine the actual energy consumed for reporting purposes. Actual energy consumption for reporting purposes must be measured by direct metering or in some circumstances indirect measurements are acceptable. For further information, contact the CCA Helpdesk.

Where a site has more than one eligible process belonging to more than one sector

If activities on a site span more than one sector, the operator should adopt **one** of the following options:

- apportion the site's energy against each process and apply for an agreement to each relevant sector association. This option requires adequate metering to be in place to ensure no energy is double counted.
- hold one agreement for the largest eligible process and treat the other process as 'other' site energy. This will necessitate the installation of sub-metering where appropriate (see section 3.3.3 for more about sub-metering requirements). Note, under this option only the throughput associated with the largest eligible process should be counted.

3.3.3. Step 3: Apply the 70% rule

The aim of this step is to find out how much of the energy consumed on the site can be included in the eligible facility. Where applicable, the energy consumed in the eligible facility is eligible for the CCL discount. However, some fuels consumed on a site will not be liable for the CCL or any discount. Operators should check with HMRC if there is any doubt over this.

What is the 70% rule?

The 70% rule is derived from the Eligible Facilities Regulations. The basic principles of the rule are as follows:

- if the installation consumes 70% or more of the site's total primary energy (reckonable energy), an operator can claim that all the site's energy consumption falls within the eligible facility. This would include fuel consumed in plant carrying out Annex 1 activities if present on a site.

- if the installation consumes less than 70% of the site's total reckonable energy, an operator can claim the installation's energy consumption, plus energy consumed by other activities on site up to a value equal to an additional 3/7ths of the installation's energy consumption, as falling within the eligible facility. However, both the installation and any additional energy claimed under the 3/7ths provision must be separately sub-metered. The addition of the 3/7ths can occur at any point during the CCA except for the last two months of a target period.

Operators should monitor their facilities annually to ensure they continue to comply with the 70% rule. We may check compliance with this rule when we carry out an audit (see section 9).

When to use sub-metering

Before applying to join the CCA scheme, an operator should estimate the energy consumed by the installation over the previous 12 months using any existing sub-meters, spot metering or calculation based on equipment rating and the hours used. The methodology for any estimation must be site-specific and set out clearly when the facility eligibility application in the CCA register is completed. This estimate should be checked regularly by the operator to ensure that the energy consumed in the installation remains correct.

If the proportion of energy consumed by the installation over the previous 12-month period was greater than or equal to 70% of the total energy consumed by the site, the only meters needed are fixed site meters.

If the installation consumed was less than 70% of the total energy consumed by the site, the energy consumed by the installation and any additional 3/7ths must be sub-metered separately. If it falls below 70%, 12 months of sub-metered data will need to be supplied before applying for a CCA unless it can be demonstrated that the site is a greenfield facility (see section 4.3).

If eligibility against the 70% rule changes during a target period, it will be necessary to amend the target unit's underlying agreement (see section 7.5.1).

3.3.4. Step 4: Calculate the energy consumption relevant for CCA target setting and performance reporting (defining the target facility)

This step is only relevant if there is an ETS installation associated with the eligible facility.

An ETS installation is associated with the eligible facility if one of the following applies:

- the eligible facility includes plant carrying out an Annex 1 activity
- the eligible facility imports and consumes heat or power from an Annex 1 activity

If either applies the fuel consumed within the plant carrying out the Annex 1 activity must be subtracted from the eligible facility's energy consumption. This will give the energy consumed within the target facility. Energy consumed within the target facility in the base year will constitute the base year performance against which targets will be set. The eligible facility remains the entity whose energy consumption is entitled to receive the CCL discount and will include energy consumed within an ETS installation.

Target facility energy consumption = Eligible facility energy consumption – Any fuel consumed within the eligible facility that is consumed within plant carrying out an Annex 1 activity

This calculation is made easier if the fuel consumption in plant carrying out Annex 1 activities is identified in step 1.

ETS information on the CCA register

It is important that information about the ETS installation included in the eligible facility is captured in the CCA register so we know that the energy consumption of the target facility and the eligible facility will differ. These data are also necessary to calculate the penalty for the eligible facility stated in the target unit's underlying agreement.

This information should be included in any new application. If the information is missing from the register, a variation (section 7) can be raised to add this to the agreement.

3.3.5 Step 5: Calculate base year performance

What is the base year?

The base year is a continuous 12-month period where the operator measures its initial performance. The data collected during the base year establish the baseline. The baseline energy consumption for the target facility must not include any fuel consumed in plant carrying out Annex 1 activities.

- For target periods 1 to 4, we would normally expect the base year to be the 12-month period from **January to December 2008**
- for target period **5**, we would normally expect the base year to be the 12-month period from **January to December 2018**

If an operator doesn’t have data during either of the above default base year periods, it must use the next available 12-month period closest to the default base year. Operators must explain why they aren’t able to use the default base year periods. Changes to energy use and/or products since the base year are not valid reasons for using a later base year.

If a structural change occurs, the base year data should be reconstructed where possible (see section 7.5.1).

A greenfield facility is a special case. The operator of a greenfield facility can apply to join the CCA scheme within 12 months of starting to carry out an eligible activity. We will issue an agreement once the operator is able to start collecting the data necessary to establish a representative baseline performance. The operator must ensure the baseline data is complete and supply us with this no later than 12 months after the start date of its agreement. More information on how to deal with greenfield facilities is given in section 4.3.

The base year cannot be changed after an operator has entered into an agreement, subject to the rules on variations (Rule 11.1).

How to calculate the target facility performance in the base year

To determine their baseline performance, operators need to:

- understand how to account for energy in the CCA scheme (section 3.1)
- collect all the information on the site's energy consumption
- work out how much of the site's energy consumption is consumed within the eligible facility (section 3.2)
- remove from the eligible facility's energy consumption any fuel consumed within plant carrying out an Annex 1 activity

Accuracy is essential

Data from energy supply meters and throughput measurements must be sufficiently accurate to enable the baseline performance to be expressed to at least five significant figures. If this is not possible, please contact the CCA helpdesk for advice.

Where an operator receives bulk deliveries of fuel and direct metering of the fuel used is not available, we may consider alternative methods of calculating energy consumption. For example, it may be possible to use tank level gauge readings, or a combination of a manufacturer's equipment energy rating and measured run hours. The alternative measures need to provide the accuracy required and must be used consistently.

Section 4 explains the additional data accuracy requirements for target facilities with relative or Novem targets.

3.4. How to manage energy recording and reporting when a meter fails

In general, where there are gaps in data due to the failure of a meter, it is acceptable to apply an estimation technique. Appendix F includes several estimation techniques that an operator could use if a meter fails. These estimation techniques are consistent with the principles used in previous schemes. Note: no uplift is applied to any estimated consumption figures.

It is not acceptable for an operator to use an estimation technique where an energy supplier fails to provide invoices in time for reporting. It is good energy management practice for operators to take their own meter readings regularly to reduce the reliance on supplier invoices.

4. Setting up a target unit

We cannot include additional facilities in an umbrella agreement after 30 June 2022. However, an existing or new operator, may transfer facilities included in an existing agreement following a change of ownership. Please keep this in mind when reading this section, especially parts 4.3 and 4.4.

4.1. Target and certification periods

The scheme has five target periods. Each target period is 24 months long; beginning on 1 January in the first year and ending on 31 December in the second year.

We set targets for each of the target periods using the relevant base year performance and the sector commitments.

The scheme comprises six certification periods, which start from 1 April 2013 and end on 31 March 2025. The individual certification periods are defined in the agreement and follow on from each other continuously.

After activation of an operator's agreement, we will add the facilities in that agreement to the reduced rate certificate. The operator can claim CCL discount for the energy supplied to facilities whilst these are included in the reduced rate certificate.

If an operator meets its target at the end of a target period or uses the buy-out mechanism, we will recertify the facilities for the next certification period. Note: the sixth certification period starts after the fifth target period has ended. We will recertify the facilities for all operators who meet their targets for the fifth target period (or pay a buy-out fee) from 01 July 2023 until 31 March 2025.

New facilities in target period 5

We certified the new facilities added to agreements between 1 January 2021 and 31 March 2021 (during the fourth certification period) from the date when the agreement was activated, until the end of the fifth certification period (30 June 2023). The operators of these facilities were not required to show that they had made progress towards meeting their target during the fourth certification period.

4.2. Sector commitments and target unit targets

There are two types of target within the CCA scheme:

- a target for the sector, known as the 'sector commitment'
- a target for the individual agreements, known as the 'target unit target'

4.2.1. Sector commitment

The sector commitments for target periods 1 to 4 were agreed between DECC and the sector associations in 2012and form the overall energy or carbon efficiency percentage improvements required until the end of 2020. New sector commitments for target period 5 were agreed between BEIS and the sector associations in 2020.

The sector commitments for each target period are included in schedule 5 of each sector association's umbrella agreements. Umbrella agreements for each sector are available to view/download from the CCA webpages: Climate change agreements: umbrella agreements.

4.2.2. Target unit targets

For operators with existing agreements, targets for TP1-TP4 were agreed during the 2012/13 target setting period. For operators with existing agreements, targets for TP5 were agreed during the 2020/21 target setting period.

We set targets for new entrants using the standard target setting method outlined in section 4.4.

Types of targets

Targets can be expressed in terms of energy (kWh, MWh, GJ or PJ) or carbon (kgC) and as either absolute or relative. Four types of target are therefore possible in the CCA scheme.

- relative energy (for example, kWh/m^2)
- absolute energy (for example, MWh)
- relative carbon (for example, kgC/tonne)
- absolute carbon (for example, tonnes C)

These are described below, with examples of how they apply for an eligible process.

An **absolute target** is a target to reduce the total energy consumed within the target facility for each target period. For example, for an absolute energy target, a target facility used 1,000 MWh of electricity in its base year. Its target is a 5% reduction over the next target period (covering two years). Therefore, the target facility's target is 1000 x 2 x 95% = 1,900 MWh of electricity consumption for that target period.

A **relative target** is a target to reduce the energy used to produce each unit of throughput in the target facility. A relative target can be calculated for both carbon and energy in two ways.

- **Standard relative target** – where there is only one product at a facility or group of facilities that makes up a target unit. For example, a product is created which

used an average 50 kWh of fuel per m^2 of throughput in its base year. Its target is a 5% reduction over the next target period. Therefore, the target is an average 47.5 kWh per m^2 for the two year target period.

- **Ratio relative (Novem) target** – calculated using the Novem method. This is used when a target unit produces two or more products which have very different energy intensities of production or whose throughput is measured in very different units (for example, m^2 and litres). The target is stated as a ratio of the target energy consumption to the reference energy. This is the energy that would have been consumed in the base year for the same level of throughput and product mix as the target period. The Novem method corrects for any distortions created by a changing mix of throughput by generating one common output. See section 4.4.3 for how to calculate a Novem target.

Expressing the target

For energy targets, kWh is the most commonly used unit because it is the unit most frequently used in metering the main types of energy (electricity and gas).

Target unit targets must be the same type (carbon or energy) as the sector commitment (or sub- sector commitment where a sector has sub-sectors). They can differ from the sector commitment in so far as targets for target units in the same sector can be either relative or absolute. For example, where a sector commitment is in relative energy terms, a new entrant can choose either a relative energy or an absolute energy target but can't choose a carbon target.

Targets are expressed as percentage improvement and numerical targets. A percentage improvement target for a target period is the target percentage improvement in performance for that target period relative to performance in the base year. Applying the percentage improvement target for a target period to the base year performance will derive the numerical target for that target period. For example, a target unit has a base year specific energy consumption (SEC) performance of 20.000 kWh/kg and the percentage improvement target for the target period is 10%. In this example, the numerical target for that target period is 18.000 kWh/kg. The base year performance is required for all target units to enable a numerical target to be calculated.

Data accuracy

The base year and target SECs determined for a relative energy target unit (non-Novem) from energy and throughput data need to have at least five significant figures within the constraint that they are only recorded to 3 decimal places. Therefore, the value of the base year and target SECs must be greater than 10.000. This can be achieved by adjusting the throughput units (while retaining meter accuracy), essentially by moving the decimal point in the throughput measurement. For instance, an SEC can be determined for a throughput unit of a tonne but use data from a meter which measures in kg units.

When meter readings for energy and throughput provide an accuracy of at least five significant figures, a percentage target will be accurate to three decimal places. If meter readings cannot provide five significant figures, we may allow a tolerance on percentage targets for a relative energy target unit (non-Novem) up to a limit of 0.1 percentage points of the target percentage. For example, if the target is 6%, then using a 0.1% tolerance would mean that the TU would meet their target if they achieve 5.9%.

Selecting a target type

Operators should work with their sector association to work out what type of target is available and appropriate for their operation. Once the underlying agreement is signed, it won't be possible to request a change to the type of target except as detailed in the paragraph below. It is therefore essential for operators to consider the best target currency for their operation before signing their underlying agreement.

Operators with standard relative targets (for example, SEC targets) may change to Novem targets, as both are relative targets. However, there are requirements an operator should consider before initiating a change to a Novem target. To be able to use a Novem target, the operator needs to be able to determine the base year SECs for each separate product (either through sub-metering or appropriate calculation) and to report the level of production of each separate product at future target periods.

If a range of products with significantly different energy intensities could be produced, then a change in the production mix could have a major impact on target period performance. Such changes are not a structural change and do not trigger a change in base year data however they are a reason to consider a Novem target. See Section 7.9 (other types of variation) on how to change a Novem target.

The target period 5 target type specified in an underlying agreement must be the same as the specified target type for target period 1 to 4. However, for target units that have target period 4 and 5 targets the underlying agreements can be amended during an amendment window which opens from 1 July 2021 to 30 September 2021 to allow Operators of target units with an absolute target to vary their target period 5 target to a relative or relative Novem target. No such changes can be requested outside of this amendments window.

Throughput conversion factors

Conversion factors should be used where units of throughput differ between the sector commitment and the target unit target. Operators will need to be able to justify throughput conversion factors using past data.

The relationship between the target unit throughput measure and sector commitment throughput measure should be auditable. For example, if throughput is measured in kg of aluminium for the sector commitment and m^2 of aluminium for the target unit, records of

the thickness of the sheet produced will have to be kept at the target unit so that there is an auditable trail supporting the conversion factor used.

Choosing a throughput measure

The appropriate choice of a throughout measure is key to tracking changes in energy efficiency.

The choice of throughput is important for relative targets as it features in the performance metric (such as kWh/kg) and is relied upon to determine whether the levels of activity at a facility have changed and the absolute target should be adjusted.

The best throughput measure for a site is usually a physical output measure, such as mass (kg or tonnes) or volume (litres or m^3) of product. Other measures of activity that operators can demonstrate drive energy consumption may also be considered.

We discourage capacity as a throughput measure (for example building volume, building area or machine capacity). While capacity may be in some way associated with energy consumption, it rarely drives it, as energy consumption may increase or decrease as a result of the utilisation of the capacity, rather than as a result of the presence of capacity on a site. In the absence of a physical output measure that can be shown to drive energy consumption, robust measures of capacity utilisation may be considered.

The throughput measure chosen should be descriptive enough so as to avoid doubt about what it actually is. For example, where product mass is measured at various places in a production sequence, it must be clear in the throughput measure description where this measure is actually made (for example, 'tonnes packed' rather than just 'tonnes').

Unless there are compelling physical or operational reasons why it cannot be so, we will expect the point at which the activity is measured to encompass the greatest possible proportion of the site's energy consumption. This means measuring physical production at the point closest to leaving the site, and a favouring of process outputs over process inputs as the throughput measure. Such an approach encourages and rewards sites for improving process yield, which is in itself an energy efficiency measure.

4.3. Brownfield and greenfield facilities

A brownfield facility is an existing facility that already carries out the eligible process.

A greenfield facility is a site that began operating in the 12 months before it applied to join the CCA scheme. It may be a brand-new facility with new equipment carrying out activities and processes that hadn't been carried out there previously. Or it may be a facility that had closed down, had all its plant replaced and been recommissioned. In

both cases, 12 months of base year performance data, representative of the newly commissioned site, cannot be provided.

By their very nature, brownfield and greenfield facilities differ in terms of the availability of base year data prior to entering a CCA. This affects target setting for new entrants to the CCA scheme.

4.3.1. Brownfield facilities

To enter into a CCA, the existing operator must have been running the site without any structural changes and collecting the required data continuously for at least 12 months. Representative base year data should therefore be available, and the operator will be expected to produce data against which future numerical targets can be set.

There are situations where a brownfield facility may not have the required data for the previous 12-month period and will need to collect these data before it can enter into a CCA. Examples of this are as follows.

- An existing facility with an agreement closed down for a period of time and restarted production (whether with or without a new owner) without any structural changes to the facility so that, since it closed, the configuration of the site had remained the same.
- Previous data are not available, for example, because the new operator did not undertake due diligence to obtain data from the previous owner, or because the site went into administration and the administrator refused the new owner access to previous records.

A brownfield facility that re-enters the CCA scheme must use its existing base year. Where the data are not available or it is not possible to reconstruct them, the next available 12-month period for which there are complete data should be selected. Lack of data due to poor record-keeping is not acceptable as a reason to use a more recent base year. Any brownfield facility that does adopt a new base year should apply the target setting methodology outlined in section 4.4.

4.3.2. Greenfield facilities

A greenfield facility can have an agreement from the outset. The target unit will be given a percentage target in line with its sector commitment. An estimated interim base year performance for the year the facility began operation will need to be agreed with us. Where appropriate, this can also include the optional additional 3/7ths provision. The base year for the greenfield new entrant will be the first year that the underlying agreement is held.

The facility is required to agree with us a date by which it will have 12 months of continuous data available from which a numerical target will be calculated. Installation of

sub-metering is expected to occur within six months of the date when the need for sub-metering is identified. This also applies to any sub-metering required for the optional 3/7ths provision.

If a greenfield facility joins the CCA scheme in the final 12 months of a target period, it should report against the numerical target calculated using the agreed estimated interim base year performance. A revised numerical target will be calculated for future target periods once data for the full 12 months for the actual base year are available.

4.4. Target setting for new entrants

This section sets out a standard method to be followed by any new entrant entering the scheme. The method also applies to brownfield facilities that have re-entered the scheme with a more recent base year.

Prior to the extension to add a fifth target period and a change to the terms of the agreements, we could only add eligible facilities to agreements up until the end of October 2018.

Following government's consultation to extend the scheme in early 2020, operators were able to apply to join the scheme again for facilities in which they had started to carry out an eligible activity before 30 November 2020.

A further new entrant window opened in December 2021 and will close on 31 March 2022.

4.4.1. Calculating a target for a new scheme entrant

The sector commitment (or sub-sector commitment if applicable) is used to set the percentage improvement target of a target unit when either of the following applies.

- A facility or group of facilities is entirely new to the scheme and becomes a target unit.
- A facility formerly covered by the umbrella agreement of a different sector is moved into a new sector and becomes a target unit in that new sector. However, the target unit will retain the original performance improvement target if, when the percentage sector commitment is applied to the target unit's base year performance, the numerical target calculated for the next target period gives a target performance that was already achieved in the previous target period.

If the base year of the new entrant is more recent than that for the sector or sub-sector, the target will be adjusted in line with section 4.4.2.

If a facility re-joins the scheme as a target unit having previously left voluntarily or following our termination of its underlying agreement, the percentage improvement target awarded to the target unit will be whichever is the more demanding of its original percentage improvement target or the percentage improvement target of the sector (or

sub-sector) commitment. This does not apply to cases where the agreement is voluntarily terminated because the site has closed for a major refurbishment. In such cases, the target unit's original percentage target will be applied after the agreement is reactivated. However, there could be circumstances where there has been a voluntary termination to accommodate the replacement of plant and re-commissioning and the existing baseline is demonstrably unrepresentative of the new plant. In such cases the site may be regarded as a Greenfield site.

This applies to target period 1 to 4. We will apply the same process (as described in section 4.4.2) for setting TP5 improvement targets where the base year is later than 2018. See statutory guidance.

4.4.2. Setting a target profile for new entrants

New entrants with 2008 as the base year are expected to adopt the target profile agreed for the sector as a whole. The target profile is based on reporting performance at the end of each 24-month target period to 2020. An example – if a sector's sector commitment profile is as follows:

- 3% by end of 2014 (TP1)
- 7% by end of 2016 (TP2)
- 11% by end of 2018 (TP3)
- 15% by end of 2020 (TP4)

the operator of a target unit applying to join the scheme in 2017 with a 2008 base year would be required to achieve a target of 11% by 2018 and 15% by 2020.

The target profile for new entrants that don't have 2008 as their base year is calculated differently. For example, if the new entrant's base year was 2015 the target unit will be assumed to have already reached the required savings for the sector from 2008. Using the example sector target profile from above, this would be midway between the 2014 (3%) and 2016 (7%) targets, that is, 5% savings from 2008 or 95% of 2008 energy consumption. The remaining targets are calculated by linear interpolation based on this position. So, the 2016 target would be $(0.95 - 0.93)/0.95 = 2.1\%$, the 2018 target would be $(0.95 - 0.89)/0.95 = 6.3\%$ and the 2020 target would be $(0.95 - 0.89)/0.95 = 10.5\%$

This process is followed unless the target calculated for the next target period implies a lower level of performance (that is, less improvement with respect to the base year) than the most recent performance achieved by the new entrant. Using the example sector target profile given above, if a new entrant with a base year of 2008 joining the scheme in 2015 achieved a performance improvement of 7% between 2008 and 2015, then the percentage improvement for 2016 compared with 2008 will not be 7% because this level of improvement has already been achieved. In this case the percentage improvement target for 2016 is given by

$$1 - \left(0.93 \times \frac{0.93}{0.95}\right) = 8.96\%$$

where 0.93 is the actual performance in 2015 with respect to the 2008 base year and (0.93/0.95) is the ratio of performance implied by the sector commitment between 2015 and 2016.

TP5 has 2018 as the base year.

Selecting the correct year in the 'Target calculator' workbook tool (Appendix I) will complete the calculation.

4.4.3. How to calculate a Novem target

The basic principle of the Novem method is that the energy used for the actual production in the target period is compared with the energy that would have been used if the same level of production and mix of products had been produced in the base year, but with the base year's level of energy efficiency. The Novem method corrects distortions in the overall SEC recorded for a facility caused by changes in product mix/output, so that the aggregate result reflects only the improvement in individual SECs.

The method can also be used to report overall sector performance on the basis of a common throughput where the sector has target units reporting production using different units. Separate products should be identified to the extent necessary to reflect the diversity of energy intensity of production and throughput recording units. Separate products with similar energy intensities of production and/or the same throughput measure can form one product group for which one base year SEC will be determined and for which throughput will be reported separately at the end of the target period. It is not necessary to break the target unit’s production down to separate products where these products have very similar energy intensities of production and/or the same throughput units.

The steps involved in setting a Novem target are outlined below. Table 4.2 lists some of the abbreviations and symbols used when calculating a Novem target.

Table 4.2: Abbreviations and symbols used in the Novem calculation

Description	Unit/symbol
Specific energy consumption	SEC
Base year specific energy consumption	SEC0
Base year throughput	t0
Milestone year	N
Target SEC in target period	SECn
Actual SEC in target period	SECN
Actual throughput in target period	tN
Sum of	∑
Answer	…

Setting a Novem target for new entrants

- Obtain the values for the base year SEC $(SEC0)$, target SEC $(SECn)$ and throughput $(t0\ and\ tN)$.
- Calculate the energy $(SEC\ \times\ t)$ for each product.
- Add up the base year SEC and target energy for your total products.

Note the letter assigned to each field for later calculations.

Energy	Values	Product 1	Product 2	Calculation	Sum (∑)	Letter assigned
Base year energy	$SEC_0 \times t_0$	…	…	$\sum SEC_0 \times t_0$	…	A
Target energy	$SEC_n \times t_0$	…	…	$\sum SEC_n \times t_0$	…	B

Note that the quantity $\sum(SEC0\ \times\ t0)$ must equal the actual energy consumed in the target facility in the base year.

Calculate the target ratio as shown in the results table below.

Base year ratio	The base year target ratio is always 1.	1	Letter assigned
Target ratio	= B / A where: B = calculated energy consumption at base year throughput and target SECs A = calculated energy consumption at base year throughput and base year SECs	…	C

This target is the value that the target unit (or sector association) will be measured against at the end of the target period and can be determined using the 'Target calculator' workbook tool provided in Appendix I.

Determining the base year SEC for each product $(SEC0)$ requires its level of throughput and the energy consumption associated with its production to be determined. In determining the energy consumption associated with a product's production, meter readings from the base year should be used to the fullest extent possible. However, we recognise that it may not be possible to use sub- meter readings to account for all of the product's energy consumption in the base year. Two possible reasons for this are:

- Case 1 - The target facility's energy consumption includes overhead energy consumption which is not directly associated with the production of the product.
- Case 2 - Energy consumption directly associated with production is consumed in plant producing more than one product and it is not possible to separate out the energy consumption associated with each product.

These are considered in more detail below and our preferred method of addressing the issue is provided.

Case 1

Examples of overhead energy consumption, which is not directly associated with product production, are office energy consumption and energy consumed by services shared across the site, such as compressed air. The product of throughput and base year SEC for each product, summed across all products, must equal the base year energy consumption of the target facility. This means that the overhead energy consumption must be apportioned across the different products. This apportionment should be carried out according to the proportion of total direct production related energy consumption used in the production of each product. Example 1 illustrates.

Example for Case 1

A target facility consumed 1,000 units of electricity in the base year producing two products, Product A and Product B. Electricity was the only form of energy consumed by the target facility in the base year.

Products A and B are made on separate production lines, each with separate sub-meters.

Product	Throughput (base year)	Energy Consumption (base year)
A	100 throughput units	500 energy units
B	25 throughput units	300 energy units

Target facility base year electricity = 1,000

Overhead electricity = 1,000 – (500 + 300) = 200

Direct production related electricity = (500 + 300) = 800

Product A share of overhead electricity = (500/800) x 200 = 125

Product B share of overhead electricity = (300/800) x 200 = 75

Product A base year SEC = (500+125)/100 = 6.25

Product B base year SEC = (300+75)/25 = 15

Check: Target facility base year energy = (6.25 x 100) + (15 x 25) = 1,000 units

Case 2

Where the direct production related energy consumption for each product in the base year cannot be determined separately from meter readings it can be based on robust estimates. Such robust estimates could, for example, involve the use of plant capacities, process times, spot meter reading and other auditable measurements, including multiple regression analysis if the availability of energy consumption and throughput data allows an acceptable fit of energy consumption and throughput for each product to be established. Regardless of the method employed, the product of throughput and base year SEC for each product, summed across all products, must equal the base year energy consumption of the target facility.

You should work with your facilitator to agree a robust approach to determining the base year SEC for each individual product. If your facilitator is not satisfied that robust, auditable and representative base year SEC values for each product can be determined,

then they may recommend to the Environment Agency that the target facility uses an ordinary SEC target.

Introduction of a new product

Where a new Novem product with a significantly different energy intensity has been introduced it will be necessary to establish a baseline SEC for this new product and for this baseline SEC to be for the same base year as that for the target unit.

To do this, a SEC for the new product should be calculated for the first 12 months period after its introduction. This is consistent with the requirements for new entrant target units and is sound practice as it captures any seasonal or production cycle variations inherent to the new product. Calculations may be based on spot metering or other methods.

The new product SEC is calculated by distributing the actual energy consumed across all of the products made, including the new product, so as to arrive at an SEC for each product in the year the new product is introduced. This distribution should follow the same principles as set out for new entrants. It will ensure that each product takes an appropriate proportion of energy consumption not directly associated with production. The sum product of SEC and throughput for all products must equal the actual energy consumption.

The new product SEC will then be transformed into a SEC for the target unit's base year. This transformation will be made on the basis that the percentage improvement required of the target unit between its base year and the 12-month period after introduction of the new product applied to, and was achieved by, the new product.

The original base year SECs for the existing products will be used when calculating the reference energy for future target periods. The existing target SEC improvement trajectories for these existing products will also be preserved.

Data accuracy for Novem targets

The SEC for a Novem product is in most cases based on an estimation method, such as using meter readings taken while plant is carrying out a batch run of a single product. If the SEC is less than 10.000 then the throughput unit should be adjusted to give a larger SEC. When the SEC for a Novem product is based on sub-meter readings covering only the equipment used to produce the product, these meter readings should provide five significant figures. Tolerances will not be applied to Novem targets. See section 10.4.4 for how to report performance against a Novem target.

4.5. Deciding how to structure a target unit

This section deals with the inclusion and exclusion of a facility as part of a target unit – previously known as 'bubbling' and 'unbubbling'. The structuring of a target unit can significantly impact both the performance and reporting against the target so you should work with your sector association to understand the implications before including or excluding facilities.

4.5.1. Including a facility in a target unit

The CCA scheme allows several facilities to be included in one agreement sharing a target across all the target facilities. We treat all facilities within an agreement as one for the purposes of reporting, penalties, buy-out and surplus.

An operator can add facilities with different base years to join the same target unit, provided the facilities meet the conditions for inclusion (see section 4.5.3). For example, this situation might arise when an operator adds a greenfield facility to an existing target unit. In such cases the baseline data of the different facilities are added together to create a baseline for the resulting target unit.

The year in which most of the baseline energy was consumed is selected as the base year for the target unit. For example, a facility with a 2008 base year energy consumption of 1,000 MWh and a facility with a 2009 base year energy consumption of 3,000 MWh are combined in a target unit. The total baseline energy consumption for the target unit is 4,000 MWh and its base year is 2009 since this is the year when most of the baseline energy was used.

4.5.2. Excluding a facility from a target unit

It's also possible to exclude a facility from a multi-facility target unit, for example, if a facility is sold or the operator no longer wishes to retain the facility in the scheme.

4.5.3. Conditions for including and excluding facilities

The following six conditions apply.

1. We can only add a facility to an existing underlying agreement where it has the same operator as the operator of the underlying agreement under which it will be included. The definition of an operator is given in section 2.3.1.
2. All the facilities in a target unit must belong to the same umbrella agreement and have the same type of target. See section 4.2 for target types and how to express targets.
3. We can only add a facility to a target unit where:

a. the facility is already included in an existing underlying agreement and the operator of the target unit has become its new operator, for example, the facility is bought by the target unit operator

b. the facility is entering the CCA scheme, and its operator is the operator of the target unit. In such cases the facility may be a greenfield or a brownfield facility.

4. We can only exclude a facility from a target unit if it has left the CCA scheme or is transferred to a new operator.
5. We may alter the target unit target to reflect the change in the target unit structure resulting from inclusion or exclusion. Operators must notify us within 20 working days of including or excluding a facility from a target unit, through submitting a variation.
6. We cannot add a facility to a target unit during the last two months of each target period. This is to allow target units enough time to prepare their records for reporting.

Important points to note

We will review all requests to amend the facilities within an underlying agreement against the six conditions outlined above. When we approve a request, we will issue a revised agreement for the newly configured target unit.

It is the responsibility of the two operators involved in the transfer of facilities to agree the distribution of any CO2e surplus. We will record the CO2e balance for each target unit accordingly.

If the six conditions detailed at the start of this section are met, there are no restrictions on the size of a target unit. The responsible person who signs the underlying agreement does so on behalf of all the facilities in the target unit.

The target period performance for a group of facilities included in a target unit may be quite different from the performance of each individual facility in isolation. This might occur if the facilities have significantly different energy intensities or are not consistently covered by the ETS or do not consistently apply the SRM. Operators should consider the effect of including multiple facilities in a target unit before asking to do this. To aid decision making regarding the inclusion of a facility in a target unit an effect predictor tool is provided at Appendix I.

4.5.4. How to calculate a target for a target unit when including and excluding facilities

A workbook tool to help operators calculate the revised targets when facilities are included or excluded from a target unit is given in Appendix I. It is important that the facilities joining

or leaving a target unit take the appropriate percentage targets, the workbook provides details of the target setting rules that must be applied.

To revise targets following a change, see section 7 which covers how to change an agreement.

This outlines when and under what conditions a target unit can and can't vary its target.

5. Annual charges and billing

Under Schedule 6 to the Finance Act 2000 (as amended), the Environment Agency has the power to recover our administration costs through a charging scheme. This section explains the charges applicable to sector associations and target units.

5.1. Annual charges for holding a CCA

5.1.1. How have charges been made?

The charges for the CCA scheme have been calculated based on the amounts we expect it to cost us to administer the scheme. These charges are set out in full in a separate document and are summarised below. The charging document and its associated guidance are available on the CCA website : Climate change agreements (CCA) charging scheme.

5.1.2. What are the charges?

There are two types of annual charge – one levied on the sector association and one on the target unit.

There is no VAT added to charges.

5.1.3. Paying the charges

The target unit and sector association annual charges are payable for any full or part calendar year during which an agreement is in force. We will send out requests for payment in April each year. Payment options will include direct debit, BACS and CHAPS.

New entrants who sign an agreement after April in any calendar year will be sent a MoA for the annual charge on entering the scheme. This must be paid immediately and is payable using any method (outlined on the MoA) other than by direct debit.

Sector associations

Sector associations that collect charges from over 50% of their target units on our behalf won’t receive an invoice from us for the sector association annual charge. Instead, they will receive a MoA for the total amount payable by their operators, together with a breakdown of the individual facility charges. The MoA will be based on the information held on the register for an operator which will indicate that it is financially managed by its sector association. The MoA can be paid in one instalment or by direct debit spread over three instalments.

If the sector association doesn't want to be charged for an operator where payment can't be recovered, it must notify the CCA helpdesk by 27 March in each calendar year, giving the operator's details and target unit identification number. We will then change the register to show the operator is not financially managed by the sector association. We will send a MoA direct to the operator concerned after 1 April and the sector association won't be charged for them.

The sector association will still be charged in its MoA if it financially manages an operator that was in the scheme on 1 January of a calendar year but whose CCA was terminated before 1 April in the year.

Sector associations that decide not to collect charges on our behalf and opt to incur the annual charge will be sent an invoice in April. This will ask for immediate payment.

Target units

We won't need to contact target units paying their annual charge via their sector association.

Target units that opt to pay for their CCA directly to us will be sent a MoA in April. This will ask for immediate payment. Where a target unit fails to pay us and we are unable to resolve the lack of payment through communication, we may issue a penalty or terminate the agreement.

5.2. Collection of charges by sector associations

A sector association wishing to collect charges from its target units on our behalf needs to:

- agree this arrangement with us
- adhere to the conditions detailed in Rule 16 of the umbrella agreement
- agree to collect charges from target units that, taken together, represent at least 50% of the facilities under its agreement
- send us a written request to do this – to be received by the last working day in February of each year (we will remind sectors by email of this each year in January)

The request from the sector association should list all the facilities (by the target unit they fall into) from which it intends to collect charges.

Request to collect the target unit charges can be emailed to cca-help@environment-agency.gov.uk or posted to: Climate Change Agreements Team, Environment Agency, Lutra House, Dodd Way, Off Seedlee Road, Preston, Lancashire, PR5 8BX.

Once received, we will approve or reject the request and inform the sector association, explaining the decision made.

If we allow the sector association to collect the charges, they will need to comply with the following rules.

- Itemise the CCA charges separately in the invoices issued to its operators.
- Chase any payments owing from its operators up until the end of September.
- Collect the charges in full and send us the collected money by direct debit or BACS by the last working day of September in each year, quoting the payment reference number on the payment advice note. This number will be listed at the top of the MoA received by the sector association each April. Any debt collecting activity must cease at this point.
- Three proportional direct debit instalments will be taken in each calendar year on 15 May (20% of total due), 15 July (40% of total due) and 15 September (40% of total due). Payments other than by direct debit become due in full in April in each calendar year following the issue of the MoA.
- The final direct debit payment value due on 15 September may be altered by the sector association if it is unable to recover the full costs for its sector. You must notify us by the last working day in August if you wish to alter the direct debit payment value.
- Send us an annual report (at the address given above) by the last working day in October in the same year. This report should state which operators have paid or not paid.

If any payments are received by the sector association from operators after the last working day in September, these should be sent to us quoting the target unit identification number quoted on the sector association's original MoA. This information will allow us to identify the operator and target unit making the payment.

If a sector association fails to comply with these rules, we may withdraw our consent for it to continue to collect charges on our behalf. We will give 20 working days' notice of this.

5.3. What action will we take if charges are not paid?

If we haven't received payment of the charges from the sector association or operator by the due date, we will contact the sector association or operator to find out why. If we're unable to resolve the problem, the outstanding amount may be treated as a civil debt and we may commence debt recovery. If we aren't able to recover the charges by the end of the calendar year, we will consider terminating the agreement as well as continuing to recover the debt.

6. Application process

Sections 2 to 5 explain what an operator needs to do and know to apply for a CCA. This section outlines the procedure operators and their sector association need to follow when applying for a climate change agreement and assenting to the agreement.

6.1. What should operators do next?

After reviewing sections 2 to 5 and collating the necessary evidence to support a new application, the next step is for the operator to provide their sector association with the necessary information so the application can be submitted on their behalf. It is not possible for an operator to apply directly for an underlying agreement through the CCA register.

The sector association will check the operator's information and undertake the initial eligibility checks before entering the application on the CCA register.

We will assess the evidence submitted to determine whether a facility is eligible to be included in an agreement. Following our determination, we will send the operator an email providing a proposed copy of their agreement and ask them to provide their assent. This assent will legally bind them to the agreement.

Once we have received the operator's assent, we will issue the approved agreement to the operator and add the facilities included in the target unit to the reduced rate certificate. At this point the operator will be able to receive the CCL discount from their energy suppliers.

6.1.1. Evidence required for submission to the register during application

Facility eligibility information

The facility eligibility form (FEF) (Appendix G) asks for the information which the sector association will upload to the register for a CCA application. The following list of documents to be supplied with the FEF forms the minimum evidence to demonstrate eligibility:

- Manufacturing process evidence:
- Manufacturing process description – this is an overview of the manufacturing process carried out. It should cover all elements of the process from receipt of raw materials to dispatch of final product
- Description of eligible processes - this is a description of the elements of the process that are eligible for the CCA. It should clearly state how these elements meet the sector eligibility criteria
- DAAs including:
- evidence supporting direct association
- evidence supporting technical connection

- evidence supporting effect on emissions
- Process flow maps - these should illustrate the flow of activities around the site. The eligible processes and DAA should be clearly marked.
- Annotated site plans showing the extent of the eligible facility - these should cover the whole site, with the site boundary, areas containing eligible processes, DAAs and ineligible processes clearly marked
- Any permits currently held for the site under EPR. The permit number and a copy of the permit will have to be provided.
- Calculations relating to the energy consumed within the installation and other site energy if eligible (indicating any assumptions made). These can also be used to form the baseline.
- 70% rule calculations (indicating any assumptions made) - these calculations ideally should be provided in a spreadsheet format for ease of interpretation

Energy information

Information is required on:

- the target unit's baseline performance
- the target for the new target unit

Much of the information needed for a new application can be collated using the 'Target calculator' workbook tool provided in Appendix H.

6.1.2. Application process

The steps below outline the application process for a new underlying agreement:

Step 1: The sector association applies through the CCA Register for an underlying agreement for the operators

Step 2: The application and facility eligibility information is assessed and is approved or rejected based on sector supporting evidence to ensure the operator is eligible to hold a CCA

Step 3: The operator is notified of our decision by email

Step 4: Acceptance- the operator will receive an email with their proposed underlying agreement

Step 5: Rejection- the operator will receive an email advising why the application has been rejected

Step 6: The email will be copied to the sector association and/or sector consultant to update it on the application’s status

Step 7: The operator needs to give assent (email acceptance) to the underlying agreement within 20 working days. When we upload this to the register the operator will receive the final underlying agreement. They can claim the CCL discount from this point.

6.2. Email assent

The final step in Figure 6.1 is for the operator to give email assent to the underlying agreement. We will email the proposed underlying agreement to the responsible person (for the operator) named on the CCA application. The responsible person should email the operator's assent to us within 20 working days confirming receipt of the underlying agreement and the operator's acceptance to the terms of that agreement. The assent also covers the target unit target stated in the underlying agreement. Email assent replaces the need to physically sign the agreement and is legally binding. The responsible person can choose to sign the underlying agreement by hand and post it to us.

When we have processed the assent, the operator will receive an email confirming the agreement's activation. From that date, the facilities covered by the agreement will appear on the reduced rate certificate (RRC) and the operator can start claiming the CCL discount. We don't guarantee that we will process the assent on the day it is returned to us and therefore we recommend the operator waits for the activation email from us before notifying their energy company of the new CCA.

If we do not receive the assent within 20 working days from when we emailed the proposed underlying agreement to the responsible person named on the application, we may withdraw the agreement offer.

When a facility moves between target units (that is, it is excluded from one target unit and included in another target unit), for example, during a change of ownership, we will process the assent for the new target unit before either terminating the old agreement or processing the assent to the old target unit if it has a new proposed agreement, to ensure continuity of the CCL discount.

Target period 5 extension

In December 2020 we varied all existing agreements to include new terms and conditions relating to the fifth target period. Agreement holders were asked to confirm to their sector associations that they were still carrying out eligible activities before providing their assent to the varied agreement.

Sector associations were required to confirm that all facilities included in their proposed distribution of targets for TP5 were still carrying out eligible activities.

New eligible facilities were certified from the date when we activated the agreement.

6.2.1. Can anyone else give the email assent?

The email assent must be given by the responsible person named on the underlying agreement. Therefore, we expect the assent to be sent from their email account and the one to which we have sent the underlying agreement. We will not accept assent from any other person, including someone claiming to act with the responsible person’s authority.

The underlying agreement is a legal document that binds the operator into its agreement. It is therefore vital that the responsible person is aware of their responsibilities and the consequences to the operator when giving their assent.

If the responsible person leaves the organisation or changes for whatever reason during the time between the application being submitted and email assent being required, the sector association should update the details of the new responsible person as soon as possible. We will ensure the underlying agreement is sent to the new responsible person to give their assent.

If the responsible person has changed and we have issued a proposed underlying agreement, the sector association should update the responsible person on the register as soon as possible and the new responsible person must provide their assent to the new agreement. If the new responsible person wishes the underlying agreement to show their details, they must provide their assent to the current agreement and ask us to issue a new agreement to which they must also provide their assent.

A change in the responsible person after the agreement has been assented doesn't require a new agreement. However, the register must be kept up to date as it is a requirement in the rules (Schedule 1 to the underlying agreement) that the responsible person's details are maintained in the register.

7. Changing an agreement

Over the life of the scheme, it is likely that many operators will undergo some element of change at a site that will have an effect on their agreement. Many of these changes will require a 'variation' to the agreement or a completely new agreement.

A variation is where a change has occurred at a facility (or the target unit) that requires an amendment to the agreement. When a variation is processed, we will issue a new version of the agreement to the operator which the operator will need to assent to. In some instances, a variation that alters the baseline performance may trigger an amendment to the target.

Amendment window and opportunity to vary an agreement.

An amendments window will be open from 1 July 2021 to 30 September 2021 to allow the Administrator to vary underlying agreements to allow:

- Operators of target units with an absolute target to vary their Target Period 5 target to a relative or relative Novem target
- Amendment of any estimated 2018 data provided for the purposes of Target Period 5 target setting with the required actual 2018 data, or
- A facility that entered into the scheme from 1 January 2021 to 31 March 2021, that was not included in an existing agreement, to join into an existing agreement

These amendments will not be allowed outside the 1 July 2021 to 30 September 2021 window.

The sector association can make the changes on the CCA register necessary to initiate a variation and, if appropriate, amend a target unit target.

The different types of variations are outlined below, together with links to sections 7.1 to 7.9 which provide further detail. Section 7.10 gives details of what can't be changed by a variation and section 7.11 covers the timescale for notifying us of change. In some instances, more than one of a possible range of variations may be necessary depending on the type of change the operator has gone through.

If you're not sure about whether a variation is needed following a change of some kind, please contact the CCA helpdesk for advice (cca-help@environment-agency.gov.uk).

Different types of variation:

- When an operator takes over a facility from another operator (section 7.1)
    - revising the target when including/excluding a new facility to an existing target unit (section 7.1.1)

    - amending a target when a facility leaves the scheme but remains operating (section 7.1.2)
    - when the operator and/or sector association should not revise a target (section 7.1.3)
- When an operator changes ownership – and includes all facilities within one agreement (section 7.2)
- When the company name of an operator changes (section 7.3)
    - when the legal entity has changed for the operator (section 7.3.1)
    - when the operator name has changed (section 7.3.2)
- When the address of the responsible person for the target unit changes (section 7.4)
- Review of the baseline due to structural change or review of 70% provision (section 7.5)
    - structural change (section 7.5.1)
    - data errors in baseline discovered (section 7.5.2)
- Updating the baseline from estimated to actual values (section 7.6)
- Changing the target currency (Novem to relative) (section 7.7)
- Variations for reporting (section 7.8)
- Any other type of variation (section 7.9)

For information on how to make these changes in the CCA register, please refer to the 'Climate change agreements IT register user guide' available from the CCA webpages.

7.1. An operator takes over a facility from another operator

One of the most frequent changes is when a facility is sold by one operator and bought by another. This type of variation applies:

- where target units (with multiple facilities) exist under different operators in the same sector
- where one facility is sold to a different operator

The facility transferred to a new operator is treated as a new entrant and the sector association will need to submit complete facility eligibly information to the register using the 'Create Facility' option (see section 3 of the IT register user guide). The base year performance for the target unit will also need to be amended to reflect the inclusion of the new facility. This will generate an amendment to the numerical target for the target unit (see section 7.1.1). If a facility is to be excluded from an existing target unit because it has been sold to a different operator, the sector association should raise this variation on the register after making the change outlined above. For target units with only one facility which has been transferred to a new operator, the sector association should follow the voluntary termination process in the register to submit a request to us to terminate the old agreement.

Important information to note

Both operators will receive new agreements. They will need to provide their email assent to these for them to become active.

As part of the process of including a facility in an existing target unit or excluding a facility from an existing target unit, we will upload the assent for the new target unit before uploading the assent for the old target unit's new agreement. This will ensure continuity of the CCL discount.

7.1.1. Revising the target when including/excluding a new facility to an existing TU

The sector or sub-sector percentage commitment will be applied to a new facility or group of facilities entering the scheme with the intention of joining an existing target unit. The baseline of the target unit receiving the new facility or group of facilities will be varied to reflect the addition and the percentage improvement target will be adjusted to reflect the inclusion of the facility/facilities.

As laid down in rules 9 and 10 (Schedule 1 to the underlying agreement) and to ensure that the same sector target percentage improvement and target energy savings are achieved after facilities enter or exit a target unit, the following will apply.

Where a facility leaves a target unit as a result of being sold to a new operator, the facility will take with it the original percentage improvement given to the original target unit when it joined the current scheme.

The baseline of the target unit it has left will be varied to reflect the loss of the facility.

If the leaving facility joins another target unit, the baseline of the receiving target unit will be varied to reflect the gain of the facility. The percentage improvement target of the receiving target unit will be recalculated to reflect the addition of the facility. If the percentage improvement target given to the facility is different from the percentage improvement target of the receiving target unit, then the percentage improvement target of the receiving target unit will change as a result of this process.

We will carry out a stringency test on the newly calculated numerical targets. Where the test finds they are not stringent (as defined in paragraph 70 of the Technical Annex), the targets will be adjusted using the methodology outlined in paragraph 71 of the Technical Annex. A stringency test is applied to tighten targets for the following target period for those participants exceeding their target. Target period 5 is the final target period and therefore a stringency test is not necessary.

When an agreement is changed the targets must not be altered as a result of data accuracy changes. This means that meter readings and SEC calculations must retain the

accuracy inherent in the previous underlying agreement. Where five significant figures can be obtained for energy and throughput and where SECs can be expressed using units to achieve numerical values greater than 10.000, they must be used. If meter readings cannot provide five significant figures, we may allow a tolerance on percentages targets up to a limit of 0.1%.

Instructions on how to revise the target in line with the above can be found in Appendix D, in the 'Target calculator' workbook tool provided in Appendix H.

7.1.2. Amending the target when a facility leaves the scheme but remains operating

An operator is able to remove any facilities included in the target unit, for example, if they want to reduce the complexity and administrative burden of reporting. If a facility leaves the scheme but remains operating, the target unit's baseline data will be amended, but its percentage target will not be adjusted. The remaining facilities will need to meet the percentage reduction that has been maintained for the target unit. See section 10.3 for the reporting requirements.

7.1.3. When the operator should not revise the baseline

Where a facility leaves a target unit because it has closed and not because of a change in ownership, this is regarded as an act of rationalisation and the target unit's original baseline and numerical target are retained. See section 8.3.1 for more information on rationalisation. See section 10.3 for the reporting requirements.

7.2. An operator changes ownership and includes all its facilities within one agreement

In this type of variation, the whole target unit and all the facilities within it are transferred to a different operator who already has a CCA. In this instance, if the structure of the purchased target unit doesn’t change, then its target and baseline data will not be altered. The following process should be followed.

Via email, the sector association should notify us of the change in the operator of the purchased target unit.

Using the instructions in section 7.1.1, complete a variation to include all the facilities in the purchased target unit in the existing target unit. This will involve entering facility eligibility for all new facilities which are being included into an existing agreement. Once we have processed the variation, we will send the proposed new agreement to the responsible person for the new target unit to give their email assent. When we receive the email assent, we will activate the new agreement and terminate the old agreement for the target unit (and its facilities) that has been transferred.

7.3. The company name of an operator changes

In many instances, the operator of a target unit or a number of target units will be a subsidiary of a larger company. This section outlines what changes are necessary to the target unit agreements, depending on the type of change which has occurred.

- the operator becomes a different legal entity
- the name of the operator changes but not its legal entity
- the name of a facility changes but the legal entity of the operator remains the same

7.3.1. When the legal entity has changed for the operator

When the operator's legal entity has changed, the existing agreement no longer applies, and a new agreement is required. See section 2.3.1 for the definition of an operator and therefore what would constitute a change in operator.

In this instance, follow the steps below.

On the register, your sector association should apply for the new target unit and all the facilities attached to it. If the facilities within that target unit are to be included within an existing target unit, the application for the additional facilities to be 'included' within that agreement should be made from the existing target unit's menu in the register. It is important to make clear that the application to replace an existing agreement is due to change in ownership.

We review and process the application in conjunction with the technical consultant's facilitator for the sector. If the application is accepted, we will issue a proposed agreement for the new target unit.

The new operator must provide email assent to the new agreement. On receiving and processing the assent, we will terminate the old agreement. This will ensure there is no loss of certification to the scheme and thus no loss of CCL discount.

7.3.2. When you need to change the operator/facility name

When the legal entity holding the current agreement has changed its name, but its registration number remains the same and/or the operator wants to update the name of an existing facility, we can simply update the existing agreement to reflect the name change(s).

The sector association should provide sufficient evidence for the name change with their variation, for example information from Companies House (or similar) showing the name change and that the registration number is unchanged.

7.4. The address of the responsible person for the target unit changes

The sector association should submit this variation type if the address for service of notices changes. For a company, we normally expect this to be the same as the registered office address, but an operator can specify an alternative address for service of notices. The new address must be a UK postal address.

This variation requires the following information and evidence to be uploaded to the register:

- new address for service of notices
- any relevant information supporting the address change, for example Companies House notification of registered office address

This variation should not be used to change a facility address (see section 7.6).

7.5. Review of the baseline due to structural change, or review of the 70% provision

This section covers structural change (changes to the Stationary Technical Unit), which could change the amount of energy consumed in the eligible facility with respect to the total site energy use. This may result in the requirement to change the baseline and targets under certain circumstances.

Note: changes which affect the ability of an operator to meet its target, but aren't a structural change, for example, a change in product mix, might be possible through use of a Novem target (section 7.7).

7.5.1. Structural change

Paragraphs 5 of the Technical Annex defines a structural change as one of the following:

- "Changes in the processes carried out at a site, which mean that a process would no longer be an eligible process. Such changes may affect the primary activity carried out in the stationary technical unit such that the change means that a process can no longer be considered an eligible process, or they may affect the relationship between the primary activity and other activities originally determined to be ancillary activities, such that these other activities can no longer be considered ancillary activities.
- Changes to a facility as a result of an eligible process which used to take place inside the site boundary taking place outside of the site boundary instead

- Changes to the proportion of energy which is used in an installation comprising part of a site which would affect the extent of the facility which is eligible to be covered by an agreement as a result of the application of Regulation 3(1) of the Climate Change Agreements (Eligible Facilities) Regulations 2012
- A change in the extent of the target facility as a result of parts of the facility ceasing to carry out or starting to carry out Annex 1 activities.

Replacement or replication of plant to increase capacity of the same or similar products is not a structural change unless it entails one of the changes listed in paragraph 5 above."

Change to processes

If there is a change to the processes carried out at the STU(s), the STU may no longer meet the definition of eligibility in the umbrella agreement for the sector. If this happens, a previously eligible STU will cease to be eligible and the whole basis for CCA eligibility at the site may be lost. It may be partially lost if, as a result of the change, some but not all STUs lose their eligibility. In this second case, the proportion of the site's energy use covered by the eligible installation will be less than before and the proportion of the site's energy use entitled to be included in the eligible facility may also be less.

If the site no longer qualifies for a CCA, the agreement will be terminated. If the target unit contains more than one facility, the target unit's baseline will be revised.

If the site continues to qualify for a CCA, the extent of the eligible facility that can be included in the eligible facility may have changed. The extent may also change if the operator changes the way the site operates such that one or more ancillary activities can no longer be considered DAAs of the STU.

Eligible process moves outside site boundary

This change occurs if any of the components making up the installation at the site (an STU or a DAA) are no longer carried out on the site but somewhere else, for example, due to outsourcing. This means that the extent of the installation may have changed and the proportion of the site's energy use that can be included in the eligible facility may have also changed.

Change to proportion of energy used in the installation

If more than 70% of the site's energy consumption is consumed within the installation, the eligible facility is considered to be the site and the facility's energy consumption can be measured using the site's main meters.

If the relative proportions of a site's energy consumption taking place within the installation(s) and within the other activities at the site change significantly over time, there may be an impact on the proportion of the site that can be considered the eligible

facility. If the shift is large enough, a point will be reached where the installation consumes less than 70% of the site's energy use. At this point, the eligible facility can no longer be considered the same as the site.

Change in ETS status

The ETS status of any fuel consumed within the eligible facility might change in the future, that is, the consumption moves from being in scope of the ETS to out of scope, and vice versa. This may be due to changes in the ETS policy or changes on site, such as a change in the capacity of combustion plant on the site included in the eligible facility. Since the energy consumed within the target facility is the energy consumed within the eligible facility less any of this energy covered by ETS, changes in the ETS status of the eligible facility's energy use will change the extent of the target facility. Please refer to section 3.3.4 for additional information.

The target facility's baseline will need to be revised to reflect this. New numerical targets will be calculated for the target facility by applying the original percentage improvement targets to this revised baseline. The new numerical targets can be recalculated using the 'Target calculator' workbook tool provided in Appendix H.

What happens if there is a structural change?

If any of these changes occurs, we must be notified via the register within 20 working days of the change. Notification is through the sector association submitting an application for a variation to the target unit's agreement. We will process the variation and consider whether the baseline or the target need to be adjusted.

There are two key questions we need to consider:

- Does the proposed variation meet the structural change criteria set out in the Technical Annex?
- Does the proportion of energy consumed in the installation affect the result of application of the 70% rule (that is, does the installation go from being more than 70% of the site's energy to less than 70% of the site's energy, or vice versa)?

If the proportion of the site's energy use that can be included in the installation has changed to an extent that the 70% threshold has been crossed, then the eligible facility's baseline energy use will have to be adjusted and the effect of this on the target unit's baseline worked through. The original percentage target improvement will stand and will be applied against the new baseline for the target facility, resulting in a revised numerical target in the target unit's agreement.

If after the change, the installation consumes just over 70% of the site's energy use, we may select the site for audit so that any assumptions underpinning the extent of the installation with respect to the site can be tested.

If a change to the baseline or a target is required following a structural change variation, the sector association will need, on the operator's behalf, to supply via the register the following information for the facility that has experienced structural change:

- description of the change at the facility
- 70% calculator workbook
- revised 70% data
- revised manufacturing process description
- revised process flow map marking the STU, DAA and ineligible activities
- re-baseline workbook used to calculate revised targets

Baseline reconstruction and sub-metering

If any changes to the baseline are required, the operator should reconstruct the original base year data where possible, as described below. Speak to us about reconstructing the baseline. A baseline reconstruction workbook tool is available in Appendix H.

Following a change that generates a need to amend the baseline data, the configuration of the facility will need to be amended to reflect the change in eligibility. The numerical target may also need to be adjusted. It can be recalculated using the 'Target calculator' workbook tool provided in Appendix H.

Installation's energy consumption goes from less than 70% to equal to or greater than 70% of the site's energy consumption

In this case the eligible facility will start as the installation plus energy use in other site activities up to 3/7th of the installation's energy use, if applicable. The change will mean that the eligible facility will now be regarded as the whole site. If the operator wishes to redefine the eligible facility as the whole site, then the eligible facility's baseline will be recalculated. The new baseline energy for the eligible facility will be the total site energy consumption in the base year. The fuel mix in the base year for the whole site will be the new fuel mix for the eligible facility. See section 10.3 to see how this change will be reported

Installation's energy consumption goes from more than 70% to less than 70% of the site's energy consumption

In this case the eligible facility will start as the whole site. However, the change will mean that the eligible facility is now just the installation. This means that the installation (plus an optional energy consumption by other site activities up to 3/7ths of energy consumption by the installation) must be separately sub-metered to allow the gathering of 12 months of actual consumption data for the new extent of the installation and any additional 3/7ths of energy that the operator wishes to include in the eligible facility. We expect the sub-metering to be installed within six months of our acceptance of the variation.

At the end of the target period during which the change occurred, if sub-metering was not in place to allow the energy consumption of the new eligible facility to be reported on metered values for the entire 24-month target period, then the target facility will report based on its original extent of eligibility for the entire 24 months of the target period.

Once 12 months' actual consumption data have been gathered (including the optional 3/7ths where required), the baseline will be reconstructed, and revised numerical targets calculated. However, as stated above, this will only be done for target periods following the target period during which the change occurred if there was insufficient sub-metering in place to allow the new eligible facility to report on metered values for the target period during which the change occurred.

This baseline reconstruction process will use the newly collected 12 months of sub-metered data as follows:

- the proportion of energy consumed at the site that is consumed in the installation (plus any additional energy consumed by other activities up to 3/7ths of the installation, if applicable) is calculated.
- this proportion is applied to the energy consumed at the site in the base year. This will give a new quantity of energy in the base year for the new eligible facility. A baseline reconstruction workbook tool is available in Appendix H.

To determine the fuel split (the mixture of fuel used) of the new quantity of baseline energy, the percentage fuel split for the installation (plus the additional 3/7ths, if applicable) from the 12 months of data is applied.

If this process gives a value for the consumption of a particular fuel type greater than that consumed at the site in the base year, the consumption of that fuel type will be limited to the actual consumption and the difference will be redistributed across the other fuel types.

The redistribution will be carried out to preserve the actual percentage fuel split in the installation (plus the additional 3/7ths, if applicable) from the 12 months of data.

Due to putting in place sub-metering beyond that covering the installation, the eligible facility can now be regarded as the installation plus energy consumption by other activities up to 3/7ths of the installation. If the operator wishes to redefine the eligible facility as the installation plus other energy consumption up to 3/7ths of the installation, the eligible facility will be re-baselined once 12 months of sub-metered data for the additional 3/7ths have been collected. This process can be described as follows.

- The ratio of energy consumed in the installation plus the 3/7ths to the energy consumed in the installation is calculated. This calculation will use energy consumption data for the installation from the same 12 months period as that collected for the first time for the 3/7ths.

- This ratio will be applied to the installation's energy consumption in the base year. This will calculate a new quantity of energy in the base year for the new eligible facility.

In determining the fuel split of the new quantity of energy in the base year, the percentage fuel split for the installation plus 3/7ths from the 12 months of data will be applied as described above.

7.5.2. Review of the baseline following the discovery of an error

This section covers corrections for error(s) discovered in baseline data.

In line with Rule 6.3 (Schedule 1 to the underlying agreement), targets will be adjusted to reflect errors in the baseline (for example, those discovered during an audit). This is done by amending the baseline to correct the error. The original percentage improvement target is then applied against this revised baseline.

The 'Target calculator' workbook tool provided in Appendix H can be used to recalculate the numerical target.

If an error in the baseline is discovered, you must notify us within 20 working days of discovering the error. The notification should include an explanation of the cause of the error, how it came to be identified, and how it has been or will be resolved.

7.6. Updating the baseline from estimated to actual values

A target unit with a greenfield facility will have an estimated interim base year performance. Once available, 12 months of continuous data must be submitted to calculate a numerical target. Sectors should contact their facilitators to discuss this type of change.

7.7. Changing the target currency (Novem to relative)

Target units can change between a standard relative and a relative Novem target (and vice versa). Sectors should contact their facilitators in the first instance to discuss this type of change. Novem targets cannot be applied retrospectively to a target period that has already ended, and the decision to switch to a Novem target should be taken at the earliest possible opportunity.

7.8. Variations for reporting

There are two circumstances in which variations must be submitted in the month after the end of a target period, to reflect changes which may impact on a target unit's target. These are described in further detail in Section 10.4.

7.9. Other types of variation

Any other type of a variation an operator may wish to make that is not listed above can be submitted to the register under this section. It should include a detailed description of the variation and be supported by evidence. Examples include:

- changing the address of an individual facility due to an error with the original facility address or postal system – but if the facility is actually moving site, a new facility eligibility application is required
- changing an ETS permit number

7.10. What cannot be changed by a variation

To maintain stability within the scheme, a number of areas of an agreement cannot be changed. Target unit target (% value) unless there is a relevant variation

An operator isn't allowed to amend the percentage target. However, the numerical value of the target may change if the baseline is amended following a variation.

The only situation where a percentage target might change is where facilities leave or enter existing target units.

7.10.1. Target currency (absolute to relative)

Outside the TP5 amendments window, it is not possible for an operator to change between an absolute and relative target. That means that the operator of a target unit with an absolute target in its underlying agreement can't change to a relative target, or vice versa. The only exception is where a target unit with a relative target wishes to change the target from a standard relative target to a relative Novem target (and vice versa).

The amendments window from 1 July 2021 to 30 September 2021 allowed the Administrator to vary underlying agreements to allow operators of target units with an absolute target to vary their target period 5 target to a relative or relative Novem target. Amendments are not allowed outside 1 July 2021 to 30 September 2021.

7.10.2. Throughput currency

An operator can only amend the throughput currency of their target unit target following a structural change where a completely different product is being made at a site. This amendment can be made at any time except for the final two months of a target period. In the instance of a structural change, the sector association should submit a baseline amendment variation via the register.

7.10.3. The 12-month base year period

It isn't possible to change the base year period unless this is in response to a structural change where the original base year is no longer relevant, and the baseline can't be reconstructed using the existing data.

It is possible to amend the baseline if there's an error in the data. If an error is discovered, it should be reported to us within 20 working days by raising a variation in the register. Any errors in data discovered by audit (see section 9) may risk a financial penalty (see section 8).

We may consider a change in the base year for a brownfield facility that has re-entered the scheme following a period of being in administration if the data for the original base year are no longer available.

7.10.4. Changing sector

Once a facility is deemed eligible to belong to a particular sector and joins that sector, it won't be allowed to move to another sector unless it becomes ineligible in the original sector.

There are two options if the facility and/or target unit have no eligibility in the present sector.

- If the facility/target unit is eligible in another sector, the current underlying agreement is terminated, and a new entrant application started.
- If the facility/target unit is not eligible in any sector (as listed in Appendix A), the underlying agreement will be terminated.

If the facility/target unit is partially eligible in the present sector, the facility/target unit will remain in the original sector and the underlying agreement will be varied accordingly.

7.11. Timescale for notifying us of a change

When a change has occurred at the facility or target unit which could lead to a variation, this change should be notified to us via the register within 20 working days. Within this

period the operator needs to send details of the change to its sector association and the sector association should enter details of the proposed variation for consideration.

Notification within 20 working days does not mean that the change will be processed by us in the register within this time. We will work with the target unit operator and the sector association to accept or reject the request as quickly as practicable.

8. Application of financial penalties and termination

8.1. CCA penalties

This section explains the financial penalties and termination provisions related to the CCA scheme. Further information can be found in the Environment Agency enforcement and sanctions policy.

8.1.1. What are the penalties in the CCA scheme?

The system of financial penalties set out in regulation 15 of the Climate Change Agreements (Administration) Regulations 2012 (as amended) is intended to provide a proportionate and flexible regime. In the old scheme there were no intermediate enforcement measures – only not recertifying or termination, leading to complete loss of the CCL discount. The penalty system – and its flexibility – aims to promote compliance to ensure the success of the regime.

There are two methods for calculating the penalty in regulation 15, applicable to specific infringements.

8.1.2. Method 1 – specific to regulation 15(1)(a), (c) and (d)

Method 1 covers the following types of infringement:

- failing to provide us on or before 1 May following the end of the target period with the information we need to determine whether an operator's progress towards meeting their target is satisfactory (regulation 15(1)(a))
- failing to provide information by the date we specify, when we ask for any other information to determine whether the operator has met its target or is complying with its underlying agreement (regulation 15(1(a))
- providing inaccurate information in response to our request for information to determine whether the target unit has met its target or is complying with its underlying agreement (regulation 15(1)(c))
- failing to tell us of any changes required by the underlying agreement (regulation 15(1)(d))

Amount of penalty

The amount of penalty is the greater of:

- £250
- 10% of the annual value of the CCL discount for the target unit in the base year

As we don't have access to data on the exact amount of CCL discount received by an operator, we will estimate the penalty value using the target unit base year data and the relevant CCL rates and discount values for each fuel type. (We will include any fuels consumed in Annex 1 activities.) CCL rates are available on the HMRC's website: Climate Change Levy rates.

8.1.3. Method 2 – specific to regulation 15(1)(b)

This method applies to target units that provide inaccurate baseline data or target period data (that is, the information we require on or before 1 May following the end of a target period).

Amount of penalty

The penalty is based on the extent of inaccuracy in the data provided by a target unit. In other words, it will be applied to target units that have been found to have misreported data. The amount of the penalty will be the greater of £250 or £12 per tonne of carbon dioxide equivalent of the difference between the actual emissions and the reported emissions for the target period.

Payment of this penalty will be in addition to any need to use the buy-out mechanism to meet a target if, as a result of correcting the error, the target unit is found not to have met its target for the previous target period. This is needed to maintain an incentive to report correctly at reconciliation.

8.2. Issuing penalties

8.2.1. Notice of a financial penalty

Where we are considering the imposition of a penalty, we will first serve a notice of intent and will take account of any representations received in response before we make our final decision. If we decide to impose a financial penalty on a target unit, we will issue a notice setting out:

- the amount of penalty
- the reason for the penalty
- if appropriate, what steps need to be taken to remedy the matter and the deadline for doing this
- the deadline for paying the penalty
- how to pay the penalty

Any penalty fees will be paid into the government consolidated fund administered by Her Majesty's Treasury (HMT).

We may terminate the underlying agreement if the penalty is not paid by the deadline stated in the notice or if we're not satisfied that sufficient progress has been made to remedy the matter covered by the penalty. Failure to comply with the terms of the underlying agreement could also lead to termination.

8.3. Termination of agreements

There are two types of termination in the CCA scheme:

- voluntary termination
- termination by the Environment Agency

8.3.1. Voluntary termination – when a facility leaves the scheme or closes

An operator may voluntarily terminate their agreement. Terminating an agreement will terminate all the facilities covered by that agreement. Facilities can be removed individually through a variation to the agreement.

Even though a facility (or group of facilities) no longer participates in the CCA scheme it may remain open and continue trading. If a facility within a multiple facility target unit closes, this is a rationalisation.

Depending on the scenario, the following action should be taken.

- All the facilities within target unit leave the scheme or close – the sector association carries out a voluntary termination of the agreement on the register.
- A multi-facility target unit where one or more facilities leave the scheme voluntarily but remain operating, leaving one or more facilities in the agreement in the scheme – the sector association carries out a variation to exclude the facility (see section 7.1) on the register to alter the baseline performance for the residual target unit. We will remove those facilities from the register that are leaving the scheme. The sector association should not process any voluntary termination themselves in the register.
- A multi-facility target unit where one or more facilities closes – this is a rationalisation (see section 7.1.3) as production has stopped. The sector association carries out a variation to exclude the facility or facilities. The target and baseline data should not be altered.

In terms of targets, paragraph 72 of the Technical Annex states:

When excluding a facility, if the exclusion of the site is due to it closing and is not part of a change of ownership, then this will be treated as an act of rationalisation and the original target will be retained. If there is a site closure [an exclusion] for any other reason, the

Administrator may vary the target, using the same principles as set out for the addition of a facility under Rule 9.6 (including the application of the stringency test).

Firms in difficulty

The sector association, on behalf of the operator, should process a voluntary termination on the register under the following instance as outlined in paragraph 7 of the Technical Annex:

An Operator must notify the Administrator within 20 working days of the operator or a facility in the target unit becoming a firm in difficulty, as described in the European Commission Community Guidelines on state aid for rescuing and restructuring non-financial undertakings in difficulty (2014/C 249/01).

8.3.2. Termination by the Environment Agency

We may terminate an agreement if:

- the sector association contravenes the agreement
- the sector association fails to agree a variation in a sector commitment proposed under the terms of the agreement
- the operator contravenes the agreement unless the contravention has given rise to a financial penalty
- the operator fails to pay a financial penalty or fails to take steps to remedy the contravention
- the operator fails to agree a variation in target proposed under the terms of the underlying agreement.

Examples of underlying agreement terminations are listed below:

Examples where the operator contravenes their agreement:

- Failure to comply with the charging scheme (that includes non-payment of annual facility subsistence charges)
- Failure to inform us of a site closure or withdrawal from the scheme
- Failure to pay a financial penalty

Examples where the operator fails to agree a variation in a target proposed under the terms of the underlying agreement:

- Failure to agree to a new target following a structural or other change to a target unit
- Failure to agree to a new target following corrections of errors in the base year data

- Failure to agree to changes to the Novem target following removal of a product no longer produced in target period which was produced in the base year.

We must terminate an agreement as it applies to a facility if that facility ceases to be eligible for inclusion in an agreement (Regulation 17(4)).

The sector association or operator has the right to appeal against a decision to terminate an agreement at a First Tier Tribunal as described in Regulation 20(2). Further information on the appeal process can be found at: About - HM Courts & Tribunals Service.

We also carry out administrative terminations for example to remove old facilities from target units after they have successfully transferred to a new operator following a change of ownership.

In Target Period 5, if an agreement is terminated, re-entry is not possible unless within a new entry window.

8.3.3. Re-entry following termination

A facility that has been terminated from the scheme can apply to re-join during a new entrant window. This applies to facilities that were terminated voluntarily or were terminated by the Environment Agency.

Any facility seeking to re-enter should demonstrate that:

- it is eligible to re-join the scheme
- if re-entering as a standalone target unit, it met its target at the previous target periods, or, if not, the operator has paid the buy-out to make good any underperformance against its target at all the applicable previous target periods
- it has paid any missed administration charges or unpaid penalties pertaining to the target unit at the time it was terminated

If it was the not the only facility in a target unit when it terminated, it has to demonstrate the above points but re-join the same target unit with an inclusion variation.

The operator of the terminated facility should apply to the scheme as a new entrant and follow the full process outlined in section 6 providing the necessary evidence and eligibility information. The previous target unit ID number must be given in the application to show the facility has previously been part of the scheme. Failure to provide this information may lead to penalty or termination later if we discover this information was knowingly withheld in the application. We expect the original base year to apply to a facility re-entering the scheme.

Where a facility re-joins the scheme following a termination and the operator is the same as when the termination was made, it needs to comply with both the following conditions.

- It has paid any outstanding penalties, administration charges or unpaid buy-out fees against its previous target unit.
- It takes on a target that is the greater of the percentage target of the previous target unit or the percentage target for the relevant sector or sub-sector.

Where a facility re-joins the scheme following a voluntary termination, but the operator has changed in the interim, the percentage target will be same as for the sector or sub-sector to which the facility belongs.

8.3.4. New operator for a previously terminated facility

If the operator of a facility that was part of a previously terminated agreement changes, the new operator can apply for that facility to be included within an underlying agreement. Although the new operator is not liable for any outstanding CCA penalties, buy-out or charges we cannot include the facility in an agreement until outstanding penalties and charges are paid and any buy-out from the immediately preceding certification period is also paid.

Where records have been transferred to the new operator, the previous target should be taken. If records are not available, a new target can be set using the new entrant's process (see section 4.4). In this instance, we would need evidence to demonstrate that previous records are not available.

8.4. Appeals process

If an operator wishes to challenge a decision taken by the Environment Agency such as to terminate an agreement, not certify a facility (for example. following reporting), to levy buy-out, or for the imposition of a penalty it has the right to appeal to the First-tier Tribunal (the Tribunal). After receiving the relevant notice, the operator has 28 days from the date that the notice was sent to lodge a notice of appeal

The appeal process is set out in four stages. The details of this and the appeal form can be found at the Tribunals website at Ministry of Justice

Alternatively, you can contact the First-tier Tribunal (General Regulatory Chamber):

- by telephone: 0300 123 4504
- by email: grc@justice.gov.uk

9. Auditing the CCA scheme

9.1. What is a CCA audit?

We carry out audits on selected facilities and sector associations to verify eligibility and performance.

9.2. How we select a facility for audit

We select facilities for audit either by using a risk-based approach or by random selection.

9.2.1. Risk-based selection

We select facilities for audit primarily by using a risk-based approach, ensuring where possible that they are spread across a range of sectors. Facilities are selected where one or more factors could increase the likelihood of errors in the information held about the facility, for example:

- facilities that are new entrants or whose agreement was varied between the old and the current schemes and thus may have an increased risk of errors
- facilities where eligibility changed between the old and new schemes
- where a facility's compliance against the 70% rule has changed since the new scheme began
- where the eligible process is more complex

9.2.2. Random selection

For sectors where no risk-based audits are identified, we may select facilities at random to provide a representative sample each year. The facility audit process as seen by the operator is set out below:

1. Notification of selection for audit by email to the target unit contact. This will contain confirmation of whether the audit will be desk or site based.
2. The assigned contracted auditor will get in touch with the operator to agree the date the audit will take place.
3. The auditor may request documentation from the operator to be provided to them prior to the audit.
4. The audit takes place at the agreed time and date either by arranged teleconference for desktop audit or by visit to the facility for a site-based audit.
5. The operator will receive a copy of the initial audit report by email. In relation to the audit findings this may contain a number of actions to be completed by the operator and a date for these to be completed by. The report may also contain recommendations based on best practise.

6. The operator is required to complete the stated actions from the initial report with the communicated deadline.
7. The auditor will request confirmation of any completed actions.
8. The final audit report will be issued by email. This will reflect any action taken in relation to the initial audit report. Overall, the audit will be marked as “passed” or “requires further action”.
9. Operators whose audits are marked “require further action” may be subject to a penalty due to non-compliance.

9.3. How we carry out audits

We will inform the operator of a facility selected for audit via an emailed letter to the administrative contact for the target unit. The auditor will contact the administrative contact for the target unit to discuss and agree a date for the audit. We will also copy sector associations, or their consultants, into the e-mail.

There are two types of audit: a desktop audit or a full site audit. A desktop audit is intended to be less extensive than a full site audit and is normally used for lower risk or random audits. We have appointed consultants who may carry out audits on our behalf.

9.3.1. Desktop audits

We will ask the operator to provide us with data for the facility by the agreed date of the audit. The auditor will review these data at their place of work and hold a phone call on the agreed audit date with the operator’s representatives. A desktop audit typically takes a few hours of the operator's time.

The auditor will produce an initial report based on the data supplied and the responses obtained during the phone call. If issues are identified that cannot be resolved over the phone or by email within an agreed follow-up period, we may escalate the facility to a full site audit.

A final report will be sent once the deadline for resolving any issues from the desktop audit has passed. The possible audit outcomes are described in section 9.4.

9.3.2. Full site audits

When the auditor arranges the audit date, they will ask the operator to provide data for the facility based on the risk(s) identified or outstanding issues from an escalated desk-based audit. The operator should provide this information by an agreed date in advance of the site audit. The auditor will then visit the site to examine the data and facility eligibility in greater detail.

The auditor will produce an initial report detailing their findings and setting out any recommended actions by the facility. This report will also contain a date by when any remaining actions need to be completed.

When this date arrives, the auditor will check that these actions have been completed and will then produce a final report which states the final audit outcome.

9.3.3. Questions we will ask in a CCA facility audit

During both types of audit, the auditor will ask questions around the topics outlined in more detail below. Operators must provide evidence on request to answer the auditor's questions. The operator must keep records throughout the duration of the agreement and for a period of four years following the termination of the agreement.

Eligibility

The auditor will assess the facility eligibility form (FEF) or PP4 form where a facility has been migrated across from the old scheme. They will also examine supporting information for these forms including:

- the regulation under which the facility is eligible to hold an agreement
- what areas of the process meet the eligibility criteria for the sector
- evidence that the site boundary is correctly defined in the eligibility calculations
- how much of the site is eligible to claim the CCL discount, including an assessment of the 70% and any additional 3/7ths of energy associated with the eligible facility
- evidence of the stationary technical unit and directly associated activities for the facility and where these take place within the site boundary and a clear site plan to highlight the location of the STUs, DAAs and any non-eligible areas on the site. If applicable under the 70% rule, evidence that sub-metering has been installed in the appropriate locations

The 70% rule

The auditor will check the eligible and non-eligible energy use on the site to demonstrate whether the site meets the 70% rule. They will look for appropriate evidence of how this was determined as part of the original application and how this is kept up to date throughout the agreement, for example the recommendation to review the PP10/11 forms each year.

Where the eligible energy use is significantly over 70% the operator may demonstrate this by a calculation, preferably in a spreadsheet, showing a list of the non-eligible equipment, the energy ratings (for example in kW), the relevant hours of operation and the level of utilisation (that is, how long each item of equipment is used during the hours of operation). All of this can be reasonably estimated.

Where the eligible energy use is close to the 70% threshold the operator may demonstrate this using temporary meters to check actual eligible or non-eligible energy for a period.

Where the eligible use is less than 70% it must be sub-metered on a continuous basis and recorded.

Data Management and retention

The auditor will assess the baseline and target reporting period data submitted by the operator to demonstrate target performance. This will include both the throughput (production) and the energy data. If the operator has a certified energy management system or a similar standard, the scope of which covers energy data, then it will be used as the starting point of the audit to recognise this good practice and check it is being used effectively. The review of the data will include an examination of:

- the energy units, gross calorific values and any conversion factors used for each fuel or energy source
- meter information or records for each fuel or energy source
- a clear audit trail from the primary records to the data in the register
- evidence of standards of accuracy
- evidence of the calibration of meters (where applicable) and other methods of recording data.

Where applicable, the auditor will ask for evidence of energy consumed by plant carrying out an Annex 1 activity within an ETS installation on the site. Questions will include:

- Was the site included in Phase II and is it included in Phase III of ETS?
- What's the difference between the energy consumed in Phase II and III (if any)?
- Is the energy associated with the ETS installation correctly accounted for?

The CCA Register only contains data for the target unit (TU) as a whole, which may include more than one facility (a ‘bubble’). For a multi-facility TU, the auditor will expect to see evidence of how the data for the facility being audited fits into the overall TU data.

Throughput data

The auditor will examine how throughput data is collected, recorded and reported via the template, and examine the processes in place to ensure it is checked as part of the operator’s quality assurance.

The degree of detail required for throughput data will depend on the type of facility and its complexity. The auditor would expect to see the process and associated records for the baseline year and any relevant target periods.

Energy data

The auditor will expect to see primary evidence of energy use, such as supplier invoices, the operator's own electronic meter readings or manual records. Where the data is in an electronic data management system, the auditor will check that is has been reviewed for historical accuracy and back-ups. Where more than one fuel source is used a representative sample will be taken.

Errors

If the auditor discovers a significant error in either the throughput or energy data, they may raise an action for the operator to correct this through a variation.

Performance reporting

Where relevant, the auditor will check the reported performance data and the supporting evidence of the TU’s performance against its targets. The auditor will check for records of energy saving actions and measures implemented, which operators must retain as part of their obligations under their underlying agreement.

The operator should be able to describe their performance during the target period to explain the reasons underlying that performance, including any step changes at key points in time, for example new technology installation dates.

CCA governance

The auditor will check the processes for managing CCA data collection and reporting. Operators are required by their underlying agreements to keep accurate records and make them available for inspection on request.

9.3.4. What we look for in a CCA Sector Audit

We may audit target period performance data for a sector. This will cover both the handling and processing of operator data by a sector association and include an examination of a representative sample of facility data.

Data handling and processing

The auditor will review the sector association's procedures for collecting, processing and reporting data from operators. The auditor will expect to see evidence that the sector has a robust management system which sets out the responsibilities for data management, quality checks and management reviews in place to ensure accuracy.

The auditor will assess the data reported for a representative sample of target units in the sector. The selection will include specific target units where we have particular concerns about the data that has been reported.

Audit of target unit or facility data

The auditor will expect to see copies of primary evidence provided to the sector association, where applicable and will check that the data held in the CCA Registry agrees with that provided by operators or has been corrected and agreed with the operator prior to submission.

Auditors will check data for: different types of target (where applicable), correct application of any target tolerances, and that any buy-out fees have been paid.

Absolute Energy Targets

The auditor will check that any required adjustment to targets for a fall of 10% or more in throughput has been made and reported correctly.

Relative Energy Targets

Where the operator has opted to apply the special reporting mechanism the auditor will check that calculations required have been carried out correctly for both the base year and reporting period.

Novem Energy and/or Carbon Targets

For Novem targets (whether energy or carbon) the auditor will check any SRM calculations and also check that Novem calculations to adjust for product data have been carried out correctly.

9.4. Possible audit outcomes

An audit has two possible outcomes:

- pass – no further action required
- requires further action – the report will contain recommendations to address current issues and to reduce future risks of non-compliance (for example, the need for one or more variations to the agreement)

The audit report will be sent to the operator. The sector association will be informed of the audit outcome.

9.4.1. What happens next

If the facility passes the audit, no further action is required by the operator.

If follow-up actions are recommended, we will work with the operator to agree a timescale for those actions. We may suggest a follow-up meeting and possibly carry out a further audit depending on the severity of the issues requiring attention.

If the operator does not take action in response to the audit's recommendations within the agreed timescale, we may take enforcement action, which could include serving a civil penalty on the operator or, in the worst case, terminate the agreement due to non-compliance.

If an audit discovers an operator is in the wrong sector, they will have to change sectors. For how to do this see section 4.4.1.

10. Target period reporting

10.1. Introduction

This section covers:

- what data needs to be reported and when
- how to report
- reporting requirements for non-standard circumstances
- reporting variations
- the buy-out and surplus mechanisms
- what to do if you discover an error in your reporting

10.2. What is target period reporting?

At the end of each target period, energy consumption and throughput data for every target unit must be reported via the register. Comparison of these data against the target unit's target allows us to assess whether the target unit has met its target as set out in its underlying agreement, schedule 6.

Facilities included in target units that meet or overachieve against their targets will automatically be re-certified for the next certification period.

During target periods 1 to 4, overachievement was converted into a carbon dioxide equivalent (CO_2e) which could be banked and used by the target unit in subsequent target periods to offset underperformance in the surplus mechanism.

In target period 5, the surplus mechanism does not apply and no banked surplus from previous target periods can be used to meet the TP5 target. A target unit that doesn't achieve its target will need to pay a buy-out fee to be re-certified.

After each target period all operators must report their energy consumption and throughput. The timeline and process for doing this are described in the following sections.

10.3. The reporting process

Operators must report data for all their facilities that were in the scheme on the last day (31 December) of the target period and according to the structure of target units on the last day of the target period.

- The data for facilities (other than rationalisations), that left the scheme on or before the last day of the target period are not to be included in a target unit target period reports.

- The data for facilities that joined the scheme after the start of a target period are required from the date of assent in their target unit's underlying agreement. In practice this means reporting data from the point of the nearest preceding record to the date of assent.
- The data for facilities that have changed operator during the target period are required from the start of the target period, or the date when their continuous participation in the scheme started, whichever is later. The operator for the target unit that the facility is in on the last day of the target period is responsible for reporting and will need to obtain data from previous operator(s).

The target period report for a target unit must therefore include data for all facilities that are still in the target unit at the end of the target period for:

- the whole target period for facilities that were in the target unit at the beginning of the target period
- from the date of assent for facilities that joined the scheme during the target period
- from the later of the date when continuous scheme participation started or the first day of the target period for facilities that changed operator during the target period

Terminated facilities cannot re-enter in the next target period unless they meet the criteria listed in section 8.3.3 (Re-entry following termination).

Where the operator has varied the agreement because the installation's energy consumption went from less than 70% to equal to or greater than 70% within a target period, the operator will report as if the whole site was eligible over the entire 24 months of the target period or for that part of the period when they were scheme participants.

New entrant facilities with a base year overlapping with or falling within the target period being reported on should report energy consumed and throughput incurred during the target period between the date of assent to the underlying agreement and the end of the target period.

The data for a facility that closed due to rationalisation may be included in the target unit report for the period up to its closure.

10.3.1. What to report

The operator of each target unit is required to report all data necessary to establish its performance in the previous target period. For example, for the second target period, the operator on 31 December 2016 must report on or before 1 May 2017. This includes the energy consumed in the target unit and the throughput.

The operator of the target unit must collect the individual facility energy consumption and throughput data (as detailed in section 3) and then use this information to report against its target unit target, using energy and throughput data for all the facilities contained

within the target unit's underlying agreement. These data may be reported as either an aggregate for the target unit, or individually for each facility.

The agreed calculation method for determining a target facility's throughput for a target period is set out in the underlying agreement for the target unit.

In order to assess performance, the target unit's performance, expressed in its chosen target currency (absolute or relative/carbon or energy), is compared against its target, and expressed in the same currency terms. The difference between performance and target is then determined, expressed in target unit currency terms, and converted into an equivalent quantity of CO_2e. The mechanism for making this conversion is set out in the target unit's underlying agreement.

Section 3.1 contains more information on the types of energy and fuels that are included in the scheme.

10.3.2. What not to report

The following energy types cannot be counted in CCAs and should not be reported:

- Fuel used as a chemical feedstock
- Heat recovered from exothermic reactions
- Electricity generated from recovered heat

More detail on each of these energy types is provided in section 3.2.

10.3.3. Format for reporting

A set of workbooks is available to assist with the calculations needed for reporting and to present performance data in a standardised format. Partially populated workbooks specific to each target unit are available to download from the register from the day after the end of the target period (1 January). The generic templates used are provided in Appendix H. Appendix I describes how to use the reporting workbooks.

10.3.4. Who is responsible for reporting?

The operator is responsible for providing all the data necessary to calculate performance at the target unit level. The sector association will liaise with its operators to collate the required data and to upload it to the register via a completed reporting workbook by the reporting deadline of 1 May.

10.3.4.1. Change of operator

The operator at the end of each target period is responsible for reporting on the target unit as it was structured on 31 December. By default, it is this operator that any

Memorandum of Account (MoA) for buy-out will be sent to, even if the underlying agreement has subsequently been amended. Sectors should speak to us on a case by case basis if they wish to change this arrangement.

Where the operator of a facility or target unit changes after 31 December, the responsibility for reporting remains with the operator who held the agreement on 31 December. It is for the operators concerned to decide how this will be achieved and, in practice, a new operator may report on behalf of the old operator. Our requirement is that information for the full target unit comprising all its facilities is reported.

If there is no report or if inaccurate information is supplied a penalty may be levied. If we have insufficient information to determine whether the target has been met we may refuse to recertify the facility or facilities for the new certification period.

10.3.5. Timeframes for reporting

Each target period is 24 months long, beginning on 1 January of month 1 and ending on 31 December of month 24. Target unit reports must be submitted on or before 1 May in the year following the end of each target period.

Target Period Reporting workbooks for each target unit are pre-populated with information taken from the register, based on the latest version of the underlying agreement. To ensure the workbook is correct any variations must be completed and assented to before the reporting workbook is generated and downloaded for reporting.

10.4. Target adjustments for previous target periods

In two circumstances variations may be submitted to reflect changes which may impact on a target unit's target. This is where:

- the actual throughput for the target period is less than 90% of twice the throughput in the base year (absolute targets only)
- there has been an unexpected disruption in supply

These variations must be submitted in the month following the end of each target period, for TP5 between 1 and 31 January 2023. These variations must be assented to ensure that the correct target period reporting workbook is available on the register for completion.

For TP 4 additional circumstances were included for the impact of COVID-19.

The Technical Annex in paragraph 53A states that:

When an Operator made a notification that there had been a change in operations of a facility as a direct result of COVID-19, which materially affected target period 4

performance, the Administrator may have adjusted the target period 4 target. Adjustments were only made where the calculated additional buyout (net of surplus) was valued at over £1,000 or, if under £1,000, where this was greater than 10% of the annual Climate Change Levy discount received for that target unit. The Operator must have reported data for the full target period 4 period; however, the target would have been adjusted to provide a final outcome in terms of buyout equivalent to performance for 2019 only. The Operator was required to provide the Administrator with separate 2019 and 2020 monthly production and energy data in order for this adjustment to be made.

Paragraphs 50 to 51A in the Technical Annex states:

An Operator must notify the Administrator on or before 31 January in the year following the end of a target period if the following circumstances have occurred:

- In respect of a target unit which has an absolute target if the throughput in the target period was less than 90% of 2 times the throughput in the base year.
- If there has been an unexpected disruption in the supply of energy to the target facility or an unexpected failure in on-site electricity generation plant serving the target facility, which causes the target unit to fail to meet its target. Operators could also make a notification to the Administrator if there had been a change in operations of a facility which had materially affected target period 4 performance as a direct result of measures taken to control COVID-19 during 2020, resulting in an increased level of buyout (net of surplus) than compared to performance had it continued at 2019 levels by 31 January 2021.

In order to determine that there has been an unexpected disruption in the supply of energy to the target facility or an unexpected failure in on-site dedicated electricity generation, data and other evidence will need to be provided to the Administrator demonstrating the following:

- That the supply disruption actually took place and the duration of the disruption.
- That the supply disruption was unexpected, and that the nature of energy supply contracts is such that the disruption could not have been anticipated. In the case of failure of electricity generation plant serving the target facility, it will be necessary to prove that supplier recommended maintenance procedures and schedules had been followed and that the total period of down time was over and above what would be required for routine maintenance over the target period.

In order to determine that there had been a material COVID-19 related impact to target period 4 performance, data and other evidence needed to be provided to the Administrator demonstrating the following by 1 March 2021:

- The nature of the change in operations, for example facility closure or significant drop in production, and explanation of how this has affected target period 4 performance. This must include any non-COVID-19 related changes.
- Monthly energy and production data for 2019 and 2020 for the facility(s).

10.4.1.1. Throughput falls by more than 10% of twice the base year throughput (absolute targets only)

Paragraph 52 of the Technical Annex states:

“When an Operator has made a notification that throughput has decreased during a target period by more than 10% from 2 times the throughput in the base year, the Administrator may adjust the previous target using either method 1 or method 2 below.

Method 1

Method 1 must be used by the Administrator if the actual target period throughput is less than 90% of 2 times the throughout in the base year and if no additional information is provided. Except as provided below, the target must be adjusted directly in proportion to the reduction in throughput (i.e. by the percentage by which the actual target period throughput is lower than 2 times the base year throughput).

Method 1 provides a taper to be applied in cases where the actual throughput at the target period is between 10% and 20% less than 2 times the base year throughput. The taper adds back some energy (or carbon) to the absolute target in such situations so that there is not a sudden and precipitous decrease in the value of the absolute target as soon as the actual target period throughput is >10% less than 2 times base year throughput. The full value of the taper is added back to the target if the actual target period throughput is exactly 10% less than 2 times the base year throughout and no taper is added back to the target if the actual target period throughput is 20% or more less than 2 times the base year throughput. The full value of the taper is 10% of the absolute energy target. The value of the taper added back to the absolute target varies linearly between actual target period throughput being 10% and 20% less than 2 times base year throughout.

Method 2

Method 2 must be used by the Administrator where an Operator has provided a statistically valid energy – throughput relationship.

To demonstrate a statistically valid energy – throughput relationship, an operator must show that there is a correlation factor with an r-squared value of greater than [0.8] between energy consumed in the target facility and throughput. If the r-squared value is less than [0.8], method 2 must not be used and the Administrator must use the default method 1 calculation to revise the target. The target adjustment takes account of base load energy use and is achieved by reducing the target by a percentage. This percentage is the extent to which the energy target, for the agreed level of throughput, is less than the energy that would have been consumed in the reference year for that same level of throughput. To determine the latter, the Operator must establish an energy/throughput curve for the reference year.”

A target calculator has been developed to assist with target adjustment as a result of a drop in throughput. This workbook is provided in Appendix H and supports the use of both method 1 and method 2.

10.4.1.2. Unexpected disruption to energy supply causing the target unit to fail to meet its target

Paragraph 53 of the Technical Annex states:

> "When an Operator has made a notification that there has been an unexpected disruption in the supply of energy to the site or an unexpected failure in on-site dedicated electricity generation the Administrator may adjust the target to take account of the difference between the quantity and type of primary energy consumption that would normally have been required to support operations for the period of the supply failure and the quantity and type of primary energy consumption that was actually required to support operations during the period of the failure. The difference between the two will be taken as the additional energy (or carbon) incurred by the target facility as a result of the unexpected supply disruption."

The operator of the target unit needs to provide the following:

- formal, qualitative evidence that the supply of energy was disrupted, or that on-site dedicated electricity generation plant failed
- quantitative evidence of the duration of the disruption of supply – for example, a letter from the energy supplier, or an extract from the energy management system
- qualitative evidence to demonstrate that the failure could not have been anticipated – for example, evidence that electricity generation plant adhered to the maintenance regime specified by the plant supplier and that the plant was not scheduled for maintenance for a period comparable to the duration of the supply failure. Examples of evidence could include an extract from the maintenance logbook schedules and/or a letter from the energy supplier providing evidence that the site was not on an interruptible energy supply contract.
- data to allow an adjusted target to be created for the relevant target period

The adjusted target will take account of the difference between the primary energy consumption that would normally have been required to support operations for the period of the supply failure, and the primary energy consumption that was actually required.

The difference between the two will be taken as the additional energy (or carbon) incurred by the target facility because of the unexpected supply disruption.

Examples for two different supply disruption scenarios (one with CHP and one without), are provided in Appendix H. These examples provide guidance on the data to be collected and calculations undertaken.

A target calculator has been developed to provide the adjusted target for all target types. This workbook is provided in Appendix H.

Surplus cannot be generated in respect of a target adjustment following our acceptance of a supply disruption notification. This means that if the additional energy consumed because of the supply disruption is greater than the gap between actual energy consumption and target energy consumption, then the target is adjusted to exactly equal the actual performance, thereby preventing the generation of surplus.

If the supply disruption did not cause the target unit to fail its target no adjustment to the target will be made.

Variations related to the disruption of power supply cannot be submitted through the register until the reporting window opens on 1 January following the end of the target period. However, sectors with target units that are affected by this issue should contact us and begin gathering the required data as soon as possible.

10.4.2. Buy-out and surplus mechanisms

The buy-out and surplus mechanisms are designed to manage circumstances where target units under or over-achieve against their targets.

10.4.2.1. Surplus

The surplus mechanism could be applied in target period 1-4, however, in target period 5, the surplus mechanism does not apply, and banked surplus may not be used.

10.4.2.2. Buy-out

The buy-out mechanism is available at the end of the target period to any target unit that fails to meet its target.

The buy-out fees are as follows:

- £12 per tCO2e for TP1 and TP2
- £14 per tCO2e for TP3 and TP4
- £18 per tCO2e for TP5

Buy out is payable to a consolidated fund administered by Her Majesty's Treasury (HMT). Payment of this fee will enable the facilities in a target unit to continue to be certified in the scheme and continue to receive the CCL discount. The facilities of a target unit whose

operator chooses not to pay the buy-out fee will not be re-certified in the scheme in the new certification period.

A buy-out payment could also be due where a reporting error is discovered after the end of the target period and, as a result of this error, the target unit is found to have failed to meet its target for the previous target period(s). The requirement to pay this fee is known as secondary buy-out. In target period 5, the calculation of the buy-out fee does not take account of any surplus previously banked by the target unit on the register.

If a buy-out fee is due the target unit operator will be sent a Memorandum of Account (MoA) notice with details of:

- the fee to be paid (and its calculation)
- the date by which it must be paid (cleared funds received)
- how to pay the fee and to whom (including bank account details and a unique payment reference code)
- the consequences of not paying the fee

Once funds are cleared into the consolidated fund, the register will be updated, and the target unit recertified and included on the next Reduced Rate Certificate list that is published. If the buy-out fee is not paid by the due date, a notice issued informing operator of intent not to re-certify will be issued to the operator.

The buy-out fee must be paid (and funds cleared) on or before 1 July following the end of each target period. The clearance of funds is dependent on the banking system and operators must allow sufficient time. Payment must be provided by BACS/CHAPS.

If the revised target data are provided at any time other than the reporting period leading up to the 1 May, for example, where a reporting error is corrected following an audit, the resulting buy-out fee must be paid within 30 calendar days of the date shown on the MoA notice.

10.4.3. Recertification

10.4.3.1. What is recertification?

If the operator of a target unit fails to meet its target and chooses not to pay the buy-out fee by the due date:

- we will not recertify the facilities in that target unit for the next certification period
- the operator will not be able to claim CCL discount for any of the facilities in the target unit from the start of the next certification period

Once we have confirmed receipt of the buy-out fee due for a target unit, we will recertify the facilities in the target unit from the date of receipt. The operator will be able to claim

CCL discount from the date of recertification, not from the beginning of the certification period. The operator will therefore not be able to recover the lost CCL discount retrospectively.

Example

The operator of a target unit failed to meet its **TP1 target** and chose not to pay the buy-out fee required by 1 July 2015. We didn't recertify the facilities at the start of the **second certification period** (1 July 2015). This meant the operator was not able to claim the CCL discount for the second certification period (01 July 2015 – 30 June 2017).

If the operator of the same target unit met its **TP2 target** (or paid the TP2 buy-out fee), we would recertify the facilities from the start of the **third certification period** (1 July 2017). The operator would be entitled to claim CCL discount for the whole of the third certification period (01 July 2017 – 30 June 2019).

If the operator paid the **TP1 buy-out fee** on 01 September 2015, we would recertify the facilities from 1 September until the end of the **second certification period**. The operator would be entitled to claim CCL discount for the period 01 September 2015 until 30 June 2017. (It would not be entitled to claim CCL discount for the period 01 July 2015 to 31 August 2015.)

10.4.3.2. What happens if a facility which has not been recertified is purchased by another operator?

We may only enter into a new underlying agreement covering a facility which has not been recertified with the new operator if we are satisfied that:

- there are no outstanding penalties or charges which occurred under the previous underlying agreement
- progress in the immediately preceding certification period towards meeting targets under the previous underlying agreement is, or is likely to be, satisfactory. Progress may be made through paying the buy-out fee.

10.4.4. Calculation of carbon emissions from the target facility

Paragraphs 46 to 49 in the Technical Annex state that:

> The total number of units of carbon emitted from a target facility during a target period must be calculated by multiplying the units of energy consumed of each fuel used in the target facility during the relevant target period, by the relevant carbon emission factor set out below for that fuel. Carbon emissions (kgC) = Fuel (kWh) × Carbon Emission Factor (kgC/kWh)

Table 1 - Primary energy

Fuel type	Carbon Emission Factor (kgCe/kWh)
Grid and Renewable Electricity	0.0546
Gas Oil	0.0758
LPG	0.0585
Naphtha	0.0646
Natural Gas	0.0505
Coal	0.0794
Heavy Fuel Oil	0.0732
Jet Kerosene	0.0676
Refinery Gas	0.0671
Coke	0.0117
Petrol	0.0643
Ethane	0.0545
Petroleum Coke	0.0908

With the exception of coke and ethane, the figures in table 1 are taken from table 1c of annex 1 of 2012 Guidelines to Defra/DECC's GHG Conversion Factors for Company Reporting. In the case of coke and ethane, the figures are carried over from fuel conversion factors in CCA10 for the old CCA scheme. The figure for electricity is the 5-year rolling average for 2010 in table 3c of annex 3 of 2012 Guidelines to Defra/DECC's GHG Conversion Factors for company reporting. The figure of 0.0546 kgC/kWh of electricity is in primary energy terms and 2.6 units of primary energy are assumed to be associated with each unit of consumed electricity.

Process carbon emissions

Carbon emissions from industrial processes must not be counted as part of a target facility's carbon emissions unless they result from combustion or oxidation of fossil fuels. Process emissions do not include emissions from the combustion of fuel where heat is not recovered and consumed by the target facility, as is the case with flaring.

Carbon emissions from electrodes must not be counted as part of a target facility's carbon emissions.

Calculation of throughput from a target facility

The calculation of a target facility’s throughput for each target period must be agreed with the Administrator and set out in the Underlying Agreement for the target unit.

10.4.5. Calculation of surplus and buy-out for relative target units

10.4.5.1. Tolerance

The calculations we perform to determine buy-out and surplus for target units with a standard relative target type take account of any tolerance we have allowed on the percentage target.

The tolerance is derived by allowing ± 0.5 energy units and ± 0.5 throughput units at the resolution used for the base year and the target period.

For example, if throughput is measured to 3 decimal places, the throughput tolerance for the base year and target period will be +/- 0.0005 throughput units.

Considering the scenario where both the energy and throughput are available to zero decimal places, the target at the target period will be met if:

$$\frac{Energy_N}{t_N} \leq \frac{Energy_0 + 1}{t_0 - 1} \times (1 - TP\%)$$

Where:

- TP% is the improvement target expressed as a percentage
- $Energy_N$ and t_N are the actual energy and throughput in the reporting period
- $Energy_0$ and t_0 are the energy and the throughput in the base year

This calculation assumes a similar magnitude for reported energy and baseline energy and reported throughput and baseline throughput allowing the tolerance to be determined using only the base year data.

The above equation can be reformulated to calculate the percentage tolerance on the target period percentage target, that is TP%, through the equation:

$$\%Tol_{TP} = TP\%_{calculated\ using\ SEC_{0_{tol}}} - TP\%_{calculated\ using\ SEC_0} = (1 - TP\%) \times \left(1 - \frac{SEC_0}{SEC_{0_{tol}}}\right)$$

Where SEC_{0tol} is calculated as:

$$SEC_{0_{tol}} = \frac{Energy_0 + 1\ unit\ of\ energy\ at\ the\ resolution\ available}{t_0 - 1\ unit\ of\ throughput\ at\ the\ resolution\ available}$$

The percentage target tolerance $\%Tol_{TP}$ is equivalent to a tolerance on the SEC value, that is SEC_{tol}, which is calculated as:

$$SEC_{tol} = \frac{SEC_0}{1 - \left(\frac{\%Tol_{TP}}{1 - TP\%}\right)} - SEC_0$$

This tolerance is given to the agreed SEC value for the target period, that is, SEC_n.

10.4.5.2. Buy-out

A buy-out will be determined if:

$$SEC_N > SEC_n + SEC_{tol}$$

Where:

- SEC_N is the actual SEC in target period determined from reported energy and throughput
- SEC_n is the agreed target SEC in target period
- SEC_{tol} is the tolerance on SEC value

The buy-out in energy terms for the target period N will be:

$$Energy_{buyout_N} = \left(SEC_N - (SEC_n + SEC_{tol})\right) \times t_N$$

Where t_N is the reported throughput in the target period N.

The buyout in CO_2e terms for the target period N will be:

$$CO2e_{Buyout_N} = Energy_{buyout_N} \times TP\ Carbon\ to\ Energy\ factor \times \frac{44}{12}$$

This will be rounded up to the nearest tonne CO_2e (that is. the highest whole tonne) and so a buy-out of at least one tonne of CO_2e will be incurred if:

$$SEC_N > SEC_n + SEC_{tol}$$

10.4.5.3. Example calculation

A target unit has the following baseline/TP parameters:

- $Energy_0$ = 150,000 kWh
- Throughput t_0 = 100.0 tonnes
- SEC_0 = 1,500.000 kWh/tonne
- %TP1 = 10%

Therefore, its SEC target for Target Period 1, that is, SEC_n is:

$$SEC_n = SEC_0 \times (1 - \%\,TP1) = 1{,}350.000\ kWh/tonne$$

The tolerance in percentage target terms will be:

$$\%Tol_{TP1} = (1 - TP1\%) \times \left(1 - \frac{SEC_0}{SEC_{0_{tol}}}\right) = (1 - 10\%) \times \left(1 - \frac{1{,}500.000}{\left(\frac{150{,}000 + 1}{100.0 - 0.1}\right)}\right) = 0.091\%$$

The tolerance on its SEC for Target Period 1 will be:

$$SEC_{tol} = \frac{SEC_0}{1 - \left(\frac{\%Tol_{TP1}}{1 - TP1\%}\right)} - SEC_0 = \frac{1{,}500.000}{1 - \left(\frac{0.091\%}{1 - 10\%}\right)} - 1{,}500.000 = 1.518\ kWh/tonne$$

This means that the target unit will meet the target if the actual performance (SEC_N) for Target Period 1 is in the range:

$$1348.482 \leq SEC_N \leq 1351.518$$

In Target Period 1 the target unit reports its actual performance as:

- $Energy_0$ = 270,250 kWh
- $Throughput_0$ = 200.0 tonnes
- SEC_N = 1351.250 kWh/tonne

Without taking into account the tolerance, the TU would have not met the target. Taking tolerance into account the result is that the target is met within tolerance and so no surplus or buy-out applies.

If the target unit had used a bit more energy in target period 1, say 270.350 kWh, then the SEC_N would be 1351.750 kWh/tonne and a buy-out would be required.

10.4.5.4. Surplus

A surplus will be determined if:

$$SEC_N < SEC_n - SEC_{tol}$$

The surplus in energy terms for the target period N will be:

$$Energy_{surplus_N} = \left((SEC_n - SEC_{tol}) - SEC_N\right) \times t_N$$

Where t_N is the reported throughput in the target period N.

The surplus in CO2e terms for the target period N will be:

$$CO2e_{surplus_N} = Energy_{surplus_N} \times TP\ Carbon\ to\ Energy\ factor \times \frac{44}{12}$$

This will be rounded down to the nearest tonne CO2e (that is, the lowest whole tonne) and so a surplus will not be gained until the amount calculated exceeds at least one tonne of CO2e.

10.4.5.5. Scenarios where the target unit joins the scheme part way through the target period

When a target unit joins the scheme part way through the target period, the buy-out/surplus will be calculated in the same way as it would have been if the target unit had been in the scheme from the start of the target period.

For example, in the case of the buy-out calculation, $Energy_{buyoutN}$ will be:

$$Energy_{buyout_N} = \left(SEC_n - (SEC_n + SEC_{tol})\right) \times t_N$$

The actual target period throughput will be lower than it would have been if the target unit had been in the scheme since the start of the target period. Therefore, the size of the surplus/buy-out will be in proportion to the length of time the target unit has been in the scheme.

10.4.6. How to report

Reporting is through the online CCA register. For further information on how to download the partially populated target unit-specific reporting workbooks for the sector, please refer to the IT User Guide. The following sections explain how to use these workbooks.

10.4.6.1. The reporting workbook

Sector associations can download the partially populated reporting workbooks from the CCA register. The reporting workbook for each target unit is specific to the target type specified in the agreement and will be one of the following types:

- Absolute energy target
- Novem carbon target
- Novem energy target
- Relative energy target

The sector association must complete the workbook with data for the facilities making up the target unit. Some sections are specific to the target unit target type (for example

Novem, SRM), meaning that data requirements may vary between the target units in a sector.

Reporting workbooks and examples can be found in Appendix H. For further information on completing and submitting the reporting workbook, please refer to Appendix I.

10.4.7. Reporting requirements for non-standard circumstances

A few non-standard circumstances may arise when compiling report data. The following paragraphs set out the methods we require operators to apply when dealing with these circumstances.

10.4.7.1. Facilities that entered the scheme during migration without the required sub-metering in place

At the beginning of the current scheme, target units from the old scheme were migrated into the new CCAs. At this time, facilities which required sub-metering but did not have it in place were allowed to stay in the scheme. This was on the condition that the required sub-meters were installed by 31 May 2013. As a result, several facilities that migrated into the current scheme had up to five months where sub-meters were not in place and, consequently, for which metered energy consumption of the target facility cannot be reported.

Sectors carried out variations to reconstruct the original baseline for target units affected by these circumstances.

For target period reporting, the following steps must be taken to determine energy use for the entire target period:

1. Use the available sub-metered data to calculate the percentage of total site energy use that was used in the target facility.
2. Apply the percentage to the whole site data collected during the period of up to five months where no sub-metering was in place.
3. Add the result of step 2 to the target facility energy use measured through sub-meters during the remainder of the target period.

10.4.7.2. The extent of the eligible facility changes during the target period

The extent of the eligible facility, with respect to the site, is considered to have changed in the following circumstances:

- the energy used in the installation increases above 70% of the total site's energy use and the facility becomes fully eligible
- the energy used in the installation decreases below 70% of the total site's energy use and the facility becomes partially eligible

Fully Eligible Reporting

Where a facility's eligibility changes from below 100% to 100%, the operator is expected to have metered data available on which reporting can be based. The facility will now be the whole site and the whole site's energy can be defined by the main site meters. A variation will have been submitted to revise the baseline and the numerical targets of the target unit. The target unit will be required to report against the revised eligible facility (whole site) for the entire 24-month target period.

Rules on reporting do not change the rules on claiming the CCL rebate from HMRC. Discount may only be claimed on the energy that is eligible for the discount at that point in time.

Part Eligible Reporting

If the facility has been re-assessed as part eligible and where the operator has a full 24 months of sub-metered data, the sector should only report against the revised eligible facility. If this is not the case, the sector must wait until the next target period to amend the baseline, by which point sub- metering should have been installed. Facilities that are assessed as part eligible during a target period will have their baseline and targets revised after the end of the target period, once sub- metering has been installed and actual energy can be reported. For example, a target unit would therefore need to report at the end of TP1 on the basis of its original eligibility (100% of the site for the implicated facility) and targets.

When 12 months of sub-metered data is submitted, the reconstructed baseline and target will only apply to the current target period onwards and will not be applied to previous target periods.

If sub-metering cannot be put in place for the beginning of the next target period (that is, 1 January 2015 for target period 2 (TP2), then the target unit must report actual sub-metered energy for the months in the next target period for which sub-metering is in place. For the period of TP2 for which sub-metering was not in place, it will report total site energy multiplied by a factor, with the factor being the ratio of energy consumed in the installation (plus 3/7th, if applicable) to the total energy consumed on the site during the period of TP2 for which sub-metering was in place.

10.4.7.3. A facility leaves or joins ETS during the target period

The extent of the target facility changes if an ETS installation overlapping with a CCA facility exits ETS mid-way through the target period (for example. exiting at end of 2015 because its combustion plant fell below the 20MW threshold), or if some of the energy consumed by a CCA facility becomes covered by ETS during this time. This will also result in a revised target facility.

Under these circumstances, the operator should report against the revised target facility (including/ excluding fuel which was/is covered by ETS) for the full target period within which the change took place. Data should be available to report against the new target facility for the full 24 month target period.

10.4.7.4. There are metering faults during the reporting period

There may be gaps in energy supply data due to a metering fault that occurred during the target period. In these circumstances it is allowable to use one of four estimation techniques to fill the gaps:

1. Using estimated bills to obtain the data.
2. Using a pro-rata technique to extrapolate actual data to cover the period of missing information.
3. Using data for the same supply for another period of time for example another month as a proxy for the missing data. 4. Using energy cost data to estimate the energy use for the missing time period.

The operator should decide which of these estimation techniques is the most appropriate for the circumstances, working with its facilitator.

Missing supplier invoices are not an allowable reason for having gaps in data. The onus is on the operator to take its own meter readings at regular intervals in order to reduce reliance on supplier invoicing information.

More information on each of the four estimation techniques is provided in "How to manage energy recording and reporting when a meter fails" in Appendix F.

10.4.7.5. A facility within a multiple facility target unit leaves the scheme

Where a facility in a multiple facility target unit leaves the scheme but continues to operate (for example it leaves under the mineralogical/metallurgical CCL exemption provisions), the target unit is re-baselined to reflect the removal of the terminating facility's base year energy and throughput. The original percentage improvement target is then applied to this revised baseline performance to calculate revised numerical targets for the target unit remaining in the scheme.

When reporting performance, the target unit remaining in the scheme must not include the leaving facility's energy and throughput.

10.4.7.6. A target unit or facility becomes ineligible during the target period, but its agreement is not terminated

The operator of a facility that ceases to be eligible for a CCA must notify us and terminate its agreement as it applies to the facility as soon as possible. See section

7.5.1. If the operator fails to terminate before the end of the target period, it will be required to include the facility's performance in its report for that target period. In this circumstance, energy and throughput data must be reported up to the date at which the target unit became ineligible.

10.4.7.7. A target unit with a capacity throughput has a change in capacity

The throughput of some target units is expressed in terms of capacity such as the facility's area rather than actual physical throughput such as kg of product processed. Account must be taken of any changes to capacity throughput using a 'Time Weighted Capacity' for the target period report in the following circumstances:

- A facility using capacity as the throughput measure joins the scheme part way through the target period
- A facility expands (or contracts) its capacity during the target period.

In both of these cases the energy consumption attributable to the facility will be a function of capacity and the time that it is available. Therefore, where the capacity changes from the base year value, or the capacity is only in the scheme for a part of the target period, expressing performance as energy consumption divided by 2 x base year capacity is inappropriate because the base year capacity is not relevant for the whole of the target period.

The operator of the target unit must report a 'Time Weighted Capacity' for the target period, calculated by dividing the actual capacity in operation at any one time by the number of months in the base year (12 months) and then multiplying the result by the number of months for which the capacity was operated within the target period.

$$Time\ weighted\ capacity = \left(\frac{Capacity}{Duration\ of\ base\ year}\right) \times Duration\ of\ operation\ in\ target\ period$$

$$Time\ weighted\ capacity = \sum^{i} \left(\frac{Capacity_i}{Duration\ of\ base\ year} \times Duration_i\ of\ operation\ in\ target\ period\right)$$

Where *i* represents the time when each change in capacity occurred.

target period. For new entrants we expect units of days to be used in the adjustment because the day of entry into the scheme is known. For adjustments involving a change in capacity, identifying the day on which the capacity changed may be more difficult. If this cannot be done, then using months in the adjustment is permissible. If using months, you should only count the capacity for a month if that capacity ran for the whole month.

10.5. Treatment of errors

If you report information as part of your target period reporting that differs from the information that should have been reported, you must correct the errors. You may be liable for penalties for the errors. See section 8 for details of the CCA penalties regime. Errors that could affect the information in your performance report include errors in:

- The energy supplies you have used during the target period (such as missing energy supplies or data entered against the wrong energy supply in the target period reporting template)
- How much energy you have used (such as inaccurate data, units or conversion factors)
- Throughput information (such as inaccurate data, units or conversion factors)
- Incorrect target values in the report template due to errors in the base year data

If the error in your report occurs due to an error in the underlying agreement, you will need to correct the error in the underlying agreement before resubmitting the performance report. Similarly, if an error in the report data means that the target adjustment rules have not been applied correctly, these will need to be processed before resubmitting the performance report.

See section 7 for further guidance on submitting a variation to your underlying agreement.

10.5.1. Resubmissions prior to 1 May reporting deadline

If you find an error before the reporting deadline (known as “initial” or “primary reporting”), we can accept a corrected version.

To make a correction please send an email to cca-help@environment-agency.gov.uk stating the target unit identifier for the report you want to change. We will process these requests as soon as practicable and unlock your report on the CCA register.

A new version of the report template will then become available to download from the register.

This new template should then be filled in with the corrected data and uploaded to the register.

10.5.2. Resubmissions through secondary reporting

If you find an error after the reporting deadline, you may only submit a correction after the start of the new certification period (this is known as “secondary reporting”).

This restriction on corrections is necessary to ensure that we publish an accurate list of facilities that are re-certified in the new certification period.

You should notify us of an error in your report, by emailing cca-help@environment-agency.gov.uk. You should identify the error(s), how it was identified and the steps you have taken to correct it.

When we are satisfied that you will be able to submit corrected data and, where relevant, have completed a variation to correct your underlying agreement we will “unlock” your report on the CCA register. A new version of the report template will then be available to download from the register. This new template should be filled in with the corrected data and uploaded to the register.

10.5.3. Re-assessing performance against the target and changes to surplus or buy-out following secondary reporting

Once you have submitted your correction, we will reassess the target unit against your target. If the changes affect the amount of the buy-out fee or surplus calculated, we will update your account in the register with the new information.

If the target unit has met its target but there is an increase or decrease to the calculated surplus, we will update the CCA register but we won’t formally notify you of this. If we find the target unit has failed its target, then we will notify you.

If the buy-out fee decreases, we will write to the operator explaining how you may claim a refund of any buy-out fee due that has already been paid to BEIS.

If the buy-out fee increases, a notice and MoA will be sent to the operator requesting payment of the (additional) buy-out fee due. The notice will be as set out in 10.4.2.2.

11. List of abbreviations

Abbreviation	Full term
BEIS	Department for Business, Energy and Industrial Strategy
CCA	Climate Change Agreement
CCL	Climate Change Levy
Ce	Carbon equivalent
CHP	Combined Heat and Power
CHPQA	Combined Heat and Power Quality Assurance
CO2	Carbon dioxide
CO2e	Carbon dioxide equivalent
COVID-19	Coronavirus Disease 2019
DAA	Directly associated activity
DECC	Department for Energy and Climate Change
Defra	Department of Environment, Food and Rural Affairs
EPR	Environmental Permitting Regulations
ETS	Emissions Trading Scheme
GCV	Gross calorific value
GHG	Greenhouse gas
HMRC	Her Majesty’s Revenue & Customs
HMT	Her Majesty's Treasury
MOF	Multi-operator facility
QPO	Qualifying power output
RRC	Reduced rate certificate
SEC	Specific energy consumption
SRM	Special reporting methodology
STU	Stationary technical unit
TPO	Total power output

12. Glossary

Term	Definition
70% rule	Rule allowing for all the energy consumed at a site to be included in the CCA eligible facility if 70% or more of the site's energy is consumed within the installation. The rule provides for an additional amount of the site's energy to be included in the eligible facility if the energy consumed by the installation is less than 70% of the energy consumed on the site. The additional energy that can be included is a maximum of 3/7th of the energy consumed in the installation.
Absolute target	An absolute target is set for a target period at an assumed level of throughput for that target period. An absolute target can be expressed as either an energy target or as a carbon target. The assumed level of throughput for that target period is twice the actual level of throughout in the base year.
Account	Account held by a sector association or an operator in the CCA register.
Account holder	A sector association or operator holding an account in the CCA register.
Administrator	The public body charged by the Secretary of State with administering the CCA scheme. The Environment Agency administers the scheme for the whole of the UK.
Ancillary activities	Activities that: are directly associated with any of the primary activities carried out at an installation have a technical connection with those primary activities; and could have an effect on pollution
Annex 1 activity	An activity as defined in the Emissions Trading Directive 2003/87/EC (as amended from time to time.
Audit	A technical review carried out by the Administrator (or by the technical consultant on behalf of the Administrator) to check compliance within the scheme rules. Audits also include checks on eligibility, administration and record-keeping.

Base year	A 12-month period agreed between an operator and the Administrator, ending before the date of an underlying agreement, for which data are supplied by an operator to the Administrator before the operator enters into the agreement. The data from this 12-month continuous period establish the baseline performance of the target unit before the underlying agreement. Future performance and energy and carbon savings achieved in the scheme are measured relative to this base year performance.
Brownfield facility	An existing site.
Bubbling	The grouping together of two or more eligible facilities into a single target unit with one target.
Buy-out	Buy-out is a fee a target unit may be required to pay to retain certification in the CCA scheme. It is payable at the end of a target period if the target unit has failed to meet the target stated in its underlying agreement, or to rectify an error identified at any other time in a material impact on the position of the target unit against its target at a previous reporting period. The buy-out fee is calculated by multiplying the amount by which the target unit has failed to meet its target, expressed in terms of tonnes of carbon dioxide equivalent (tCO_2e), by: £12 for TP1 and TP2 £14 for TP3 and TP4 £18 for TP5 Any previously accrued surplus (expressed as tCO_2e) will be used to offset the payment for TP1-TP4 only. Where payment of the buy-out fee is needed to rectify an error identified at any time other than the end of the target period, surplus cannot be used to offset the amount payable. If the buy-out fee is not paid in the allotted time the target unit risks not being recertified from the scheme.
Carbon	Carbon dioxide emissions associated with the burning/use of certain fuels.

Carbon conversion factor	A conversion factor that is used to calculate the carbon emissions associated with the consumption of different fuels or electricity. The factor is expressed in terms of carbon emitted per unit of energy consumed (for example, kgC per kWh).
Carbon target	A target expressed in tonnes of carbon.
CCA register	Online system set up by the Environment Agency as Administrator to carry out the administration of climate change agreements. The register can be used by: current and prospective account holders any person appointed on behalf of an account holder to operate an account
Certification period	The period of validity of a certificate issued by the Environment Agency on behalf of the Secretary of State stating that the facilities listed in it are eligible for the CCL discount. Certification periods last for two years and are specified in the facility's underlying agreement.
Charges	Charges levied at the target unit level due to the Administrator under the charging scheme. The charges are based on the number of eligible facilities a target unit has within its underlying agreement.
Charging scheme	The Climate Change Agreements Charging Scheme 2013 allows the Administrator to charge participants in the scheme to recover its costs.
Climate change agreement	The scheme under which eligible facilities can receive a discount in the rate of Climate Change Levy (CCL) in return for achieving energy and carbon efficiency targets.
Climate Change Levy (CCL)	Tax since 1 April 2001 on electricity, gas, petroleum gas, coal, lignite, coke, semi-coke and petroleum coke (but not mineral oils) used as fuels by non-domestic energy users.
Consultant	An external organisation (consultancy) that assists sector associations (and target units) in completing their obligations under the CCA scheme.
Decision notice	A notice served by the Administrator under Rule 5 of the Rules for the operation of climate change agreements. See rule(s).
Delivered energy	The amount of energy contained in fuel, heat or power delivered to a site or installation for consumption. It's synonymous with metered energy. Not to be confused with primary energy, which is the basis on which energy is accounted for in the CCA scheme.

Department for Business, Energy and Industrial Strategy (BEIS)	Government department with the overall responsibility for energy and climate change policy in the UK.
Devolved administrations	The Scottish Parliament, the National Assembly for Wales and the Northern Ireland Assembly.
Directly associated activity (DAA)	An activity on the same site which has a technical connection with the activities listed in Appendix A and which could have an effect on emissions and pollution.
Eligible processes	The term used to describe: Part A activities the processes listed in the Schedule of The Climate Change Agreements (Eligible Facilities) Regulations 2012; and ancillary activities with a technical connection to the above
Emissions	Total emissions in tonnes of carbon dioxide equivalent (tCO_2e) for a target unit.
Energy target	A target expressed in relative or absolute terms that includes units of energy, such as kWh, MWh and PJ.
Environment Agency	The organisation appointed under The Climate Change Agreements (Administration) Regulations 2012 to be the Administrator of the CCA scheme from 1 October 2012.
EPR	The Environmental Permitting (England and Wales) Regulations 2010.
Emissions Trading Scheme (ETS)	The UK Emissions Trading Scheme established under the Greenhouse Gas Emissions Trading Scheme Order 2020. (The UK ETS came into force on the 1 January 2021 replacing the UK's participation in the EU ETS.)
Excluded installation	An installation within the meaning of Schedule 5 of The Greenhouse Gas Emissions Trading Scheme Regulations 2012.
Facilitator	Technical consultant supporting the Administrator with the technical aspects of the CCA scheme. The facilitator also provides technical support to the sector associations.
Facility	An installation, site, or part of site which is eligible to be covered by a climate change agreement. Also known as the eligible facility.
Finance Act 2000	Schedule 6 of the Finance Act 2000 (as amended) contains legislation pertaining to the Climate Change Levy.

Financial Services Centre	The internal finance department that manages all financial transactions into and out of the Environment Agency.
Fuel	Gas, liquid or solid matter that can be consumed to produce energy in the form of heat or power.
Green electricity tariff	A green supply tariff means that some or all of the electricity supplied is ‘matched’ by purchases of renewable energy made by the energy supplier on their customer’s behalf.
Greenfield facility	A newly built facility or an existing facility that has closed down and undergone a complete replacement of plant and been recommissioned with a new eligible process.
Installation	The installation stationary technical unit (STU) and directly associated activities (DAA) combined.
Integrated Pollution and Control Directive	EC Directive 96/61/EC, which is implemented in England and Wales by The Environmental Permitting (England and Wales) Regulations 2010 (as amended) (EPR) and their equivalents in Scotland and Northern Ireland (PPC Regulations). The IPPC Directive is being replaced by the Industrial Emissions Directive (IED), which will be implemented through a revised version of EPR.
Memorandum of Account (MoA)	A notice sent from the Environment Agency to the operator to notify them that a fee is due for example annual subsistence charges or a buy- out fee.
Migration	The transfer of target units from the old to the current CCA scheme.
Mineralogical/ metallurgical exemption	CCL exemption provisions introduced for those in the mineralogical and metallurgical sectors.
Multi-operator facility	A facility in respect of which different parts of the installation or installations are operated by different legal persons.
Novem	A Novem target is a target calculated using the Novem methodology. It's used by target units which produce two or more products whose throughput is measured in different units (for example, litres and m^2) or which have significantly different energy intensities of manufacture. The target is stated as a ratio of the target energy consumption to the reference energy. The reference energy is the energy that would have been consumed in the base year for the same level of throughput and product mix as the target period. The Novem method corrects for any distortions created by a changing mix of throughput by generating one common output.
Operator	A legal person or organisation that is party to an underlying agreement. May also be known as an account holder or participant.

Part A activity	An activity falling within Part A(1) of any Section in Part 2, or Part A(2) of any Section of Part 2 of Schedule 1 to the EPR, taking account of any relevant numeric thresholds, relevant exceptions or relevant modifications in paragraph 51 of Schedule 6 to the Finance Act 2000.
Penalty	A civil financial penalty issued under the CCA scheme by the Administrator to the operator of a target unit due to an infringement of the CCA rules and agreements.
Personal information	Address of the registered office of the sector association or operator Name, address and email address of a person who can be contacted in respect of: the sector association or operator the facility or, if more than one, each facility covered by the agreement
PPC Regulations	The Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000/1973) (as amended) and their equivalents in Scotland and Northern Ireland. Note that the former have been replaced by the Environment Permitting Regulations (EPR) while the latter remain in force.
Primary activity	An activity the carrying out of which at a facility results in the facility being eligible to be covered by an agreement.
Primary energy	The primary fuel (or other primary energy source such as wind or solar energy) consumed in the process of generating and delivering to the point of consumption secondary forms of energy such as electricity, heat or mechanical power.
Publish	To publish on any part of a website maintained by the Administrator that is accessible to the public.
Rationalisation	Where a facility leaves a target unit because of closure and is not part of a change of ownership.
Reduced rate certificate (RRC)	A report published every month by the Environment Agency and submitted to HM Revenue & Customs (HMRC). The certificate details all facilities that are deemed to be part of the CCA scheme at the point of publication and therefore entitled to the CCL discount.

Reference energy	Relating to target units with relative targets, reference energy is the energy that a target unit would have consumed if it produced at the same level realised during the target period but at the levels of efficiency recorded for the base year. For a relative target expressed in terms of specific energy consumption (SEC), reference energy = base year SEC × target period throughput. For a relative target expressed in Novem terms, reference energy = base year SEC × target period throughput summed across all separate products.
Regulator	The environmental regulator is: Environment Agency for all participants in the CCA scheme and for Part A1 processes in England Natural Resources Wales for Part A1 processes in Wales Local Authorities in England and Wales for Part A2 processes Scottish Environment Protection Agency (SEPA) for all Part A processes in Scotland Northern Ireland Environment Agency (NIEA) for all Part A processes in Northern Ireland
Relative target	A target expressed in terms of the amount of energy consumed per unit of activity, usually throughput (for example kWh/tonne or MWh/m^2).
Reporting date	The last working day in the April immediately following the end of a target period.
Reporting period	The period available at the end of a target period for gathering, submitting and verifying performance data.
Reporting variation	A variation that must be submitted at the beginning of the reporting window to reflect a change that may impact on a target unit's target. These variations must be submitted between 1 and 31 January 2015.
Reporting window	The timeframe during which the register is open for target period reporting.

Responsible person	An individual who is legally authorised by the operator to: act on behalf of the operator (or their representative) enter as the operator's agent into an underlying agreement agree any amendments to an underlying agreement accept notices served by the Administrator on behalf of the operator The responsible person is not required to be the day-to-day contact for the target unit.
Rule(s)	One or more of the Rules for the operation of Climate Change Agreements as set out in Schedule 1 to underlying agreements and umbrella agreements.
Secondary buy-out	Buy-out associated with the correction of an error through secondary reporting.
Secondary reporting	A reporting amendment carried out after the close of the reporting window and the issue of MoAs.
Sector	The collection of facilities satisfying the definition of eligibility set out in that sector association's umbrella agreement.
Sector association	Trade association or other body representing a sector of industry. Some sectors have set up (or plan to set up) subsidiary or separate organisations to represent them in the agreements.
Sector commitment	The commitment agreed between DECC (now BEIS) and the sector association as set out in Schedule 5 of an umbrella agreement. It was agreed at the start of the new CCA scheme in April 2013 and reviewed in 2016 but not changed. This is to facilitate the determination and distribution of individual target unit targets, with the target unit targets producing, in aggregate, the agreed sector commitment. The sector commitment agreed for a particular point in the future will change as the make-up of the sector changes through entrants, exits and variations to incumbent target units.
Site	A site is an area of land falling within a continuous boundary which encloses the land used in connection with the operation of the installation. For this purpose, however, an area of land may still be regarded as a single site even if it is dissected by a road, railway line or river. Other non-contiguous parcels of land would not, however, constitute a single site.

Special Reporting Mechanism (SRM)	A voluntary reporting mechanism that can be adopted to account for CHP and imported electricity when fuel consumption is covered under the ETS.
Specific energy consumption (SEC)	The amount of energy consumed per unit of activity.
Stationary technical unit (STU)	A place where one or more eligible process is carried out.
Structural change	Any change at a facility which, in the view of the Administrator, may make the numerical target, currently set for the target unit to which the facility belongs, no longer appropriate. Structural changes include changes that affect the proportion of the site's energy consumption included in the eligible facility and the ETS status of any energy- consuming plant included in the eligible facility.
Sub-sector	A practical method of partitioning within a sector such that the target units in each sub-sector carry out the same or similar processes and/or have either all energy targets or all carbon targets.
Surplus	The amount by which the emissions have fallen below the target for any target period recorded on an account.
Target facility	The part or parts of a facility which do not carry out Annex 1 activities. The target facility is the part of a facility in respect of which targets are set and energy use and emissions must be reported.
Target period	The period over which performance against targets is assessed. The Climate Change Agreements (Administration) Regulations 2012 define the target periods as follows: Target period 1: 1 January 2013 to 31 December 2014 Target period 2: 1 January 2015 to 31 December 2016 Target period 3: 1 January 2017 to 31 December 2018 Target period 4: 1 January 2019 to 31 December 2020 Target period 5: 1 January 2021 to 31 December 2022

Target unit	The target facility or group of target facilities that join together for the purposes of CCA target setting and reporting (that is, the facility(s) to which an underlying agreement applies). A facility or group of facilities becomes a target unit once it has signed its underlying agreement.
Target unit currency	The units in which a target unit's actual and target performance are expressed, for example, kWh for an absolute energy target unit, kWh/tonne for a relative energy target unit and kgC/m^2 for a relative carbon target.
Target unit target	The target set out in Schedule 6 to an underlying agreement for a target unit (either one facility or a group of facilities). The target applies to the energy consumed in the target facilities making up the target unit, that is, the energy consumed in the eligible facilities less any energy consumed in the eligible facilities that is consumed in plant carrying out Annex 1 activities as defined in the Emissions Trading Directive 2003/87EC (as amended from time to time).
Target variations for throughput changes	The process whereby absolute targets are adjusted when the actual throughput of a target unit during a target period is 10% or more below twice the base year throughput. The base year throughput for each target period is stated in the target unit's underlying agreement.
Technical consultant	Provides day-to-day advice on behalf of the Administrator to the sector associations.
Termination	Termination of a target unit's climate change agreement for a minimum of two years.
Throughput	The measure of production (or a factor related to production) that has been selected and agreed with the Administrator and is used in determining the relationship between the amount of energy used by the target unit and the facility's levels of activity.
Throughput conversion factor	The factor used, when the throughput unit of the target unit differs from the throughput unit of the sector, to express target unit throughput in equivalent sector throughput terms so that the two can be compared.
Throughput units	The units used to express the level throughput of a target unit (for example, kg, tonnes, vehicles).

Tolerance	Tolerance is an allowance made for the inaccuracy of measurements in the calculation of target performance, or similar. For relative target units, buy-out and surplus calculations will account for the tolerance on the percentage target that the target unit has been allowed. The tolerance is derived by allowing +/- 0.5 units for energy or throughput at the resolution available for the Base Year and Target Period data. For instance if throughput is available to 3 decimal places then the throughput tolerance for the Base Year and Target Period would be +/- 0.0005.
Tribunal	The First-tier Tribunal established under the Tribunal Courts and Enforcement Act 2007.
Umbrella agreement	An agreement between a sector association and the Administrator that governs the obligations of both parties within the CCA scheme. It lists all the target units covered by it when it was signed.
Unbubbling	The splitting up of a target unit containing multiple eligible facilities into a number of target units. This is commonly known as ‘unbubbling’.
Underlying agreement	An agreement between the operator of a target unit and the Administrator that governs the obligations of the Administrator and the target unit (and its constituent eligible facilities) within the CCA scheme.
Variation notice	A notice served by the Administrator on the operator under Rule 12 of the rules for the Operation of Climate Change Agreements. Any notice served on an operator must be copied to their sector association.

Appendix A: Eligible processes

The eligibility text in this appendix is taken from the respective umbrella agreements.

Sector code	Sector name	Eligibility definition from the umbrella agreement
ADS	Aerospace	A facility belongs to the aerospace sector if it is a facility which undertakes one or more of the following activities: (i) casting of ferrous or non-ferrous metals in a foundry; (ii) melting ferrous or non-ferrous metals; (iii) hot-rolling of ferrous metals and their alloys; (iv) operating hammers in a forge; (v) surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating; (vi) surface treatment of metals and plastic materials using an electrolytic or chemical process; (vii) burning of any fuel in an appliance with a rated thermal input of 50 megawatts or more; (viii) manufacture or repair involving the use of beryllium or selenium or an alloy containing one or both of those metals; (ix) producing explosives; (x) activities involving carbonisation; or (xi) producing synthetic rubbers where the activity is in connection with the aerospace or defence industries.
AFED	Aluminium	A facility belongs to the aluminium, titanium and magnesium sector if it is a facility which - (a) produces aluminium, magnesium or titanium from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic activities; (b) melts, including making alloys, aluminium, magnesium or titanium, including recovered products (refining, foundry casting, etc.); (c) refines aluminium, magnesium or titanium or any aluminium, magnesium or titanium alloy, except where the activity is related to the separation of aluminium, magnesium or titanium from mixed scrap by differential melting and no other activity in this list is carried out in the facility; (d) produces chemicals involving aluminium, magnesium or titanium; or (e) surface treats aluminium, magnesium or titanium or any aluminium, magnesium or titanium alloy using an electrolytic or chemical process.
AIC	Agricultural Supply	A facility belongs to the agricultural supply sector if it is a facility in which the predominant activity is the manufacture of animal feeds for agricultural purposes.

AWM	Wallcoverings	A facility belongs to the wallcovering sector if it is a facility that surface treats substances, objects and products using organic solvents in coatings, printing inks and finishes during the manufacture of wallcoverings and other flexible decorative surface materials in roll form.
BATC	Textiles	A facility belongs to the apparel and textiles sector if it is a facility that undertakes one or more of the following processes: the wet stages used in the preparation, processing (for example. mercerizing and scouring), and the dyeing and finishing of Apparel and Textiles (including, but not exclusively, fibres, threads, yarns, fabrics and carpets) and the dyeing of garments.
BATE	Textiles Energy Intensive	At an installation or site where textiles are manufactured: spinning, weaving, knitting, finishing but not printing or dyeing.
BCA	Cement	A facility belongs to the cement sector if it is a facility at which the primary activity is producing or grinding cement clinker.
BCC	Ceramics	A facility belongs to the ceramics sector if it is a facility which manufactures ceramic products (including roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain) by firing in kilns. Or at an installation or site where silica sand in combination with any associated minerals is extracted, processed and packaged: blasting, quarrying, crushing, classifying, milling, pumping, grinding, acid leaching, drying and packaging.
BCCF	Calcium Carbonate	At an installation or site where calcium carbonate based minerals are processed for use as filler or whitener for paper, plastics, pharmaceuticals, ceramics, food, paint or other products: crushing, drying, milling, classifying, screening, packaging.

BCGA	Compressed Gases	At an installation or site where— (a) nitrogen, oxygen or argon is separated from air, and then compressed or liquefied; or (b) nitrogen, oxygen and argon are separated from air, and then made into a compressed or liquefied mixture of at least two of the former, separating the above substances from air using one or more of the following air separation technologies: cryogenic distillation, pressure swing adsorption, vacuum swing absorption or membrane separation, compressing and liquefying the separated substances, pumping them (in a compressed or liquefied form) from within the installation for further use within or outside the installation.
BEPA	Egg Processing	A facility belongs to the egg processing sector if it is a facility which processes eggs for the production of food.
BGMC	Glass	A facility belongs to the glass sector if it is a facility which (i) manufactures glass or glass fibre; (ii) manufactures glass frit or enamel frit, or uses glass frit or enamel frit in any activity where that activity is related to its manufacture; (iii) carries out surface treatment of substances, objects or products using organic solvents during the manufacture of glass and/or glass products; (iv) produces salts such as sodium metasilicate; (v) carries out any activity of manufacture of glass and/or glass products which involves the use of hydrogen fluoride, hydrogen chloride, hydrogen bromide or hydrogen iodide or any of their acids and which may result in the release of any of these compounds into the air; or (vi) carries on related activities of a description agreed between the sector association and the Secretary of State. At an installation or site where glass products or chemicals using glass as a base material are produced from raw materials, pre-formed glass or cullet for use as reflective additives in road markings or as toughened glass for the automotive market: partial melting, fusing, bending, toughening, cutting, grinding, etching, polishing (both mechanical and chemical), surface treating and drying.
BLA	Lime	A facility belongs to the lime sector if it is a facility which produces lime.
BLRA	Brewing	A facility belongs to the brewing sector if it is a facility which operates facilities for treating and processing vegetable raw material intended for the production of beer.

BMPA	Meat	A facility belongs to the meat processing sector if it is a facility in which the predominant activity is the slaughtering of animals or the processing of red meat; the facility may also include standalone permanent storage buildings for controlling the inside temperature of the storage area below ambient temperature for the purposes of storing red meat, and which includes permanent machinery to cool or freeze products prior to storage or to produce ice for the purposes of storing red meat.
BNMA	Geosynthetics Non-Woven	At an installation or site where geosynthetic materials comprising at least one component made from a synthetic or natural polymer in the form of a sheet, strip or other three-dimensional structure are manufactured for use in geotechnical or civil engineering applications: all processes and activities involved in the manufacture of such materials.
BPC1	Poultry Meat Rearing	A facility belongs to the poultry meat sector if it is a facility in which the predominant activity is the breeding or rearing of poultry for meat.
BPC2	Poultry Meat Processing	A facility belongs to the poultry meat processing sector if it is a facility in which the predominant activity is one of the following: a) the slaughtering of poultry and/or the processing of poultry meat, b) the manufacture of animal feeds for use on poultry farms.
BPF	Plastics	At an installation or site where plastic materials, or plastic products (whether or not these are finished products), are produced by – (a) the application of heat and pressure to; or (b) a chemical reaction involving plastics powder, granules, shredded waste or liquid: injection moulding, reaction injection moulding, compression moulding (including hot and cold press moulding), transfer moulding, structural foam moulding, direct screw transfer moulding, rotational moulding (including slush moulding), flexible foam moulding (including dual component processing), blow moulding, casting, expanded polystyrene moulding, expandable materials processing, mixing and compounding, calendering, powder coating (including dip moulding), sintering, thermoforming (including vacuum forming), pultrusion, filament winding, spread coating, hand lay- up and resin transfer moulding.
BPIF	Printing	A facility belongs to the printing sector if it is a facility that undertakes printing using organic solvents in the following processes; lithography, letterpress, flexography, gravure and screen printing.

BTMA	Tyres	A facility belongs to the new rubber tyre manufacturing sector if it is a facility which manufactures new rubber tyres or manufactures intermediate products used in the manufacture of rubber tyres.
CAST	Foundries	A facility belongs to the foundries sector if it is a facility which – (a) produces, melts or refines iron or steel or any ferrous alloy, including continuous casting, using electric arc furnaces or a cupola, crucible furnace, reverbatory furnace, rotary furnace, induction furnace or resistance furnace; (b) applies protective fused metal coatings; (c) casts ferrous metals at a foundry; or (d) melts, including making alloys, non-ferrous metals, including recovered products (refining, foundry casting, etc.).
CBM	Metalforming	A facility belongs to the metal forming sector if it is a facility which operates as a forge, producing from a cold or heated metal work piece by a blow or series of blows a product or component with enhanced physical and or metallurgical properties, including: Cold Forging, Warm Forging, Hot Forging; Heading, Upsetting; Stamping, Pressing; Blanking, Shearing, Trimming, Piercing, Punching, Notching; Coining; Deep Drawing; Precision Bending; and which may heat-treat pre- formed or manufactured metal components to facilitate their efficient formability or to enhance their service performance, all processes and activities involved in the heat treatment of pre- formed or manufactured metal components to facilitate their efficient formability or to enhance their service performance; and which may undertake (other than for the re-painting or re- spraying of or of parts of aircraft or road or railway vehicles) application of printing ink or paint or any other coating material to a substrate, or drying or curing after such application, as, or in the course of, a manufacturing activity, where the process may result in the release into the air of particulate matter or of any volatile organic compound.

CIA	Chemicals	A facility belongs to the chemical sector if it is a facility which is used for: manufacturing organic or inorganic chemicals, chemical fertilisers, plant health products, biocides, pharmaceutical products or explosives; a manufacturing activity involving carbon disulphide or ammonia (but not ammonia used as a refrigerant); an activity involving chemical processing; it produces potassium chloride from Sylvinite (potassium chloride) ore containing a mixture of potassium chloride, sodium chloride, clay and anhydrite, by sub-surface mining followed by separation and purification from the other constituents through a process of crushing/grinding, froth flotation and depending on the specific product, drying and compacting, followed by grading prior to dispatch; high grade soluble product is also obtained by the recrystallisation of KCl from supersaturated brine: or it produces potassium, sodium, magnesium and/or calcium salts from Polyhalite ore by a process of crushing/grinding, leaching, acid reaction, precipitation, evaporation, crystallisation and drying; or (e) any other activity of a description which CIABATA and the Secretary of State have agreed is suitable for inclusion in the chemical sector.
CONF	Timber Sawmilling	A facility belongs to the sawmill sector if it is a facility where: an unprocessed log undergoes semi-processing (“a semi-processed log”); or a semi-processed log is kiln dried, graded, planed, shaped, or chemically treated where this occurs at the same installation or site where the log underwent semi-processing. “Semi-processing” means debarking and sawing an unprocessed log. “Unprocessed log” means a log from which the branches have been removed, but to which no other processing has been applied.

CPI	Paper	A facility belongs to the paper sector if it is a facility at which the primary activity is the manufacture of paper, pulp or cardboard.
CSDF	Cold Storage	At an installation (which must be a building where the predominant business activity is commercial temperature controlled storage or product freezing) or site upon which there is such an installation where— (a) products are cooled or frozen for the purposes of— (i) storing them under controlled temperatures below ambient levels; or (ii) producing ice; or (b) products are stored under controlled temperatures below ambient levels, cooling and freezing products and all processes and activities involved in controlling temperatures below ambient levels.
DATC	Data Centres	The business activity is the leasing or licensing of a data facility which is being used as a data centre. “data facility” means a room, or rooms sharing the same electricity supply circuit, occupied mainly or exclusively by computer equipment which is enabled to transfer data electronically, and where in respect of the room or rooms: the temperature and humidity is regulated in connection with the operation of the computer equipment; the electricity supply is at least 200kW; and electricity is supplied by a back-up electricity supply when the mains supply is interrupted.
DIAL	Dairy	A facility belongs to the dairy sector if it is a facility whose activities involve the purchase of raw milk or a commodity produced from raw milk in order to convert it into liquid drinking milk, dairy products, or composite dairy products, or any other commodity of which milk is a substantial ingredient; and, in the case of organisations which purchase raw milk and for whom the processing of milk is the dominant activity, the use of similar manufacturing processes to those used to produce dairy products in respect of other food or drink products.
EUR	Eurisol / Mineral Wool	A facility belongs to the mineral wool sector if it is a facility which produces mineral wool insulation products for thermal, acoustic and fire applications manufactured using glass or rock.

FDF1	Food and Drink	A facility belongs to the food and drink sector if it is a facility which treats, and processes materials intended for the production of food products. For this purpose ‘food’ includes drink, articles and substances of no nutritional value which are used for human consumption and articles and substances used as ingredients in the preparation of food. At an installation or site where refined salt for use in food products or supplements is prepared or processed from minerals.
FDFS	Supermarkets	A facility belongs to the supermarket sector if it is a facility which treats and processes materials intended for the production of food products in supermarket stores.
GPDA	Gypsum Products	A facility belongs to the gypsum manufacturing sector if it is a facility that burns fuels in Part A combustion plant that is integrated into the process of manufacturing gypsum.
KABC	Kaolin and Ball Clay	At an installation or site where kaolinitic clay in combination with any of its accessory minerals is extracted and processed: blasting and crushing, dry mining or hydraulic mining, refining, blending, drying and packaging, classifying, hydrocloning, pumping, centrifuging, grinding, shredding, magnetic separating, bleaching, pressing, pugging, milling, micro-separating.
MAGB	Malting	A facility belongs to the malting sector if it is a facility which modifies cereal grain by the process of malting for use in the production of drinks and foodstuffs and whose predominant product is malt.
MPMA	Metal Packaging	A facility belongs to the metal packaging sector if it is a facility which uses organic solvents for surface treating operations (such as protection, decoration, sealing and lubrication) during the manufacture of metal packaging products.
NAMB	Bakers	A facility belongs to the craft baking sector if it is a facility that produces bread, morning goods, flour confectionery and savoury products from animal and vegetable raw materials and using traditional bakery skills, rather than ‘industrial’ type baking processes. The facility may be either a) A ‘bakery’ that serves more than one retail outlet; or b) ‘A shop’ which is a retail outlet that processes part-finished products (‘bake off’) or is a ‘scratch’ bakery that produces product for no other retail outlet.
NFA	Non-Ferrous Metals	A facility belongs to the non-ferrous sector if it is a facility which produces, processes or uses non-ferrous metals, or is engaged in related manufacturing activities.

NFU1	Pigs	A facility belongs to the pig farming sector if it is a facility which is specifically used in indoor pig production.
NFU4	Horticulture	At an installation or site where (in controlled, environment–protected structures) horticultural crops are grown, harvested and receive primary preparation for market: planting, seeding, heating, lighting, ventilating, irrigating, fertilising, cooling, preparing and sterilising growing media, grading and conveying.
NFU5	Eggs & Poultry Meat	A facility belongs to the NFU poultry meat sector if it is a facility which is specifically used for rearing poultry for the production of meat. And/or A facility belongs to the egg production sector if it is a facility which is specifically used for rearing poultry for the production of eggs.
NMI	Semiconductors	A facility belongs to the semiconductor sector if it is a facility which manufactures semiconductors and/or raw materials specific to the manufacture of semiconductor devices.
PIFA	Packaging & Industrial Films	An installation or site where plastic film is produced using extrusion to convert melted polymer into blown or cast film: all processes and activities involved in the production of plastic film using extrusion to convert melted polymer into blown or cast film, and which may include printing using organic solvents in the following processes; lithography, letterpress, flexography, gravure and screen printing on plastic film.
SEA	Surface Engineering	A facility belongs to the surface engineering sector if it is a facility which surface treats substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating or which surface treats metals and plastic materials using an electrolytic or chemical process.

SEEC	Spirits	A facility belongs to the spirit drinks sector if it is a facility in the United Kingdom of Great Britain and Northern Ireland that is engaged in one or more of the following activities: the production and/or preparation of spirit drinks (as defined in EC Regulation 110/2008) (the ethyl alcohol, distillate or spirit of which is of agricultural origin); the distillation of ethyl alcohol of agricultural origin (as defined in EC Regulation 110/2008) intended for human consumption; the production of distillate of agricultural origin (as defined in EC Regulation 110/2008) intended for human consumption; iv) the processing of by-products from a distillery which is a facility engaged in any activity covered by (i)-(iii) above.
SEHT	Surface Engineering Heat Treatment	A facility belongs to the heat treatment sector if it is a facility where pre-formed or manufactured metal components are heat- treated to facilitate their efficient formability or to enhance their service performance, all processes and activities involved in the heat treatment of pre-formed or manufactured metal components to facilitate their efficient formability to enhance their service performance.
SGS	Slag Grinding	A facility belongs to the slag grinders sector if it is a facility which grinds granulated blast furnace slag.

SMMT	Motor Manufacturing	A facility belongs to the motor industry sector if it is a facility within the motor industry that undertakes one or more of the following activities: the casting of ferrous and non-ferrous metals in a foundry; the surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating degreasing, waterproofing, sizing, painting, cleaning or impregnating; the surface treating of metals and plastic materials using electrolytic or chemical process, operates as a forge, producing from a cold or heated metal work piece by a blow or series of blows a product or component with enhanced physical and or metallurgical properties, resin transfer moulding, plastic injection moulding, on-site nitrogen generation and the burning of fuels in a Part A combustion plants or if it is a facility where pre-formed or manufactured metal components are heat-treated to facilitate their formability or to enhance their service performance: the relevant processes and activities are all processes and activities involved in the heat treatment of pre-formed or manufactured metal components to facilitate their efficient formability or to enhance their service performance. The motor industry shall mean motor vehicles, components and accessories and shall include chassis of motor vehicles, trailers, engines, vehicle bodywork, freight containers, tyres and transport service equipment, and engine components for marine craft.
TSA	Laundries	At an installation or site, not being a launderette predominately offering self-service washes or predominately serving the domestic market, where textiles are laundered by washing with water, drying and smoothing except where such laundering is carried out in support of other activities carried out by the business (not being textile rental activities), whether or not such activities are carried out at the installation or site.
UKLF	Leather	A facility belongs to the leather sector if it is a facility that processes, tans, dresses or finishes raw and part processed hides and skins to produce part processed leather intermediates or finished leather.

UKRA	Rendering	A facility belongs to the rendering sector if it is a facility which is engaged in rendering animal material not used for human consumption by utilising heat treatment to reduce moisture content and separation of animal protein from tallow by centrifuging and pressing.
UKSA	Steel	A facility belongs to the steel sector if it is a facility which is used for manufacturing iron or steel products or carrying on related activities of a description agreed between the sector association and the Secretary of State. In this clause - 'iron' and 'steel' include any alloy where the iron content is at least 50% by weight; 'iron or steel products' means – (i) pig iron used for steelmaking or related purposes; (ii) steel ingots, blooms, billets and slabs; (iii) semi-finished steel for tube making; (iv) uncoated, and coated rolled products, bright steel bars, wire, tubes and pipes; (v) railway rails and accessories (including light rails), tyres, wheels, axles, rolled steel rings, wheel-pairs, steel arches and forgings; 'manufacturing' means making, rolling, casting, forging, or drawing iron or steel or if it is a facility where pre- formed or manufactured metal components are heat-treated to facilitate their formability or to enhance their service performance: the relevant processes and activities are all processes and activities involved in the heat treatment of pre- formed or manufactured metal components to facilitate their efficient formability or to enhance their service performance.
WPIF	Wood Panels	A facility belongs to the composite wood-based boards sector if it is a facility which manufactures composite wood-based boards and products: wood particleboard, oriented strand board, wood fibreboard, plywood, cement bonded particleboard or any other composite wood based board.

Appendix B: Register user guide for operators

B.1 Requesting access to the register

Requests for read access to an operator's account on the register should be sent via email to the CCA helpdesk (cca-help@environment-agency.gov.uk). A request must come from either the operator's administrative contact or responsible person and must be from the email address recorded in the register. If your contact has changed, please contact your sector association first to ask them to update your account on the register.

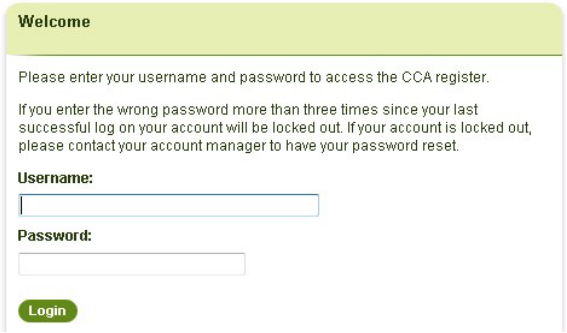
Once we have processed your request, we will send you an email invite containing your username and a temporary password and PIN number.

B.2 Logging in to the register

Go to the web link given in the invitation email or: https://cca.environment-agency.gov.uk/

On the login screen:

- Enter your username and temporary password. Click login
- Enter the requested digits from your pin number. Click login
- You will be asked to read and accept the terms and conditions.
- You will be prompted to set your own password and pin number for future logins.



Note that usernames and passwords are case sensitive.

All future logins will require you to use your username, new password and new PIN number. Once you click the login button, you'll be directed straight to your target unit home page.

If you forget your password, you'll need to contact the CCA helpdesk to ask them to unlock your account.

B.3 Navigating around the register

Every time you login to the register you'll be taken to the welcome screen. From there you can update user account details, change your password and view alerts.

The target units to which you have access will be listed on the right-hand side of the screen.

Clicking on the target unit you wish to view will take you to the target unit home page.

The home page displays the following information for the target unit:

- operator name and address
- details of the administrative contact and responsible person (bottom of page)
- consultant's name – if a consultant operates on behalf of the target unit • sub-sector details
- target unit's status (for example, underlying agreement activated or terminated)
- financial independence, that is, whether the target unit pays its CCA fees directly to us
- ('independent') or whether it pays them via the sector association ('not independent')
- any surplus emissions – recorded in tonnes of CO_2 equivalent

A previous target unit ID will be shown if the target unit has been in the scheme before. This will link the accounts and may be necessary if the owner of the operator changes. Note this doesn't apply to target unit IDs from the old scheme (pre April 2013).

If you wish to change any of these details, please contact your sector association which can make the amendments on your behalf.

Left hand menu of target unit home page

This menu contains links to key information about the target unit:

- underlying agreement
- agreement applications and change requests
- facilities
- target unit targets
- TP Reporting History

Viewing the target unit's underlying agreement

Select the 'Underlying Agreement' option to download the latest version of the agreement as a PDF. Click on the document link to open or save the PDF.

Viewing agreement applications and change requests

To view the application for the underlying agreement and any subsequent requests to change it since it was created, select the 'Application and Change Requests' option. This will open a new page listing the agreement's history under the new scheme. To view the history, click on the appropriate 'ID' link to reveal the information behind the change.

Viewing the facilities listed in the underlying agreement

To view the facilities listed in the underlying agreement, select the 'Facilities' option. This will open a new page listing all the facilities along with the site name, address and CCA status. To view details of an individual facility, click on the appropriate 'Facility Code' link.

If the 'status' field is shown as 'ineligible' this means an application was made but was refused by the Administrator because the process at that facility was not eligible for the CCA scheme.

Viewing details of the Target Unit Targets

To view the target unit's target, select the 'Target Unit Target' option. This will open a new page with a form showing the target unit targets for each target period in the new scheme. The page displays the following information:

- target currency – target type (absolute or relative), the unit used for throughput and the energy or carbon unit
- baseline data – throughput, energy or carbon, and base year
- targets for each target period – assumed throughput and target improvement

Appendix C: Qualifying renewable fuels

This list is as outlined in Annex A of the Technical Annex. Please contact the CCA helpdesk (cca-help@environment-agency.gov.uk) about any renewable fuels not listed here.

Table D.1: Qualifying renewable fuels

Type	Fuels
Biomass (plants or parts of plants)	• Straw • Hay and grass • Crops (for example, maize)
Biomass wastes	• Waste wood • Forestry residues • Landfill gas • Sewage sludge • Biogas produced by digestion, fermentation or gasification of biomass • Animal and fish oils, fats and tallow
Biomass fraction of mixed materials	• Biomass fraction of textile wastes • Biomass fraction of composites containing wood • Biomass fraction of municipal and industrial wastes
Fuels whose components and intermediate products have all been produced from biomass	• Bioethanol • Biodiesel • Biomethanol • Biogas • Syngas via gasification or pyrolysis • Liquid fuels via pyrolysis

Appendix D: Calculation methods

D.1 Accounting for CHP in the CCA scheme

CHP – where all fuel input is non-renewable

Where all fuel inputs to the CHP plant are not renewable energy, they should be accounted for in CCA as stated in paragraphs 14 to 25 in Technical Annex.

Where the electricity or heat outputs from a CHP plant are consumed within the target facility, the units of energy to report must be calculated on the basis of the units of energy input to the CHP plant, not the units of electricity or heat consumed.

Where a target facility is served by a CHP plant (whether the CHP plant is on the associated facility or whether the CHP plant is operated by a third party operator) and all of the energy from the CHP plant is consumed within the target facility, the target facility must be treated as consuming all of the units of energy input to the CHP and no allocation of those units is required.

Where a target facility is served by a CHP plant on the associated facility and some of the electricity or heat outputs from the CHP plant are exported from the facility, or where the target facility imports electricity or heat generated by a CHP plant that is not part of the facility, the energy input to the CHP must be allocated to each consumer of the heat or the electricity as follows:

First allocate the energy inputs to the CHP to the electricity and heat outputs using the following two formulae:

$$Heat\ Energy\ = \left(\frac{Fuel\ Input}{(2 \times Electricity\ Output) + \ Heat\ output}\right) \times Heat\ output$$

$$Electricity\ Energy\ = \left(\frac{2 \times Fuel\ input}{(2 \times Electricity\ Output) + \ Heat\ output}\right) \times Electricity\ output$$

Where:

- **Heat Energy** is the input energy allocated to the heat outputs of the CHP plant.
- **Electricity Energy** is the input energy allocated to the electricity outputs of the plant.

- **Fuel Input** is the total fuel supplied to the CHP plant, expressed in energy terms, using the
- Gross Calorific Value of the input fuels. For CHP schemes certified under the Combined Heat and Power Quality Assurance (CHPQA) programme it is the Total Fuel Input (TPI), as defined by the CHPQA Standard, 2009.
- **Heat Output** is the quantity of heat produced by the CHP plant, expressed in energy terms. For CHP schemes certified under the Combined Heat and Power Quality Assurance (CHPQA) programme it is the Qualifying Heat Output (QHO), as defined by the CHPQA Standard, 2009.
- **Electricity Output** is the quantity of electricity generated by the CHP plant, expressed in energy terms. For CHP schemes certified under the Combined Heat and Power Quality Assurance (CHPQA) programme it is the Total Power Output (TPO), as defined by the CHPQA Standard, 2009.
- Energy units must be consistent throughout.

Where absorption cooling is used to produce a cooling supply, the heat input to the absorption chiller must be metered so far as is reasonably practicable. If the heat input to the absorption chiller is not metered, then the cooling output must be metered and divided by the average coefficient of performance (COP) of the cooling system to estimate the heat consumed.

Then apportion the energy input to each consumer of heat and electricity as follows:

- Allocate the heat energy to each consumer of the heat in proportion to the quantity of heat from the CHP plant that each consumes.
- Allocate the electricity energy to each consumer of the electricity in proportion to the quantity of electricity from the CHP plant that each consumes.

If heat is distributed to a number of users (m), this is expressed:

$$Heat\ Output = Heat_1 + Heat_2 + Heat_3 + \cdots + Heat_m$$

If electricity is distributed to several electricity consumers (n), this is expressed:

$$Electricity\ Output\ = Electricity_1 + Electricity_2 + Electricity_3 + \cdots + Electricity_n$$

The energy inputs to the CHP plant are assigned to consumer, ‘i’, according to the formula:

$$Heat\ Energy_i = \left(\frac{Heat_i}{Heat\ Output}\right) \times Heat\ Energy$$

The electricity energy inputs to the CHP plant are assigned to consumer, ‘j’, according to the formula:

$$Electricity\ Energy_j = \left(\frac{Electricity_j}{Electricity\ Output}\right) \times Electricity\ Energy$$

If some of the CHP generated electricity is exported to the public supply (that is the grid), and not directly to a known consumer, a credit must be allocated to each heat consumer in respect of all or part of this electricity exported to the grid.

The electricity exported to the grid in respect of which a credit must be allocated is the Good Quality CHP electricity (as defined by the CHPQA Standard, January 2009) exported to the grid. The Good Quality CHP electricity exported to the grid is given by:

$$\text{GQCHP electricity exported to the grid} = \text{QPO} - \text{QPO consumed by known consumers}$$

Where:

- QPO is the Qualifying Power Output (as defined by the CHPQA Standard, January 2009)
- QPO consumed by known consumers is the CHP electricity on which the climate change levy is not paid

The credit allocated to each heat consumer is calculated as follows:

- Multiply the Good Quality CHP electricity exported to the grid by 2.6.
- Subtract the energy apportioned to the Good Quality CHP electricity exported to the grid (as calculated in paragraph 19). This gives the primary energy that has been saved as a result of the grid exported CHP electricity displacing conventional grid electricity generated at a power station.
- Divide this saving among each of the consumers of heat from the CHP on a pro-rata basis according to the quantity of heat each uses.
- Subtract the pro-rata saving from each of the Heat Energy figures (as calculated in paragraph 19), to get a revised Heat Energy figure.

Thus, if QPO were exported to public supply instead of being supplied to consumer ‘k', then the revised Heat Energy figures for each consumer ‘i’ (i = 1,..,m) would be as follows:

$$Revised\ Heat\ Energy_i = Heat\ Energy_i - \left((Exported\ QPO \times 2.6 - Electricity\ Energy_k) \times \frac{Heat_i}{Heat\ output}\right)$$

In cases where there is export of CHP generated electricity to the grid, consumer ‘i’ must report total primary energy consumption, as a result of the use of CHP generated electricity and heat, as Revised Heat Energy$_i$ plus Electricity Energy$_i$.

When calculating credits for grid exported QPO:

- if the fuel allocated to a heat user minus the credit for exported QPO results in an overall fuel figure of less than zero the user affected must set the overall fuel figure to zero;
- if the heat credit itself for exported QPO to a heat user is negative the user affected must set the credit for exported QPO to zero.

When reporting primary energy (fuel) consumption associated with the consumption of CHP generated electricity or heat, this fuel consumption must be recorded under the same fuel type as the fuel inputs to the CHP. For example, if the fuel inputs to the CHP are natural gas, then the fuel consumption associated with the consumption of CHP electricity and heat will be reported under natural gas.

CHP – where all fuel input is renewable

Paragraphs 32 to 36 from Technical Annex state that:

If the fuel input to the CHP is 100% renewable all of the electricity and heat outputs of the CHP must be considered renewable. This means that consumption of all of this electricity will be treated as if it were grid electricity. Consumption of CHP heat will lead to the reporting of primary energy consumption (in the form of some of the input fuels), but this energy consumption will be zero rated for carbon.

For a CHP where the fuel inputs are 100% renewable, the primary energy for CHP heat is calculated as follows:

Primary energy for CHP heat = Total Fuel Input to CHP – (Total Power Output from CHP × 2.6)

If Total Fuel Input to CHP < (Total Power Output from CHP × 2.6), then primary energy for CHP heat must be set to zero.

This means that the energy input to renewable CHP must be recorded in order that the primary energy for renewable CHP heat can be determined and reported.

When reporting primary energy (fuel) consumption associated with the consumption of CHP generated heat, this fuel consumption must be recorded under the same fuel type as the fuel inputs to the CHP. For example, if the fuel inputs to the CHP are biogas, then the fuel consumption associated with the consumption of CHP heat will be reported under biogas. The consumption of CHP generated electricity in this case would be reported as primary renewable electricity.

CHP – where fuel input is mix of renewable and non-renewable

Paragraphs 37 to 340 from Technical Annex state that:

If the fuel input to the CHP is not 100% renewable, then a proportion of the electricity output must be treated as renewable and the balance as non-renewable. The proportion of the electricity output that is treated as renewable must be the same as the proportion of the fuel input that is deemed renewable, on an energy content basis.

If the fuel input to the CHP is not 100% renewable, then a proportion of the heat output must be considered renewable and the balance as non-renewable. The proportion of the heat output that is treated as renewable must be the same as the proportion of the fuel input that is treated as renewable, on an energy content basis.

The primary energy associated with electricity and heat outputs of the CHP treated as renewable must be determined as set out in the section above (CHP where all of the fuel input is renewable).

The primary energy associated with the electricity and heat outputs of the CHP treated as non- renewable must be determined as set out in the section above (Combined Heat and Power where all of the fuel inputs are non-renewable).

The following example illustrates how to determine the energy to report and how carbon will be accounted for in respect of the consumption of electricity and heat outputs of a CHP fuelled by a mix of renewable and non-renewable fuels.

Example

A reciprocating engine (CHP) situated on CCA facility A generates electricity through the combustion and carbon is accounted for by facilities A and B as follows.

Total fuel input to CHP	17,000 MWh
Biogas fuel input	17,000 × 50% = 8,500 MWh
Natural gas fuel input	17,000 × 50% = 8,500 MWh
Renewable fuel input	= 8,500/17,000 = 50% Therefore, not all electricity and heat generated is considered renewable.
Non-renewable fuel input	= 8,500/17,000 = 50%

Renewable outputs

Proportion of electricity considered renewable	50%
Proportion of heat considered renewable	50%
Electricity considered renewable	= 50% × 4,800 = 2,400 MWh
Heat considered renewable	= 50% × 7,000 = 3,500 MWh
Total fuel for renewable outputs	= 50% × 17,000 = 8,500 MWh
Primary energy for renewable electricity	= 2,400 × 2.6 = 6,240 MWh
Primary energy for renewable heat	= 8,500 – 6,240 = 2,260 MWh

Non-renewable outputs

Proportion of electricity considered non-renewable	50%
Proportion of heat considered non-renewable	50%
Electricity output considered non-renewable	= 50% × 4,800 = 2,400 MWh
Heat output considered non-renewable	= 50% × 7,000 = 3,500 MWh
Total fuel for non-renewable outputs	= 50% × 17,000 = 8,500 MWh
Fuel for non-renewable electricity output (calculated using formula given in paragraph 17of the Technical Annex)	$\frac{2 \times 8{,}500}{(2 \times 2{,}400) + 3{,}500} \times 2{,}400 = 4{,}916$
Fuel for non-renewable heat output (calculated using formula given in paragraph 17 of the Technical Annex)	$\frac{8500}{(2 \times 2{,}400) + 3{,}500} \times 3500 = 3{,}584$

Facility A Consumption and accounting – electricity

Total delivered electricity consumed (renewable and non-renewable)	= 3,000 MWh
Delivered electricity consumed – renewable	= 50% × 3,000 = 1,500 MWh
Delivered electricity consumed – non-renewable	= 50% × 3,000 = 1,500 MWh
Primary energy accounted for – renewable electricity	= 1,500 × 2.6 = 3,900 MWh
Primary energy accounted for – non-renewable electricity	$\left(\frac{1{,}500}{2{,}400}\right) \times 4{,}916 \; = \; 3{,}073 \; \mathrm{MWh}$

Facility A Consumption and accounting – heat

Total delivered heat consumed	= 3,500 MWh
Delivered heat consumed renewable	= 50% × 3,500 = 1,750 MWh
Delivered heat consumed non-renewable	= 50% × 3,500 = 1,750 MWh
Primary energy accounted for renewable heat	= (1,750/3,500) × 2,260 = 1,130 MWh
Primary energy accounted for non-renewable heat	= (1,750/3,500) × 3,584 = 1,792 MWh

Facility A Reporting

Delivered renewable electricity	1,500 MWh
Non-renewable electricity	3,073 MWh (as natural gas)
Renewable heat	1,130 MWh (as biogas)
Non-renewable heat	1,792 MWh (as natural gas)
Reporting form would return total CO_2 emissions associated with this energy consumption	1,681,601 $kgCO_2$
Of which renewable electricity	= 1,500 MWh × 0.52037 $kgCO_2$/kWh × 1,000 = 780,555 $kgCO_2$
Of which non-renewable electricity	= 3,073 × 0.18521 × 1,000 = 569,150 $kgCO_2$
Of which renewable heat	0 kg CO_2
Of which non-renewable heat	= 1,792 MWh × 0.18521 $kgCO_2$/kWh × 1,000 = 331,896 $kgCO_2$

Facility B Consumption and accounting – electricity

Total delivered electricity consumed	= 1,800 MWh
Delivered electricity consumed – renewable	= 50% × 1,800 = 900 MWh
Delivered electricity consumed – non-renewable	= 50% × 1,800 = 900 MWh
Primary energy accounted for – renewable electricity	= 900 × 2.6 = 2,340 MWh
Primary energy accounted for – non-renewable electricity	= (900/2,400) × 4,916 = 1,844 MWh

Facility B Consumption and accounting – heat

Total delivered heat consumed	= 3,500 MWh
Delivered heat consumed – renewable	= 50% × 3,500 = 1,750 MWh
Delivered heat consumed – non-renewable	= 50% × 3,500 = 1,750 MWh
Primary energy accounted for – renewable heat	= (1,750/3,500) × 2,260 = 1,130 MWh
Primary energy accounted for – non-renewable heat	= (1,750/3,500) × 3,584 = 1,792 MWh

Facility B Reporting

Delivered renewable electricity	900 MWh
Non-renewable electricity	1,844 MWh (as natural gas)
Renewable heat	1,130 MWh (as biogas)
Non-renewable heat	1,792 MWh (as natural gas)
Reporting form would return total CO_2 emissions associated with this energy consumption	1,141,756 $kgCO_2$
Of which renewable electricity	= 900 MWh × 0.52037 $kgCO_2$/kWh × 1,000 = 468,333 $kgCO_2$
Of which non-renewable electricity	= 1,844 × 0.18521 $kgCO_2$/kWh × 1,000 = 341,527 $kgCO_2$
Of which renewable heat	0 kg CO_2
Of which non-renewable heat	= 1,792 MWh × 0.18521 $kgCO_2$/kWh × 1000 = 331,896 $kgCO_2$

Facility A reports:

- 1,500 MWh of delivered renewable electricity (which will be treated exactly the same as grid electricity)
- 3,073 MWh natural gas for the non-renewable electricity it consumed
- 1,130 MWh of biogas for renewable heat
- 1,792 MWh of natural gas for non-renewable heat

The reporting form would calculate CO_2 emissions associated with this energy consumption of 1,681,601 kgCO_2.

Facility B reports:

- 900 MWh of delivered renewable electricity (which will be treated exactly the same as grid electricity)
- 1,844 MWh of natural gas for the non-renewable electricity it consumed
- 1,130 MWh of biogas for renewable heat
- 1,792 MWh of natural gas for non-renewable heat

The reporting form would calculate CO_2 emissions associated with this energy consumption of 1,141,756 kgCO_2.

D.2 CHP special reporting methodology

Fuel consumed in plant carrying out an Annex 1 activity under the Emissions Trading Directive is excluded from the CCA target facility. This means that such fuel is not included in the target facility's baseline and will not be reported by the target facility at future target periods.

For a number of facilities, all fuel consumed for the generation of heat is covered by EU ETS. This means that, in many cases, grid electricity is the only energy included in the CCA target facility.

However, at some facilities where all fuel for the generation of heat is covered by EU ETS, CHP plant is also used to meet all or a proportion of the facility’s electricity demand. Where the fuel consumption of this CHP is covered by EU ETS, the fuel consumed by the CHP plant is also excluded from the CCA target facility.

Over a given period of time, such as a base year or a target period, the CHP plant may not meet all the facility’s electricity demand. This could be because the CHP plant has insufficient capacity to do this or it is not operating for maintenance or other reasons. In these situations the facility will have to import grid electricity and this electricity will be included in the CCA target facility. This means that the electricity consumption included in the CCA target facility could change appreciably over time even if its total electricity

consumption remains the same. In these situations the apparent performance of the CCA target facility is subject to large movements, up or down, and for reasons unconnected with the efficiency with which electricity is consumed. This means that apparent performance may become uncoupled from actual performance.

A special reporting methodology (SRM) has been devised to reduce this volatility in apparent performance and for changes in apparent performance to more closely reflect changes in actual performance.

The SRM works by adjusting the throughput used in the calculation of performance of the target facility to reflect the proportion of total electricity consumption that is sourced from the grid. Actual grid electricity consumption is used as normal in the calculation of performance.

As such, performance for the facility in the base year or at a future target period is expressed as follows:

$$Performance = \frac{Total\ grid\ imports_{primary}}{Total\ throughput \times Grid\ intensity\ factor}$$

where:

$$Grid\ intensity\ factor = \frac{Total\ grid\ imports_{delivered}}{Total\ grid\ imports_{delivered} + Total\ CHP\ electricity_{delivered}}$$

Where facilities meet the criteria, the operator may choose to use the SRM to calculate the performance for the facilities in the base year and at subsequent target periods. This means that all target units containing facilities meeting the criteria, and where the operator has chosen to use the SRM, must have their baseline data recalculated.

D.3 Inclusion and exclusion of facilities in a target unit

Step 1

Use the table below to collate the information for each individual target unit or new facility to be included in the target unit.

Original data from the start of the underlying agreement are needed plus data for the predicted base year throughput of any new facilities (A) and the target SEC (B) for the next target period.

	Base year: Predicted throughput (A)	Next target period: Target SEC (B)	Next target period: Target energy use (C)*
Target unit 1	ATU1	BTU1	CTU1
Target unit 2	ATU2	BTU2	CTU2
New facility 1**	ANF1	BNF1	CNF1
Total	DTOTAL		ETOTAL

* C = 2 × A × B (calculate this for each target unit/facility).

** Operators will need to calculate a target SEC for the standalone new facility.

The protocols to be used to determine the percentage improvement target with respect to the baseline data that will be applied for the new facility are as follows.

- If it's a new entrant, the facility will take the same percentage target as the sector, adjusted as necessary if the new facility and the sector have different base years. The base year for the new facility will be deemed to be the calendar year containing the majority of the months of the new facility's base year. For example, if the base year for the new facility is September 2010 to August 2011, the base year for the new facility will be deemed to be 2011.
- If the facility is already covered by a CCA and is moving between target units with different operators (sale or purchase), the facility's percentage target will be the same as the target for the target unit it left.

Step 2

Perform the calculations in the table below.

Calculation	Result	Total
Twice total base year throughput for all the target units/facilities you plan to include in the target unit: 2 × (ATU1 + ATU2 …+ ATUn)	…	DTOTAL
Total target energy for all the target units/facilities you plan to include in the target unit (CTU1 + CTU2…+ CTUn)	…	ETOTAL
ETOTAL/DTOTAL = target SEC for new target unit	…	F

The proposed new target unit target (F) for the next target period from this calculation is the mathematically equivalent target that would have been set had the new target unit structure been in place from the start of the underlying agreement.

Step 3

We apply a stringency test to the proposed target (F) for the next target period for the new target unit. This test checks whether the performance that the new target unit would have had at the last target period is better than the mathematically equivalent target for the new target unit for the following target period. If this is found to be the case, we will adjust the mathematically equivalent targets calculated for all future target periods for the new target unit. This step doesn't apply in target period 1 as there is no previous target period to compare against.

Step 4

The adjustment ratio to be applied to all future targets is calculated as follows:

$$\text{Adjustment ratio} = \frac{\text{Performance of proposed target unit at most recently completed target period}}{\text{Mathematically equivalent target for most recently completed target period}}$$

D.4 How to vary the target when including and excluding a facility

If an eligible facility is added to a target unit, we may vary the target to take account of its addition. The type of target held by the target unit will govern how we do this.

Technical Annex paragraphs 66 to 71 state that:

If a facility is added to a target unit, the Administrator may vary the target to take account of the addition of the facility, as follows.

If the additional facility is to be added to a target unit with an absolute target, a new target must be calculated by adding the target energy or carbon for the additional facility to the target energy or carbon value for the existing target unit.

If the additional facility is to be added to a target unit with a relative target, the Administrator may vary the target to take account of the addition of the facility using the following calculation:

Where:

- New TU target = new target for the combined target unit
- Old TU target = target unit target before adding the facility
- Old TU BY T/P = target unit base year throughput before adding the facility
- AF target = target for the additional facility on its own
- AF BY T/P = base year throughput for the additional facility

- All the targets here are in relative terms (for example, kWh/tonne)

If the additional facility is to be added to a target unit with a relative Novem target, the

Administrator may vary the target to take account of the addition of the facility using the following calculation:

$$New\ TU\ target\ = \frac{(Old\ TU\ Target \times Old\ TU\ BY\ Energy)\ +\ (AF\ Target \times AF\ BY\ Energy)}{Old\ TU\ BY\ Energy\ +\ AF\ BY\ Energy}$$

Where:

- New TU target = new target for the combined target unit
- Old TU target = target unit target before adding the facility
- Old TU BY energy = target unit base year energy (or carbon) before adding the facility
- AF target = target for the additional facility on its own
- AF BY energy = base year throughput for the additional facility
- All the targets here are in Novem (ratio) terms (that is a value between 0 and 1)

Appendix E: Definition of an installation in the CCA scheme

The definition below is taken from Climate Change Agreements: Guidance on Eligibility via Pollution Prevention and Control, Guidance Paper CCA-B01, DECC, 2008.

Limb (i) of the definition

23. Two criteria exist for the purpose of determining whether plant or machinery satisfy the first limb of this definition:

- (1A) The plant or machinery must be a 'technical unit' where one or more activities listed in Part 2 of Schedule 1 to the PPC Regulations ('listed activities') are carried out.
- (1B) The technical unit must be stationary

For the purpose of criterion (1A), 'technical unit' can be taken to mean something which is functionally self-contained in the sense that the unit – which may consist of one component or a number of components functioning together – can carry out the Schedule 1 activity or activities on its own.

25. However, where there are two or more such units on the same site, those units should be regarded as a single technical unit for these purposes if:

- they carry out successive steps in one integrated industrial activity
- one of the listed activities is a directly associated activity of the other
- both units are served by the same directly associated activity.

Limb (ii) of the definition

26. An installation consists of the stationary technical unit, identified under the first limb of the definition, plus any location on the same site where activities that satisfy the second limb are carried out. Three criteria are proposed for the purpose of determining whether an activity satisfies the second limb:

- (2A) The activity must be directly associated with the stationary technical unit.
- (2B) The activity must have a technical connection with the listed activities carried out in or by the stationary technical unit.
- (2C) The activity must be capable of having an effect on emissions.

27. Criterion (2A) requires that the activity is carried out on the same site as the stationary technical unit and that the activity serves the stationary technical unit (that is, there is an asymmetrical relationship whereby the activity serves the stationary technical unit, but not

vice versa). If an activity, such as operating a landfill, serves a stationary technical unit carrying out a listed activity and some other industrial unit or units on a different site or carrying out non-listed activities, then the activity will only be directly associated with the stationary technical unit if that unit is the principal user of the activity.

28. Criterion (2B) gives rise to four types of DAA which may be said to have a technical connection with a stationary technical unit:

- input activities concerned with the storage and treatment of inputs into the stationary technical unit
- intermediate activities concerned with the storage and treatment of intermediate products during the carrying out of the listed activities – this might apply particularly where the stationary technical unit consists of a number of sub units, with the product of one sub unit being stored or treated prior to being passed on to the next sub unit in the production chain
- output activities concerned with the treatment of waste (or other emissions, like manure) from the stationary technical unit
- output activities concerned with the finishing, packaging and storage of the product from the stationary technical unit

29. These activities have a technical connection in the sense that they are integral parts of the overall listed industrial activity. Often there will also be a physical connection, such as a conveyor belt or pipeline, but this does not have to be the case.

30. The need for input, intermediate and output activities to be an integral part of a listed activity before it is caught by limb (ii) is presented as part of criterion (2B). Note, however, that the requirement for associated activities to be ‘directly’ associated in criterion (2A) also emphasises the need for associated activities to be an integral part of a listed activity before they are treated as part of an installation.)

31. Criterion (2C) covers both activities that have an effect on emissions and pollution from the listed activities with which they are associated and activities that have such an effect in their own right.

Appendix F: Estimation techniques for meter failure or fault

The estimation techniques described in this appendix should only be used when there are gaps in energy supply data, for example, when a meter fails or is subsequently found to have been faulty.

F.1 Introduction

There are five basic steps you should follow when applying an estimation technique:

1. Identify gaps in energy supply data
2. Identify a suitable technique to address these gaps
3. Quantify the missing data using the technique
4. Use the data to complete target period reporting data
5. Retain records for future reference and potential facility audit

To decide whether an approach is ‘reasonable’ or not, you should consider which technique will be the most accurate, that is, you should select the technique on the basis that it is limited to filling the data gaps, maximises the use of primary source data and acknowledges the levels of activity during the period of the data gaps.

You must ensure that the reasons for your choice of technique and the steps in your estimation process are documented to provide an audit trail.

F.2 What are the estimation techniques?

The four techniques available to use are:

- estimated energy bills
- pro-rata calculation
- direct comparison
- price settlement

The ways in which you can apply these techniques are described in turn below with examples. They are not in a priority order and you should consider which method is most reasonable as outlined above.

Other techniques, such as benchmarking, are not valid as estimation techniques within the CCA scheme. This is because establishing benchmark data and then measuring estimated data against them would make effective verification (either by the operator or the Administrator) too complex.

The four methods available to the CCA scheme replicate the four methods used in the CRC Energy Efficiency Scheme with the exception of the 10% uplift calculation in CRC which has been removed for the CCA scheme.

It is important to ensure the estimate resulting from your chosen method does not under-estimate supply.

Technique 1: Estimated energy bills

You can use estimated bills from suppliers to establish the energy supplied for electricity or fuels (in most cases this will be for natural gas). Suppliers may send these because they are unable to provide bills based on actual supply data for the entire period. All evidence for estimated bills should be kept to provide an audit trail.

Example – Operator A

Step 1: Some time after the billing period, an invoice for natural gas supply to operator A is identified as being estimated.

Estimates are used where bills are issued more frequently than actual meter readings are recorded.

Estimates are usually based on past supply and/or a meter profile.

Step 2: Actual meter readings have not been taken for the billing period, so operator A uses estimated bills to cover that period.

Operator A should check that the billed estimate is proportionally consistent with the supply actually recorded by the meter. For example, if you normally consume X m^3 of gas per month and you are reading the meter two months after the end of the estimated period, the current reading should be greater than the billed estimate by approximately 2X m^3.

If there is a large difference between estimated and actual supply then let your supplier know.

Step 3: Calculate the amount of energy supplied for the period.

Supply data are taken from the estimated bills.

Step 4: Reporting

Operator A should report the estimated supply for the period where appropriate.

Step 5: Operator A should keep auditable records of the estimated bills as part of its records for the target period. These are:

- Supplier invoices for CCA reporting period giving estimated supply
- Actual meter readings taken for comparison with estimated bills and recorded on meter log sheets
- Correspondence notifying the suppliers of large discrepancies (where applicable)

Technique 2: Pro rata calculation

The pro rata estimation technique involves quantifying the missing data for a data gap using a proportional method based on actual readings from another similar period.

The energy supply for a CCA target period may be estimated pro rata against the supply for a similar, but shorter period. Actual meter readings should be used to derive a daily supply rate that is then used to fill in any data gaps.

This method is less useful where seasonal effects come into play (for example, where there is a supply peak during one part of a year due to an external factor).

To ensure that the data used to fill the supply gap remain relevant, the data must cover at least three months and be no more than 12 months outside the period to be estimated. You should keep all evidence to provide an audit trail.

This technique can also be used for situations where a gas meter corrector fails but the mechanical meter continues to operate, preventing the corrected energy consumption over a period of time from being known. Provided both corrected and mechanical meter readings have been collected over a reasonable period of time during which the whole metering system has been operating correctly, and a good correlation exists between the two, this correlation can be used to estimate the corrected energy consumption from the mechanical meter readings over the period of corrector failure.

Example – Operator B

Step 1: Operator B is missing natural gas data for the final two months of a target period due to meter failure.

Step 2: Operator B has chosen to use the pro rata method based on actual meter readings for the 10 months before the meter failure.

Step 3: Operator B calculates the amount of energy supplied for the period.

Actual meter reads (corrected) in units of hundred cubic feet (HCF):

- 1 January 2016: 2,090,658 HCF

- 1 November 2016: 2,240,658 HCF

Supply between 1 January 2016 and 1 November 2016 = 2,240,658 – 2,090,658 = 150,000 HCF

Metered period: 303 days, missing 62 days at the end of the period.

Supply in period: 150,000 HCF

Pro rata for the January to December year = [(daily supply rate) × data gap in days] + rest of year supply = total year supply = [(150,000/303) × 62] + 150,000 = 180,693 HCF.

Or:

This can be calculated as kilowatt hours (kWh). Using the conversion factors given below for this example calculation, the supply in the period is calculated as 4,706,226 kWh.

- Temperature and pressure correction factor = 1.02264 (usually the figures for temperature/pressure correction and calorific value are printed on the gas bill)
- HCF (corrected) × 2.832 to convert to cubic metres (m^3)
- m^3 × CV of 39.0000 MJ/m^3 to convert to megajoules (MJ)
- MJ divided by 1,000 to convert to GJ
- GJ × 277.78 (1 GJ = 277.78 kWh) to convert to kWh

Pro rata for the January to December year = [(daily supply rate) × data gap in days] + rest of year supply = total year supply = [(4,706,226/303) × 62] + 4,706,226 = 5,669,216 kWh
Note that this figure is not for the whole target period.

Step 4: Operator B reports the estimated supply as part of its submission for its target unit target period. This will need to include all metered data for year 1 of the target period as well as any other fuels consumed for the CCA target facility.

Step 5: Operator B records all meter readings and conversion factors used and documents these for its audit trail. This should also contain details of monthly gas supply and calorific values (CVs) for the reporting period. CVs can be obtained monthly from supplier's invoices or daily from the National Grid website.

Technique 3: Direct comparison

The direct comparison method uses data that correspond with a similar period of supply. The advantage of this method is that it accommodates variability in energy demand (for example, due to annual weather patterns). For industry, it works best where production runs are long and constant and similar production levels are recorded in both periods.

To ensure the data are applicable and are not used repeatedly for an extended period, the data must be no more than 12 months from the period to be estimated. You should keep all evidence to provide an audit trail.

Example – Operator C

Step 1: Operator C has inaccurate natural gas supply data caused by a meter fault.

Step 2: Subsequent analysis by operator C or the supplier shows that natural gas supply was under-reported over a three-month period before the fault was noticed and rectified.

Step 3: Operator C should calculate the amount of energy supplied in the period.

The fault related to a manufacturing operation which uses natural gas for drying a product.

Operator C notes that shift patterns and production volumes are similar to the previous year.

Operator C selects best fit data for three months from the previous year with similar production volumes.

Adjustment to supply is made on straight-line basis for slight difference in production volumes (similarly this could be for temperature, for example, using degree days).

Step 4: Operator C reports the supply for its target period reporting as follows:

Reported supply in CCA target period: 21 months' actual data and three months' adjusted data

Step 5: Operator C should record the following:

- evidence that a fault affected the gas meter and, if available, that it was repaired
- analysis showing the fault had affected three months' data
- the three months' actual data selected from previous year for direct comparison

adjustments – the basis for these as applied to the direct comparison data for example degree day corrections, production volumes and so on.

Technique 4: Price settlement

As a last resort, you may use a price settlement (energy cost data) with suppliers as the basis for CCA target period reporting. However, this must be as the final backstop in the hierarchy of estimation techniques and must only be used if you are unable to use techniques 1, 2 or 3.

In cases of a simple price settlement the onus is on you, as the operator, to justify a reasonable unit price figure is used to convert this into a supply figure. You should keep all evidence as an audit trail.

This technique would allow you to use aggregate cost data rather than requiring individual metered supply, which would be beneficial in cases of a large number of small consuming meters. For this method you need to demonstrate the use of an actual price figure (using the unit price shown on an earlier bill for this billing period) or an average price per unit (based on a set of price figures) to convert this aggregate cost into an aggregate supply figure.

Example – Operator D

Step 1: Operator D has data available from a supplier on an aggregate cost basis but actual supply data cannot be accurately confirmed in the reporting period.

Step 2: Operator D can take the aggregated cost data and convert this into supply data using the unit price shown on an earlier bill for this billing period (pence per kWh).

Step 3: Operator D should calculate the amount of energy supplied in the period:

- Take the energy cost data provided by supplier (for example, £150,000).
- Use an average price per unit figure to convert aggregated cost into kWh (for example 6.87 p/kWh (see Step 5: Records)).
- Then calculate energy supply = £150,000／0.0687 = 2,183,406 kWh

Step 4: Operator D reports the supply for the purpose of target period reporting as follows.

- Reported supply in period: 2,183,406 kWh

Step 5: Operator D should record the following:

- Supplier statements giving aggregated cost and other relevant data
- Unit price calculations and the basis for any weighting of unit price. Electricity may need to be weighted for weekend units, night units and other time units. Example unit costs operator D might use are as follows:
    - weekend units: 8.69 p/kWh, estimated as 35.6% supply
    - night units: 4.78 p/kWh, estimated as 7.4% supply
    - other time units: 6.00 p/kWh, estimated as 57% supply
    - average unit price = (8.69 × 35.6) + (4.78 × 7.4) + (6.00 × 57)／100 = 6.87p

Appendix G: Facility eligibility form

The facility eligibility form (FEF) can be used by operators when supplying information to their sector association for a new facility application. The information will be used by the sector association when entering data into the CCA register.

Section 1 – CCA eligibility

1) Facility

1a) Site Name	Enter site name
1c) Facility Address	Enter facility address
1d) Facility Postcode	Enter facility postcode
1e) Facilities Contact	Enter contact name
1f) Facilities Contact email address	Enter contact email address
1g) Facilities Contact phone number	Enter contact phone number
1h) Consultant Name (where applicable)	Enter consultant name (where applicable)
1i) Consultant Company (where applicable)	Enter consultant company name (where applicable)
1j) Consultant email address (where applicable)	Enter consultant email address (where applicable)
1k) Consultant phone number (where applicable)	Enter consultant phone number (where applicable)

2) Related agreements

2a) Is the facility adjacent to or connected to an existing CCA facility?	Yes/No
2b) Connected Facility Number	If Yes to 2a - Supply

3) Previous agreements

3a) Has any part of the facility been previously covered by a CCA?	Yes/No

3b) Has the facility recently had a change in ownership?	If Yes to 3a - Supply
3c) Previous Facility Number	If Yes to 3a and 3b - Supply
3d) Has any part of the facility been covered by a CCA that has previously been terminated?	Yes/No
3e) Previous Facility Number	If Yes to 3d - Supply
3f) Date agreement commenced	If Yes to 3d - Supply Day/Month/Year
3g) Date agreement was terminated (If applicable)	If Yes to 3d - Supply Day/Month/Year
3h) Reason for termination	If Yes to 3d - Supply

4) EU emissions trading scheme (EU ETS) coverage

4a) Is the facility covered by the EU ETS?	Yes/No
4b) EU ETS Number	If Yes to 4a - Supply
4c) Installation Name	If Yes to 4a - Supply
4d) Installation Postcode	If Yes to 4a - Supply

5) Agreement type

5a) Eligible under	Environmental Permitting Regulations (EPR or Energy Intensive (EI)

Section 2 – EPR or IPC (Integrated Pollution Control)

6) EPR authorisation – where applicable

6a) Do you currently hold an EPR or IPC authorisation for any activity being carried out in the facility?	Yes/No
6b) Please provide authorisation number(s)	If Yes to 6a – Please Supply
6c) State here the name of the regulator or the local authority name.	If Yes to 6a – Please Supply
6d) If Yes to 6a please attach a copy of the permit	Attached/not attached

Section 3 – Information on the extent of the facility

We require a detailed description of the process from start to finish. For inclusion we need to identify the eligible activities and explain what activity or substance they use which makes them eligible under the sector's CCA eligibility criteria – see Appendix A of the operations manual. Likewise, to be included in the agreement, applicants need to demonstrate how any directly associated activities (DAA) meet the three determining criteria. You should provide all necessary additional information needed to identify what is being produced and how. A process flow map and site plan should be included with annotations to identify eligible, directly associated, ineligible and 70% areas.

7) The manufacturing process

Please attach a description of the manufacturing process conducted at this site from receipt of raw materials to dispatch of final product. It should be of sufficient detail to allow an unambiguous interpretation of the extent of your process(es). The narrative should also describe the product or range of products being produced.

7a) Manufacturing process description (PDF)	Attached/not attached
7b) Process flow maps (PDF)	Attached/not attached
7c) Annotated site plans (PDF)	Attached/not attached

8) The eligible process

Please attach a brief description of the plant or processes directly used in the stationary technical unit, covered by the sector's eligibility criteria (see Appendix A of the operations manual). Do not include any directly associated activities at this stage.

8a) Eligible process description	Attached/not attached
Enter eligible process description here if not attached.	

9). Directly associated activities

Please attach a description listing any activities that you consider to be 'directly associated'. The description should address how the activity or process meets the criteria for being directly associated. Any directly associated activities must be on the same site as the activities described above under 'The Eligible Process'. They must be technically connected, they must serve the activities described in 'The Eligible Process' and must be capable of having an effect on emissions.

9a) DAA description	Attached/not attached
Enter DAA description here if not attached.	

Section 4 – Application of the 70% rule (on basis of most recent 12 month continuous data)

10) The facility occupies the entire site, that is, the energy consumed by the installation defined above in the 'Extent of Facility' (section 3) is greater than or equal to 70% of the primary energy used within the site.	Yes/No
11) The facility occupies part of the site, that is, the energy consumed by the installation defined above in the 'Extent of Facility' (section 3) is less than 70% of the primary energy used within the site. In this case the eligible facility can be defined to include other activities that consume no more than 3/7ths of the consumption of the installation.	Yes/No
12) Provide the exact percentage of energy consumed in the installation (STU + DAA) as a proportion of the whole site energy use, excluding any additional energy that can be claimed under the 3/7ths provision.	Please enter a number between 0% and 100%.
13) Provide the percentage of energy consumed in relation to the 3/7ths provision as a proportion of the installation's (STU + DAA) energy use, where this is applicable (needs to be sub-metered).	If Yes to 11 – Please enter a number between 0% and 42.9%.
14) Is sub-metering in place for the eligible facility (STU + DAA + 3/7ths)?	If Yes to 11 – Supply

70% evidence

You will need to provide data (for example, from permanent sub-metering or spot metering, or estimates). The origin of all data should be specified. Please give the basis of any estimates and show any formula used.

15) Please attach: Evidence that the activities described in the 'Extent of Facility' section consume the percentage of primary energy stated in 12 and 13 Evidence that suitable sub-metering has been installed.	If No to 10 – Attach evidence
16) Please attach either: Evidence that activities in the installation (STU + DAA) is greater or equal to 70% of the site's total energy use. Or: Evidence that activities outside of the installation (STU + DAA) are less than 30% of the site's total energy use.	If Yes to 10 – Attach evidence

Section 5 – Submission

I declare that to the best of my knowledge the information provided on this form is correct.

I understand that the climate change agreement is bound by the process definition and description of eligible areas of the facility as described on this form. I accept that if there are any changes to the process or the eligible area I will notify this to the Administrator through the operator in order that an assessment can be made of the need to review the extent of a facility's eligibility.

Please supply evidence that the target unit associated with this facility has authorised the submission of this information.

Signed (electronic signature)	
Name	
Position or title	
Date	

Appendix H: Workbook tools

New entrant and variation target calculators

Workbook	Used for	File name	Application
Target calculator	New applications and base line variations including data corrections, facility exits and entries for all target types	LIT 10506	This workbook is for working out the appropriate targets for new entrant TUs or for existing TUs. It may be used for baseline revisions due to eligibility changes, structural changes or errors. It may be used to adjust the facilities that are included in the TU. Some data has to remain fixed (for example target type, units, percentage improvement profile). It captures revised baseline energy and fuel split data and calculates the TU numerical targets by using the TU percentage targets.
Reconstructing base year to include 3/7ths	Correcting base year data	LIT 10081	This workbook is to reconstruct the base year performance when amending the 3/7ths provision.
Reconstructing base year where eligibility crosses 70% threshold	Correcting base year data	LIT 10082	This workbook is to reconstruct the base year performance where the eligibility crosses the 70% threshold due to a structural change

Reporting variation target calculators

Workbook	Used for	File name	Application
Supply disruption calculator	Target adjustment	LIT 10083	This workbook is mandatory for use in cases where an unexpected disruption in the supply of energy to a site, or an unexpected failure in on-site dedicated electricity generation has occurred. It enables the target to be adjusted in line with the extra energy associated with the disruption of power supply.
Supply disruption plant shutdown example - no CHP	Example data and calculations	LIT 10084	This workbook provides an example of data to be collected and calculations to be undertaken in cases where a supply disruption has occurred at a plant with no CHP.
Supply disruption plant shutdown example - CHP	Example data and calculations	LIT 10085	This workbook provides an example of data to be collected and calculations to be undertaken in cases where a supply disruption has occurred at a plant with CHP.
Fall in throughput for absolute target unit	Target adjustment	LIT 10086	This workbook is for target adjustment in cases where the throughput of an absolute target unit falls by more than 10% of twice the base year throughput.
Fall in throughput for absolute target unit - Example method 1	Example data and calculations	LIT 10087	This workbook provides an example of the use of adjustment method 1 for situations where an absolute target has experienced a drop in throughput of more than 10% of twice the base year throughput.
Fall in throughput for absolute target unit - Example method 2	Example data and calculations	LIT 10088	This workbook provides an example of the use of adjustment method 2 for situations where an absolute target has experienced a drop in throughput of more than 10% of twice the base year throughput.

Reporting spreadsheet templates

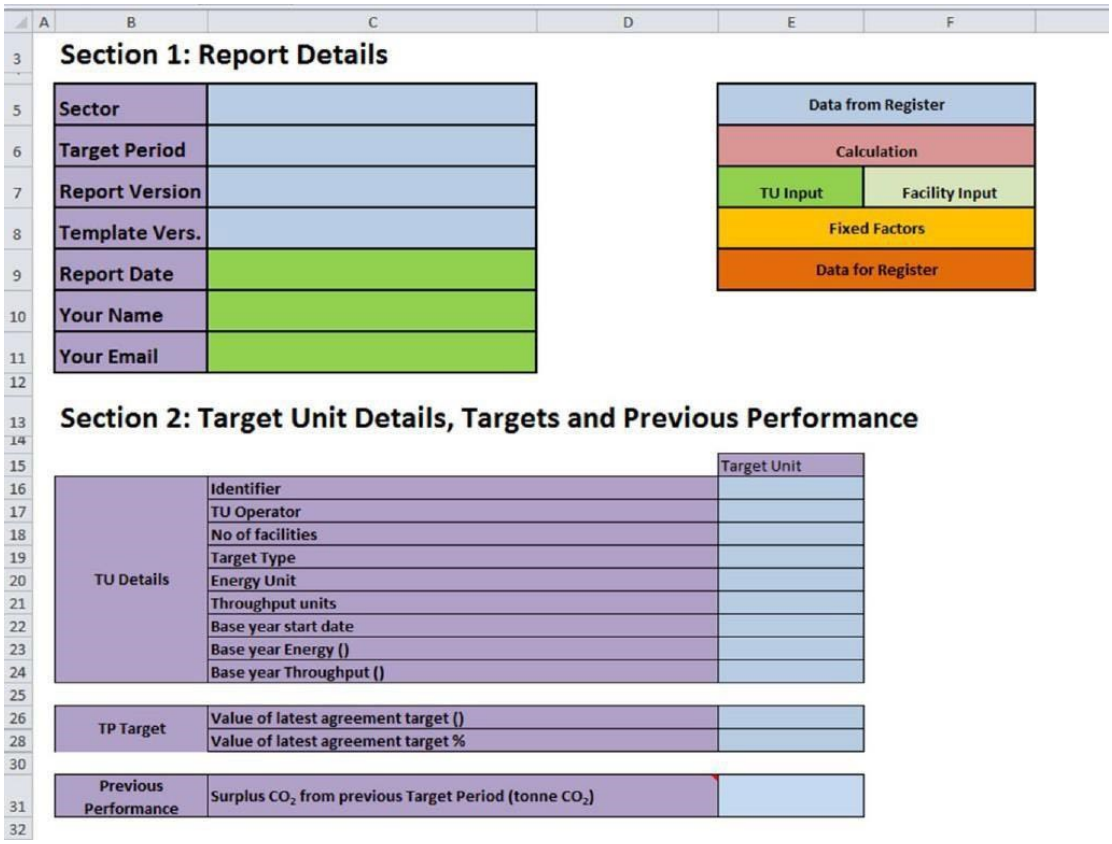
Workbook	Used for	File name	Application
Absolute energy reporting template	Reporting	LIT 10089	This workbook is for target units with absolute energy targets to use for target period reporting.
Relative energy reporting template	Reporting	LIT 10090	This workbook is for target units with relative energy targets to use for target period reporting.
Novem carbon reporting template	Reporting	LIT 10091	This workbook is for target units with Novem carbon targets to use for target period reporting.
Novem energy reporting template	Reporting	LIT 10092	This workbook is for target units with Novem energy targets to use for target period reporting.

Appendix I: The reporting workbook

I.1 Completing the reporting workbook

Each reporting workbook contains two worksheets. The first worksheet presents instructions on how to complete the reporting task. The second worksheet ('Reporting Worksheet') is where data must be entered.

Sections 1 and 2 of the reporting worksheet are the same for all target types, and are shown below. They consist mostly of pre-populated data which will come from the information held in the register. The person completing the workbook will be required to enter a small amount of contact information.



Section 1: Report Details

Sector	
Target Period	
Report Version	
Template Vers.	
Report Date	
Your Name	
Your Email	

Data from Register
Calculation
TU Input / Facility Input
Fixed Factors
Data for Register

Section 2: Target Unit Details, Targets and Previous Performance

		Target Unit
TU Details	Identifier	
	TU Operator	
	No of facilities	
	Target Type	
	Energy Unit	
	Throughput units	
	Base year start date	
	Base year Energy ()	
	Base year Throughput ()	
TP Target	Value of latest agreement target ()	
	Value of latest agreement target %	
Previous Performance	Surplus CO_2 from previous Target Period (tonne CO_2)	

Section 3 of the reporting workbook requires information to be entered about the performance of the target facility within the target period. Data must be entered for the full 24-month target period, except in circumstances where a facility has entered the scheme during the target period (see Section 10.3).

In this section the sector has the choice to enter aggregated performance data for the entire target unit or to enter the data on an individual facility basis. For a given target unit, sectors must do one or the other, not both. If facility level data are not provided in the reporting workbook they must be made available during an audit.

Fuel conversion factors are provided in section 10.4.4. Any fuels consumed that are not explicitly listed in the reporting workbook must nevertheless be identified as an 'Other Fuel' and the quantity of this fuel consumed entered in the reporting workbook. A fuel conversion factor for any 'Other Fuels' consumed should already have been agreed with the sector facilitator as part of the new entrant application or variation process. It should be noted that the conversion factors used for reporting should be the same as those used in the base year. Section 3 of the workbook is shown below.

Section 3: Actual Target Period Performance for Target Facility

Data can be provided in column F for the whole TU OR in columns G to AA for individual facilities and/or groups of facilities aggregated together

	Identifier	Fuel Conversion Factors (tC/)	Target Unit	Target Unit Entry	Facility Entry
			0	0	
Actual Target Period Performance (throughput and fuel split over 2 years)	Target Period (2 years) Total Production Units		0.000		
	Electricity used (PRIMARY) ()	0.0000546	0.000		
	Natural Gas used ()	0.0000505	0.000		
	Fuel Oil used ()	0.0000732	0.000		
	Coal used ()	0.0000794	0.000		
	Coke used ()	0.000117	0.000		
	LPG used ()	0.0000585	0.000		
	Ethane used ()	0.0000545	0.000		
	Kerosene used ()	0.0000676	0.000		
	Petrol used ()	0.0000643	0.000		
	Gas Oil/ Diesel Oil used ()	0.0000758	0.000		
	Naptha used ()	0.0000646	0.000		
	Petroleum Coke used ()	0.0000908	0.000		
	Refinery Gas used ()	0.0000671	0.000		
	Other fuel - 01 - used ()		0.000		
	Other fuel - 02 - used ()		0.000		
	Other fuel - 03 - used ()		0.000		
	Other fuel - 04 - used ()		0.000		
	Other fuel - 05 - used ()		0.000		
	Other fuel - 06 - used ()		0.000		
	Other fuel - 07 - used ()		0.000		
	Other fuel - 08 - used ()		0.000		
	Other fuel - 09 - used ()		0.000		
	Other fuel - 10 - used ()		0.000		
	Other fuel - 11 - used ()		0.000		
	Target Period Total Energy		-	No data entered	

Section 3 of the workbook presents the list of standard fuels for reporting. In some cases these fuels may be known by other names - for example, kerosene is also known as burning oil, or paraffin. Where 'fuel oil' is shown, this includes both heavy fuel oil, medium fuel oil and light fuel oil.

Target units with Novem or relative targets may have chosen to apply the CHP Special Reporting Method (CHP SRM). This has been developed for target units containing facilities with the following characteristics:

- All the facility's direct fuel consumption is covered by EU ETS.
- The facility consumes electricity generated in a CHP plant, and this CHP plant is covered by EU ETS.
- The facility is able to import electricity from the grid.

The reporting workbooks for target units with Novem or relative targets therefore contain an additional section (Section 3a) for the entry of data on the consumption of CHP generated electricity. Entry of these data leads to the calculation of an adjusted throughput for the target unit. This section must be completed for those target units that have agreed to use the CHP SRM. As with data entry in Section 3, data can be entered in Section 3a either for a whole target unit or at an individual facility level. Where data are entered at the individual facility level in Section 3, they should also be entered at the individual facility

Section 3a: Only for Target Units that have CHP in EUETS and need to apply the Special Reporting Method

			Target Unit Entry	Facility Entry
Special Reporting for CHP in EUETS	Target Period CHP delivered electricity ()		-	
	Target Period Grid Intensity			1.000
	Adjusted target period throughput	0.000		0.000
			No data entered	

level in Section 3a, and vice versa. See below.

For target units reporting at an individual facility level, a facility using the CHP SRM will need to report grid electricity consumption as its performance data. It will also need to report its delivered CHP electricity consumption to calculate its adjusted throughput.

Where an operator reports at the target unit level and this contains some facilities that are not using the CHP SRM or consuming fuel not covered by EU ETS, both grid electricity and others fuels will need to be reported.

Target units with Novem targets may report base year and target period performance at the individual product level or at the aggregated product level. If they report at the individual product level, data will be entered in the light green cells of Section 4 of the Novem reporting workbook, as shown below (for non-Novem targets, section 4 provides the output of the reporting calculations). These data will be used by the workbook to calculate two quantities necessary for determining Novem targets and performance (Quantities E and F of Section 4).

Section 4: Novem Product Data and Performance Calculation

	Product							
Base Line Performance (for 1 year)	Was this a product in the base year?	Please select	Please select	Please select	Please select	Please select	Please select	
	Production t0							
	$Energy_0$ (Equivalent energy of product in TU base year)							
	SEC_0	0.000	0.000	0.000	0.000	0.000	0.000	
TP Target in agreement (for 2 years)	TP Target %							
	Production t0 x2	0.000	0.000	0.000	0.000	0.000	0.000	
	$Energy_n$	0.000	0.000	0.000	0.000	0.000	0.000	
	SEC_n	0.000	0.000	0.000	0.000	0.000	0.000	
Actual TP Performance	Production tN							
Target energy at target period throughput	$SEC_n * t_N$ (E)	0.000	0.000	0.000	0.000	0.000	0.000	
Base year energy at target period throughput	$SEC_0 * t_N$ (F)	0.000	0.000	0.000	0.000	0.000	0.000	

If the target unit reports at the aggregate product level, it must enter aggregate values for the products in the bright green cells of Section 4, as below. These are the quantities E and F that would have been automatically calculated by the workbook if the target unit had entered data at the individual product level. If the target unit reports at the aggregate product level, then it must retain individual product performance data equivalent to that which would have been entered for individual products in the reporting workbook. If the target unit is audited, these individual product level records will be examined by Environment Agency auditors.

Actual Target Period Performance	Actual target period energy	D	0.000
	Target energy at target period throughput	E	0.000
	Base year energy at target period throughput	F	0.000
	Actual TP Ratio Performance	G = D/F	#DIV/0!
	Revised TP Ratio Target	H = E/F	#DIV/0!
	Actual TP Performance		#DIV/0!
	Adjusted TP Target		#DIV/0!
	Target Period Result		**#DIV/0!**

Own Novem calculation results

Once all the required information has been entered, the reporting workbook will calculate the performance of the target unit. Results will be provided to show how the target unit has performed against its target and will include information on any surplus generated or buy-out due. The format in which this will be presented is shown below (format will differ depending on the target type).

Section 4: Target Period Performance Result

TP Result	Target Period Performance ()	0.000
	Target Period Improvement Relative to Base Year %	0.000%
	Target Period Result	Target Met

Section 5: Carbon Surplus or Buy-Out Determination

Result against target

Carbon Calculations	Target period energy to Carbon factor (tonne C/)	0
	Equivalent Energy (for buy-out calculation) ()	0.000
	Equivalent Energy (for surplus calculation) ()	0.000
	Target Period (2 years) Carbon emitted (tonne CO_2)	0.000
	Surplus CO_2 used (tonne CO_2)	0
	Surplus CO_2 gained (tonne CO_2)	0
	Buy-out required (tonne CO_2)	0
	Buy-out Cost (£)	£0

Surplus CO_2e gained

Cost of buy-out

I.2 Submitting data for reporting

Completed reporting workbooks must be submitted by the sector or its consultant via the reporting area on the register. It is important to ensure that the correct workbook is uploaded for each target unit. As reporting workbooks are uploaded, they will appear in a submission results table, which will allow the sector to review its progress.

To reduce the load on the CCA register and reduce the risk of not being able to correct any issues, we recommend sector associations do not wait until the end of the reporting period before submitting.

When a report is uploaded, the register will run a series of automatic validation checks, and may reject the submission. This will allow issues to be identified and dealt with as soon as possible to allow re-submission to the register. The table below shows the possible errors that may be flagged by these checks, and the actions that must be taken to deal with them.

Validation check	Error text	Action required
The TUID in the uploaded workbook must exist within the list of target units that need to submit reporting data for the specified reporting period.	ERROR: Target unit [TU identifier] cannot be found as a reportable target unit in this reporting period.	Check TUID and confirm it is correct. Ensure that the TU had an agreement in place on 31 December.
The TUID in the uploaded workbook must exist within the sector for which it is being uploaded.	ERROR: Target unit [TU identifier] does not belong to this sector. To upload a report for a different sector, navigate to the correct sector's target period reporting submissions page.	Check that the TU report is being uploaded to the correct sector reporting page.
The TUID is "locked" for reporting (either because the 1 May deadline has been reached, the TU has already uploaded data, or the administrator has manually locked the TU).	ERROR: Target unit [TU identifier] cannot be reported on at this time. To enable reporting submissions for this target unit, please contact the Administrator.	Contact the Environment Agency to discuss reporting requirements. Under certain circumstances it will be possible to unlock the TUID to enter further reporting data.
The target period in the uploaded workbook must match the current target period being reported.	ERROR: The workbook submitted is for target period [workbook TP]. Submissions can only be accepted for [the TP].	Check that the reporting workbook is for the current target period. If they do not match, download the latest workbook, re-enter the data and re-submit.
The template version in the uploaded workbook must match the version currently recorded in the register. If the template version has been upgraded, the sector cannot upload data in the old template, it must download the revised template, populate with data and re-submit.	ERROR: The template uploaded uses an old version of the target unit template. Version [workbooktempversion] has been superseded by version [workbooktempversion]. The latest version must be completed and uploaded to ensure correct reporting results.	Download the latest reporting workbook, re-enter the data and re-submit.
The workbook version in the uploaded workbook must match the current	ERROR: The file uploaded uses an old version of the target unit's spreadsheet. Version	Download the latest reporting workbook,

workbook version for that TU, as held by the register. If a retrospective variation is assented before the data is submitted, a new workbook must be downloaded, populated and submitted.	[workbooktempversion] has been superseded by version [workbooktempversion]. The latest version must be completed and uploaded to ensure correct reporting	re-enter the data and re-submit.
User-entered data (green cells) extracted from the uploaded spreadsheet must be numeric (except the three cells at the top).	ERROR: Cells in the spreadsheet expecting numeric data contain invalid values.	Check data entry to ensure that the data entered meets the requirements of all elements of the reporting workbook. Amend any errors and re-submit.
All reportable data (bright orange cells) extracted from the uploaded spreadsheet must match the equivalent value extracted from the 'clean copy' spreadsheet.	ERROR: Results calculated in the register do not match values calculated in the submitted workbook. Please ensure that calculated cells within the workbook are not altered when entering data. The most likely way to fix this issue is to download the latest version of the spreadsheet template and re-enter the data.	Download the latest version of the reporting template and re- enter the data.
Internal system error	ERROR: An unknown error occurred processing this file. If it does not correct itself shortly, please contact the Administrator.	Contact the Environment Agency if the error persists.

Once successfully submitted, the reporting workbook will be locked. The sector can make a request to the Environment Agency helpdesk (cca-help@environment-agency.gov.uk) to unlock any report that needs editing prior to the 1 May deadline. After the 1 May the Environment Agency will review and approve the reports, which will generate MoAs for buy-outs. Any that are not approved will be put on hold and the sector will be contacted.

Any target units for which a submission has not been made by the 1 May deadline will not be able to submit data without permission from the Administrator. Failure to submit a report may result in a penalty and no recertification (anyone who doesn't pay the penalty may then have their agreement terminated).

I.3 IT compatibility

The following web browsers are currently compatible with the target period reporting functions of the CCA register:

- IE v8 and v11 (with JavaScript enabled for TPR bulk upload)
- Firefox v32 (with JavaScript enabled for TPR bulk upload)
- Chrome v37 (with JavaScript enabled for TPR bulk upload)
- Safari v5 (with JavaScript enabled for TPR bulk upload)

Note: JavaScript must be enabled to allow the bulk upload of reporting workbooks.

The reporting workbooks are compatible with Microsoft Excel 2003 and above. For target units with more than 250 facilities, it will be necessary to use Microsoft Excel 2007 and above.

I.4 Register information

Following the submission of a report, sectors will be able to follow whether a target unit has been de-certified or re-certified by viewing the target unit details screen on the register.

I.5 Secondary reporting

Any amendments required to the reported performance or target of a target unit after the 1 July, because of an audit of a facility connected with the target unit or the discovery of errors, will trigger the need for secondary reporting and require the completion of a secondary buy-out reporting workbook, as shown below.

Section 5: Supplementary MOA surplus and buy-out

Carbon Calculations	**Target period energy to Carbon factor (tonne C/)**	0
	Equivalent Energy (for buy-out calculation) ()	0.000
	Equivalent Energy (for surplus calculation) ()	0.000
	Target Period (2 years) Carbon emitted (tonne CO_2)	0.000
	Total target period Buy-out required (tonne CO_2)	0
	Previous Buy-out required after use of surplus (tonne CO_2)	
	Previous surplus CO2 used (tonne CO_2)	
	Surplus CO_2 gained in TP (tonne CO_2)	
	Secondary Buy-out required (tonne CO_2)	0
	Secondary Buy-out Cost or Refund (£)	£0

Surplus cannot be used to meet any shortfall between revised performance and revised target during secondary reporting. Any remaining deficit against the target will generate a secondary buy- out. Any buy-out paid for as part of the initial reporting will be taken into account when calculating the secondary buy-out. However, a penalty may also be issued for misreporting. No surplus can be generated from secondary reporting. However, if secondary reporting shows that too much buy-out was paid during initial reporting then the Administrator will send a letter stating the over-payment value to the operator who must then make a claim for this amount from BEIS.