



## Guide to the Carbon Reduction Commitment

### Introduction

The Carbon Reduction Commitment Energy Efficiency Scheme (CRC) is a major new scheme aimed at reducing carbon emissions through a reduction in energy consumption. It is targeted at medium and large non-energy intensive organisations, from both the public and private sector.

GDF SUEZ ENERGY UK recognises that your organisation needs to have up to date information on the possible implications of the CRC. The aim of this guide is to provide you with guidance on whether you will qualify for the CRC and if you do, what will be expected of your organisation and by when.

GDF SUEZ ENERGY UK has made every effort to ensure that the information in this guide is correct at the time of publication; however, GDF SUEZ ENERGY UK does not guarantee that the information is accurate. Readers are advised to independently verify the information before using it as a basis for decision making.

The Environment Agency is the administrator of the CRC scheme and is the ultimate authority on its operation. For further information, you can browse the CRC section on their website: <http://www.environment-agency.gov.uk/business/topics/pollution/98263.aspx>

### CRC Overview

#### What is the CRC?

The CRC is a new government scheme aimed at reducing the carbon emissions of medium to large non energy intensive, public and private sector organisations.

#### Who qualifies?

- Any organisation that consumed more than 6,000 MWh of electricity between 1<sup>st</sup> January and 31<sup>st</sup> December 2008.
- Where subsidiaries and parent organisations are concerned, the half hourly consumption for the highest parent organisation, including all its subsidiaries, must be calculated to determine qualification.

## How will it work?

- Cap and trade system administered by the Environment Agency (EA).
- Participating organisations are required to monitor their carbon emissions based on their entire energy use, excluding transport.
- Participants purchase carbon allowances annually to cover emissions.
- A league table will be produced to show and compare carbon reduction performance compared to previous years for all participants.
- Carbon allowance funds will be recycled to organisations based on league table performance.
- Recycling payments, bonus/penalties increase incrementally from 10% in year 1 to 50% in year 5.

The scheme will be split into two separate phases, introductory and capped:

### Introductory phase 2010-2012

- Carbon allowance prices capped at £12/tCO<sub>2</sub>.
- Purchased in a joint sale in April 2011 for both 2010 and 2011,
- Followed by a one year sale in April 2012,
- No limit on the number of allowances issued by government.
- Further allowances required, will be purchased through secondary market, or safety valve, at a higher price

### Capped Phase 2013-onwards

- Carbon allowances sold at market price in open auction in April every year.
- Number of allowances limited by government.
- Further required allowances purchased through secondary market at market price.

## What are the implications?

### Potential financial implications:

- Purchase of carbon allowances on a yearly basis.
- Recycling of bonus or penalty based on league table performance.
- Cash flow implication due to 6 month gap between allowance purchase and recycling payment.
- Administration cost of establishing which energy sources consumption data needs to be reported. This must be undertaken at the beginning of each phase, but not annually.
- Administration cost of collecting and reporting all necessary consumption data annually.

### Possible reputational implications:

- Brand image, due to published league table being available publicly.
- Individual sector tables likely to emerge, highlighting energy reduction performance compared to direct competitors.

## Inclusion

### How do I know if my organisation is included?

#### Qualification Criteria

Participation in the CRC is decided wholly on your organisation's half hourly electricity consumption. Your organisation will be included if the following applies:

- You have at least one electricity meter settled on the half hourly market , and;
- Your organisation's total half hourly metered electricity consumption is above 6,000 MWh for the period between 1<sup>st</sup> January and 31<sup>st</sup> December 2008

## Half Hourly meters

In order to clarify what constitutes a half hourly meter for CRC purposes, Defra has proposed that half hourly meters will be defined as any of the following\*:

- Half hourly meters (Code of Practice 5 meters) used for billing purposes
- Voluntary Automatic Meter Reading (AMR) meters that produce half hourly data (irrespective of whether the half hourly metered electricity is settled on the half hourly or non half hourly market)
- Pseudo half hourly meters (commonly used for measuring electricity consumption of street furniture – e.g. street lights, traffic lights, etc.)

(\*Taken from DEFRA (August 2008) Carbon reduction commitment: Who's affected? [www.defra.gov.uk](http://www.defra.gov.uk))

GDF SUEZ ENERGY UK will be able to inform you which of your organisations meters fall under these guidelines.

## Responsibilities for Parent Organisations and Subsidiaries

### Parent organisations

The responsibility for compliance with the CRC scheme sits with the highest parent organisation. If you are the highest parent organisation you will need to calculate the half hourly electricity consumption for your entire organization, including all subsidiaries. This whole organisation figure will allow you to determine whether you are included in the CRC. If your organisation is included you will then be required to measure and submit consumption data for all subsidiaries, from all energy use at their site/premises (not just from half hourly meters) but excluding transport.

### Subsidiaries

If you are a subsidiary of a larger parent organisation you are not individually liable for inclusion within the CRC. Your parent organisation, however, will need you to provide consumption figures for half hourly electricity consumption to add to its organisation total. If your parent organisation does qualify for CRC you will need to provide it with consumption data for all your energy use at your sites/premises annually, as defined below.

## Reporting

### What information will your organisation need to report?

Companies that fall under the CRC will be required to report their entire UK based CO2 emissions, derived from their annual energy consumption at their sites/premises, excluding transport. This calculation is separate and different from the CRC inclusion calculation, which only measures half hourly electricity consumption. Once your company has been confirmed to be participating in the scheme, you will need to measure and report energy use from all sources and fuel types every year. The primary sources for this information will usually be:

For electricity

- Mandatory half hourly meters
- Discretionary half hourly meters
- Non half hourly meters with profile classes 5-8

For gas

- Daily meters
- Non daily meters with consumption >73,200KWh

In some cases the sources listed on the previous page, will not provide data that accounts for 90% of your organisation's total CO2 emissions, excluding transport. In order to meet the regulators minimum 90% threshold, other sources may need to be included, such as:

- Non half hourly electricity profile classes 1-4
- Liquid Petroleum Gas (LPG)
- Fuel Oils
- Diesel

### **EU Emissions Trading Scheme and Climate Change Agreement sites**

Sites that fall under either the EU ETS or CCA schemes must be included in the calculation for your companies total emissions. You will, however, not be required to purchase carbon allowances for emissions that fall under EU ETS or CCA as part of your CRC requirements.

### **How will your organisation be required to submit its reports?**

#### **Submitting statements**

Your organisation will be required to submit its emissions data in the form of yearly statements to the Environment Agency via an online registry system. The measurement year will run between 1<sup>st</sup> April and 31<sup>st</sup> March. This is different to the measurement year to determine inclusion in the CRC, which ran from 1<sup>st</sup> January to 31<sup>st</sup> December 2008 only. These statements will be compulsory for all participants and the information included will be used to calculate CRC league table positions.

It is compulsory for your statements to include the following information:

- Details of organisation (name, contact details etc.)
- Annual CO2 emissions for entire organisation

We would also advise you to include details of:

- Any early actions your organisation has taken to reduce consumption, such as AMR installation.

Depending on your organisations particular circumstances it may also be beneficial for you to include:

- Details of any changes in turnover

### **Evidence packs**

It is advisable for you to produce an evidence pack for your organisation to support the information that you submit in your annual statements. Should your organisation or any of its sites be subject to an audit then your evidence pack will be a ready and prepared source of information that substantiates your annual statements submission.

If we are your energy supplier, we will be able to provide you with an annual statement of electricity and/or gas to help you compile your organisations annual statement and evidence pack. You need to request this from us by the 1<sup>st</sup> February and we will ensure it is available to you by the end of the following May ready for you to submit your data by the annual July deadline.

## Registry accounts

Each participating organisation should already have registered to open an online registry account linking it to the Environment Agency, who will administer the CRC. The deadline for registration for the scheme and set up of your online account is the end of March 2010. Your account will operate in a similar way to an online bank account and will allow your organisation to undertake the following:

- Keep track of allowances purchased during auction and via the safety valve.
- Monitor any sales or purchases through the secondary market.
- Report and surrender your organisations annual carbon emissions.

## What are the guidelines regarding estimated bills?

### Estimated Bills

If your organisation is providing consumption data from an estimated bill then you will need to add an adjustment factor of 10% to the CO<sub>2</sub> emissions total for the estimated amount. However, consumption data will be classed as actual readings in the following circumstances:

- When a minimum of 6 months data is not estimated.
- When you take meter readings for your organisation yourself.

There will be no requirement to add the 10% adjustment factor if your organisation meets either of these conditions.

## How should you calculate greener energy tariffs and on-site generated energy?

### CCL exempt energy

If your organisation has any of its sites supplied with energy from GDF SUEZ ENERGY UK's Renewable Energy or Levy Exempt Energy tariffs then you will be required to class this as equal, in terms of carbon output, as standard "brown" energy for CRC reporting. This is a DEFRA requirement and aligns to their Greenhouse Gas Reporting Guidelines.

### On site generation

If your organisation generates its own energy on site and receives Renewable Obligation Certificates (ROCs) for this then you need to class this energy in the same way as traditional "brown" energy for CRC reporting. However, if you do not receive ROCs for your organisation's onsite renewable generation then this will be zero carbon rated for the CRC.

## What about carbon offsetting schemes?

The primary aim of the CRC is to improve energy efficiency and reduce emissions across the targeted sector. If your organisation is currently buying or is intending to buy carbon offset allowances then the CRC will not offer any credit for them and therefore no reduction in your CO<sub>2</sub> emissions total.

## The Introductory Phase

As mentioned previously the CRC will operate in separate stages. The first phase (2010-2012) is considered to be an introductory phase.

Main features of the introductory phase will be:

- Emission allowances will be capped at £12/tCO<sub>2</sub>.
- Allowances will be sold to participants in a one off sale.
- The number of allowances will not be limited by the government.
- If an organisation requires further allowances they can be purchased on the secondary market at the capped price of £12/tCO<sub>2</sub>.

### What does my organisation need to do during the introductory phase?

The introductory phase begins in April 2010 and runs until March 2013. The main requirements for your organisation will be:

#### 2010

- Organisations must register by setting up an online account and submit their half hourly qualification data to the Environment Agency, (i.e. a list of their HH settled meters and their qualifying 2008 consumption volume).
- There is no fixed price sale during 2010.

#### 2011

- Participants need to request consumption data from GDF SUEZ ENERGY UK in February 2011 and we will make this available for you by May 2011.

In April Participants must purchased allowances from the government at a fixed price.

- Participants must submit yearly data in July 2011, for 1st April 2010 to 31st March 2011,
- In October 2011 the first re-cycling for 1 years worth of allowances will take place. Plus the first yearly league table is published by the Environment Agency based on participants performance in the Early Action Metric.

#### 2012

- Participants need to request consumption data from GDF SUEZ ENERGY UK in February 2012 and we will make this available for you by May 2012.

In April Participants must purchased allowances from the government at a fixed price.

- Participants must submit yearly data in July 2012 for 1st April 2011 to 31st March 2012, surrender allowances and financial report data if you are using the growth metric.
- In October 2012 the re-cycling for the previous year's allowances will take place. Plus the second yearly league table is published by the Environment Agency.

## The secondary market and Safety Valve

After your organisation has purchased its emission allowances you will be required to surrender the amount required to cover your emissions. The CRC has a built in a secondary market for the sale and purchase of surplus allowances. The CRC also has a safety valve that links to the EU ETS, allowing organisations with a shortfall in CRC allowances to purchase EU ETS allowances as a last resort. These extra EU ETS allowances will be sold at the EU ETS market price and will cost significantly more than the £12/tCO<sub>2</sub> capped price. To ensure cheaper EU ETS allowances are not available a floor price will be set, which will be higher than the capped CRC allowance price. This will ensure the EU ETS allowances are not trading at a lower price than £12/tCO<sub>2</sub>.

## What happens if I have allowances left over?

If you have left over allowances after surrendering the amount needed to match your emissions you can either:

- Bank your surplus allowances to use the following year but within the same phase (allowances from the introductory phase cannot be used in the capped phases).
- Sell your surplus allowances in the secondary market to organisations that do not have enough allowances to match their emissions. All sales during the introductory phase will be at the £12/tCO<sub>2</sub> fixed price.

## What if my organisation does not have enough allowances?

If your organisation has not purchased enough allowances to cover its carbon emissions for the year, you will have two options;

- You can purchase the required shortfall from other organisations that find they have a surplus after submitting the allowances required to match their emissions total.
- You can purchase EU ETS allowances to cover your organisations shortfall. These will be bottom capped to ensure they are significantly more expensive than the capped CRC allowances.

## The league table

At the end of each emissions year there will be a period of reconciliation and reporting to gauge your organisations performance in the scheme. After all participants performance data has been collected the government will publish a league table based on the following measures:

Absolute carbon metric: This metric is mandatory for all participants and carries an increasing weighting towards your organisation's performance, (from 0% in the first year to a proposed 75% in the future phases). Your organisation's percentage reduction in carbon emissions is illustrated and is based on a comparison between your emissions over the previous year relative to your average since the start of the scheme.

Early action metric: This metric is optional and carries a decreasing weighting towards your organisation's performance, (from 100% in the first year to 20% in the third year). The aim is to give credit to organisations who have taken actions that have lowered their baseline consumption prior to the start of the scheme. These include the voluntary installation of AMR. We would advise our customers who have taken actions that fall under the early action metric criteria to report them fully, as it is likely to be to your advantage.

Growth metric: This metric is also optional and carries an increasing weighting towards your organisation's performance, (i.e. from 0% in the first year to 20% in the 3<sup>rd</sup> year). The aim is to take into account any growth in your organisation and will provide a measure of carbon emissions relative to turnover. It may be to your organisation's advantage to report for this metric, but not in all cases.

Using the figures calculated using the three metrics, a comparison between all participants will be undertaken and each organisation ranked accordingly. An overall weighted ranking is then calculated after applying the relevant weighting ratio for the year.

### **What are the financial implications?**

Whilst the CRC is considered by the government to be revenue neutral, your organisation should be aware of the following potential financial implications:

- Your organisation will have to purchase carbon allowances to cover your annual emissions in each year of the scheme.
- The cost of allowances will be fixed at £12/tCO<sub>2</sub> for the first 3 years. After this it will be at the CRC market price.
- If you have to purchase allowances via the safety valve they will be significantly more expensive than both the £12/tCO<sub>2</sub> introductory phase price and the market price during the capped phase.
- The fund created by the sale of allowances will be recycled to participants based on their position in a CRC league table.
- Depending on your league table performance, your organisation will receive a bonus or penalty as a percentage of the total price of the allowances you purchased
- There is a significant cash-flow implication for your organisation as the gap between payments of credits and recycling of the fund is 6 months. No interest will be paid to your organisation for this delay.

### **What are the reputational implications for my organisation?**

The CRC league table will be published every year and made available publicly. The reputational implications for your organisation could be significant, as it compares the carbon reduction performance of a huge range of organisations across many sectors. Eventually it is likely that individual sector tables may be created allowing more direct comparison.