



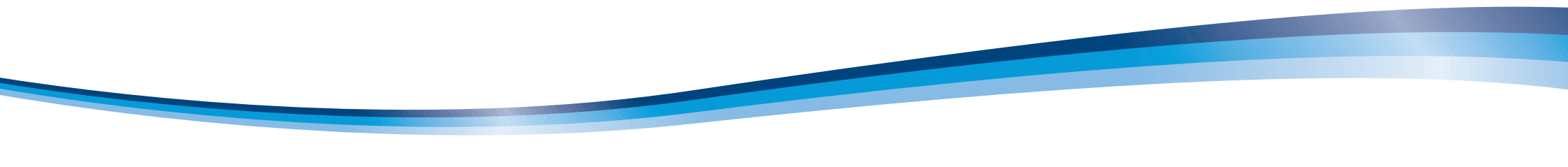
Managing the CRC as a business opportunity

**A guide to preparing your organisation
for the Carbon Reduction Commitment
Energy Efficiency Scheme**

The Carbon Trust, October 2009

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The Carbon Reduction Commitment Energy Efficiency Scheme

An executive summary from Lord Puttnam

“ Hello.

A great deal of emphasis has been placed on the worrying aspects of climate change.

But in boardrooms around the UK people like yourself have been introduced to the Carbon Trust and found that tackling the issue head-on can bring significant commercial advantages. As a good example, consider the opportunities for your business inherent in the Carbon Reduction Commitment (CRC) legislation.

Read on, and I hope you will be inspired to approach climate change from a different perspective.”




Lord Puttnam

What is the CRC?

The CRC is a mandatory emissions trading scheme starting in April 2010. Around 20,000 organisations in the UK will be affected by the new regulation and 5,000 organisations will participate in a Carbon Reduction Commitment League Table.

Your organisation could be one of them.

Who is going to be affected?

If your organisation used more than 6,000 MWh of electricity through a half-hourly meter in 2008 it will be affected by the CRC. In practice, this will include many organisations with annual electricity bills of around £500,000 and over.

What is going to happen?

Organisations that are affected by the CRC will have to purchase carbon allowances from the Government from April 2011 – which could cost thousands of pounds, depending on their emissions.

What you need to do now

Many organisations have not yet considered the financial, compliance, audit and carbon management implications of the new regulations. It's therefore important to read on – this guide has been written to help you understand how the CRC will work in practice.

Crucially, it shows how you can prepare your organisation to make the most of its opportunities by cutting energy bills, reducing your upfront CRC payments, increasing your payouts and enhancing your reputation.

Someone to talk to

The Carbon Trust was set up by Government in 2001 as an independent company to accelerate the move to a low carbon economy. If you have any questions on how to get the most out of the CRC or on any aspect of carbon reduction, contact the Carbon Trust on 0800 0852005 or go to www.carbontrust.co.uk/crc

Note: This guide is based on the draft regulations published in March 2009, and changes announced in October 2009. The final regulations are yet to be published and are subject to change. For full details on the draft regulations visit www.decc.gov.uk/en/content/cms/consultations/crc/crc.aspx

The Carbon Reduction Commitment: responsibilities and opportunities

New mandatory emissions trading scheme

To reduce the likelihood of significant climate change, global emissions of CO₂ need to be substantially reduced. The UK is committed to a reduction of at least 80% from 1990 levels by 2050. The CRC has been designed to focus UK business on this goal, particularly through energy efficiency measures.

Winners and losers

Public and private organisations that emit large amounts of CO₂ will have to purchase allowances to cover their emissions each year. The total revenues will then be redistributed among the participants, with each receiving either a bonus or a penalty, depending on how effectively they reduce emissions.

Benefiting from the CRC

The Carbon Trust is the UK leader in helping companies reduce emissions. By working with us, you can make the CRC work in your favour; while you'll still have to purchase allowances each year, you can be more confident of getting them back, plus a bit extra. A free on-site carbon survey is the first step towards your carbon reduction strategy.

The CRC performance league table

Once the CRC is underway a league table will show the relative performance of CRC participants in terms of their efforts to reduce carbon dioxide emissions. Your ranking on the league table is likely to affect your reputation with customers, business partners, employees and investors alike.

Demonstrate your commitment with the Carbon Trust Standard

In the first year, league table rankings, bonuses and penalties will be awarded on the basis of your 'early actions', one of which is Carbon Trust Standard certification. We can help you prepare for certification with our carbon management service and site surveys.

Read on to understand how the CRC's system of allowances will work. And how working with the Carbon Trust can help you take advantage of the opportunity that early action represents.

The UK is committed to a reduction of at least 80% from 1990 levels by 2050. The Carbon Reduction Commitment Energy Efficiency Scheme (CRC) has therefore been designed to focus UK business on this goal.

Key things you need to know about the CRC

All money raised will be recycled back to the participants – in proportion to their relative performance in the scheme.

The Carbon Reduction Commitment Energy Efficiency Scheme – what, why and when?

The Carbon Reduction Commitment Energy Efficiency Scheme (CRC) is a new mandatory emissions trading scheme for the UK. Administered by the Environment Agency on behalf of the Department of Energy and Climate Change, it will cover large business and public sector organisations. Through a system of reporting and reduction we can ensure that the UK meets its emissions reduction targets.

The introductory phase of the CRC will last for three years, starting from April 2010. Qualifying organisations will have to report their carbon emissions and purchase a corresponding number of carbon emission allowances each year.

The CRC is intended to be 'revenue neutral' to the Exchequer. All money raised from the sale of allowances will be recycled back to the participants – in proportion to their relative performance in the scheme.

Is your organisation covered by the CRC?

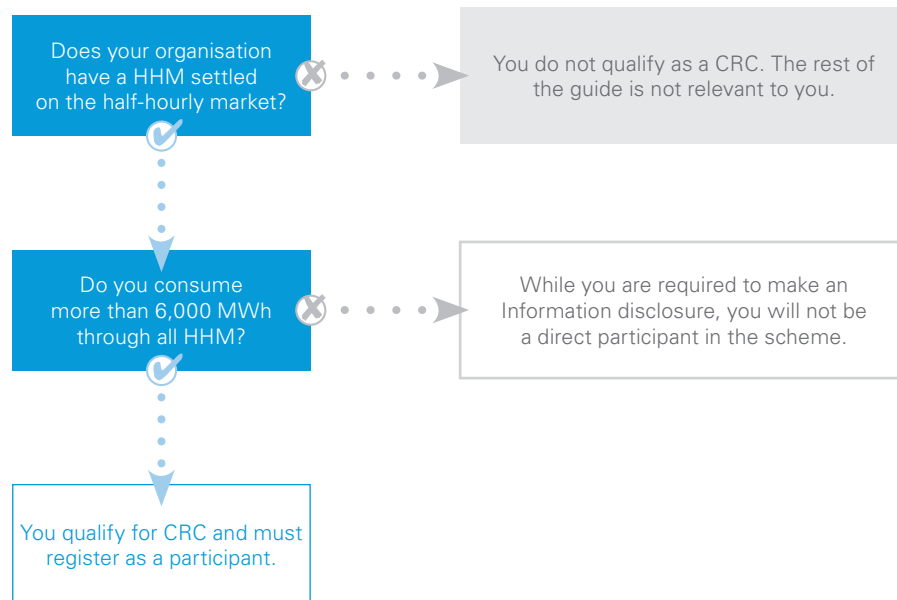
Organisations that had at least one half-hourly meter (HHM) settled on the half-hourly market, and used more than 6,000 MWh of electricity through all half-hourly meters during the course of 2008, will qualify. The qualifying organisation will then need to report at least 90% of all types of energy use in all their sites, not just HHM electricity.

Participation in the CRC is at the highest group (parent) level, or at the company (subsidiary) level if a subsidiary is large enough in its own right to participate, and wishes to do so separately. A subsidiary is deemed large enough if it meets the 6,000 MWh/annum of half-hourly metered electricity threshold in 2008.

However, this cannot effect participation at a group level by deducting the subsidiary energy usage. If deducting the subsidiary energy usage takes the total energy usage of the group below the threshold then the group must enter at the group level.

Through a system of reporting and reduction we can ensure that the UK meets its emissions reduction targets.

Check whether your organisation qualifies for the CRC:



How does the scheme work?

Purchasing allowances for energy use
Participating organisations will have to monitor their emissions and purchase *allowances* for each tonne of CO₂ they emit. As a consequence, reducing your carbon emissions means that you will not only save money on your energy bill, but also that you will need to purchase fewer allowances.

Recycling payments – winners and losers

The CRC is designed to be revenue neutral overall, with the money recycled back to the participants based on their relative emissions reduction efforts.

In the first phase of the scheme, each year's recycle payment will be calculated from two elements as follows:

- A set payment based on the organisation's share of the total emissions pot at the start of the scheme (i.e. in 2010/11).
- An adjustment to this payment – either a bonus or penalty – based on the organisation's position in the league table.

In the first year, organisations at the top of the table, who have done the most to reduce their emissions, will get a bonus of up to 10% of their base recycling payment.

On the other hand, organisations at the bottom of the table will be penalised by up to 10% of their base recycling payment.

Every year the maximum bonuses and penalties will increase by 10%, until they reach 50% in year five.

The performance league table – an opportunity to enhance reputation
The performance league table will be published annually. The more

successful an organisation has been in reducing its emissions, the higher it will appear in the table – with its ranking affecting how much of the recycled allowance payments it receives.

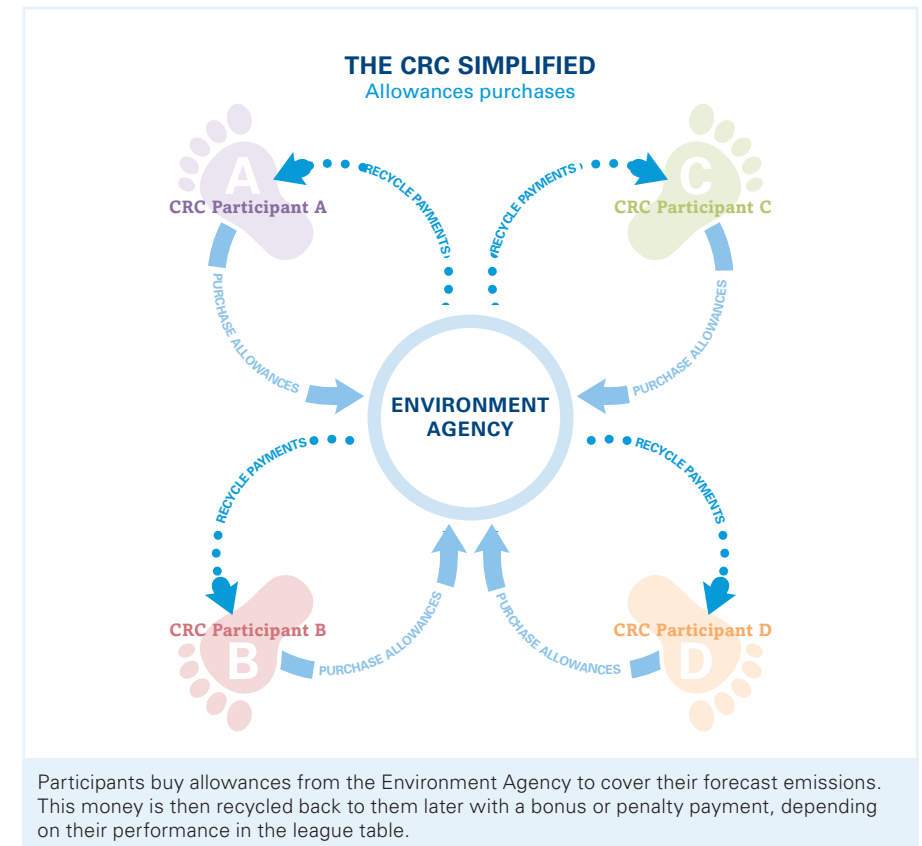
Unlike current voluntary league tables such as the Sunday Times Top 100 Green Companies, every participating company will be included in the CRC League Table. It is therefore a valuable opportunity for companies to increase their reputation and be seen as one of the 'best green companies'.

“...having gained the Standard we will have a higher ranking in the CRC league table. This will definitely reduce costs to the business.”



Adrian Swindells,
General Manager (Ops),
Abbey Corrugated

Be seen as one of the 'best green companies'.



How is performance assessed?

Your position in the league table will depend on your performance against three different metrics. These are:

1. The Early Action Metric.

This is a measure of your carbon reduction efforts carried out before the start of the scheme, comprising:

- The percentage of non-mandatory HH metered electricity and gas emissions which are covered by voluntarily installed automatic metering by 31st March 2011.
- The percentage of your organisation's emissions covered by a valid Carbon Trust Standard certificate, or equivalent, on 31st March of each compliance year.

In the first league table, performance will be based entirely on the early action metric. In later phases, it will fall away.

2. The Absolute Metric.

This is a measure of the percentage change in your absolute CRC emissions in the year relative to previous years.

3. The Growth Metric.

This is a measure of an organisation's change in emissions intensity, i.e. the change in your ratio of emissions to turnover versus previous years. This will benefit organisations that are expanding in an energy efficient way.

How much will it cost?

Initial price of £12 per tCO₂.

In the introductory phase, allowances will be sold at a fixed price of £12/tCO₂ with no limit to the number of allowances an organisation can purchase.

Second-phase auctions to begin in 2013

Once the introductory phase is over, a cap will be placed on the total number of allowances available to be sold. These allowances will then be auctioned, rather than sold at a fixed price. At this point, no reliable estimate can be made of auction prices, but they are likely to be higher than £12/tCO₂.

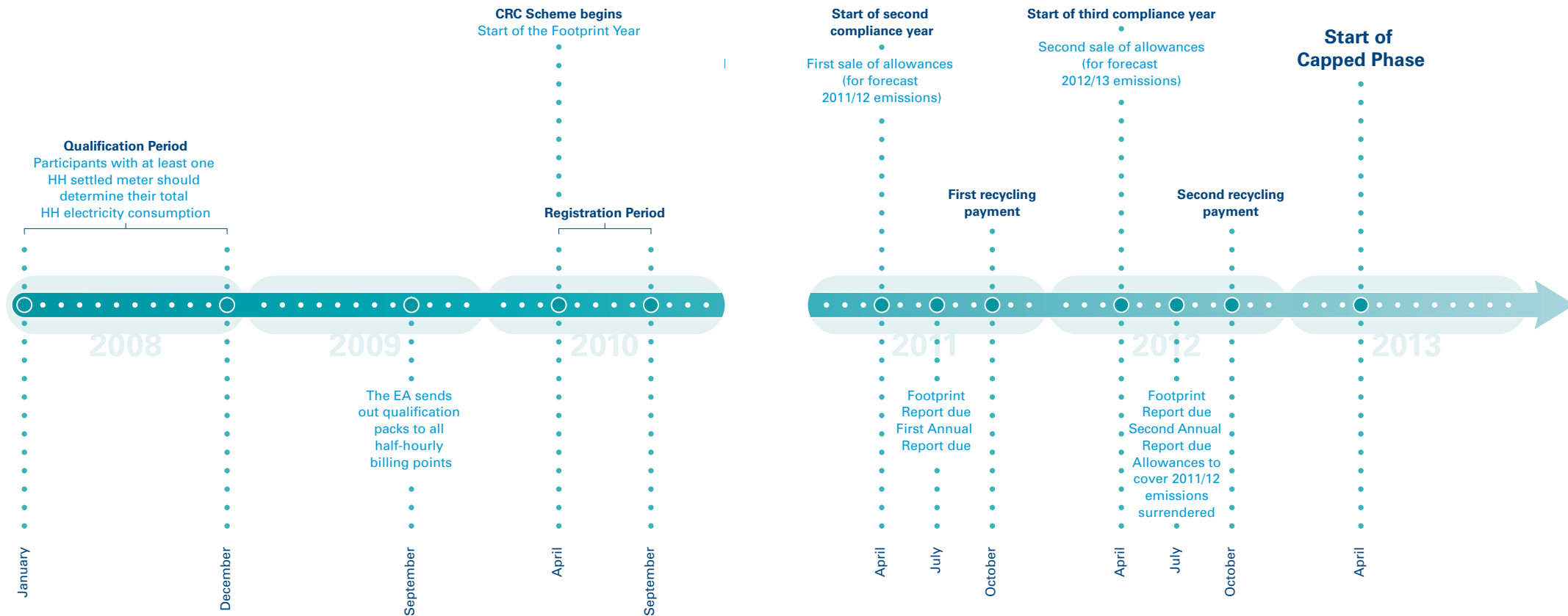
Purchase and repayment dates

Allowances will be sold in April each year, starting in April 2011, with repayments in October of the same year. The first year (2010/11), will be a reporting year only, so no allowances will need to be bought to cover this period.

Fines for non-compliance

Participants will need to submit a self-certificated evidence pack to support the league table and provide evidence of compliance. Failure to comply will result in fines, depending on the nature of non-compliance. For example, incorrect reporting is expected to be penalised at £40 per tCO₂.

Key dates for the CRC's introductory phase:



CRC winners and losers

Reduced allowance costs, bigger paybacks

Organisations who act quickly to reduce their carbon upfront, such as those who achieve the Carbon Trust Standard, will benefit in many ways. These benefits include cost savings from lower energy bills and from purchasing fewer allowances.

Clean Corp vs Big Emissions: who will be the CRC winner?

The following example compares the fortunes of two fast-growing companies: Clean Corp and Big Emissions. At the start of the scheme, in 2010/11, their annual emissions are equal at 100,000 tCO₂.

However:

- Clean Corp has voluntarily installed advanced energy meters and has achieved Carbon Trust Standard certification.
- Big Emissions has taken no action whatsoever.

How will their different attitudes to their emissions affect their allowances – and their recycle payments?

Two contrasting stories of costs and benefits in the scheme's first years of operation:

Allowances covering 2011/12:	Clean Corp	Big Emissions
<p>For 2011/12, both companies are predicting a 10% growth in turnover. However:</p> <ul style="list-style-type: none"> • Clean Corp's emissions-reduction efforts make them confident that they'll reduce emissions by 10%. They therefore purchase allowances for 90,000 tCO₂ at £12 per tonne, which works out to £1,080k. • Big Emissions expects their emissions to rise at the same rate as their turnover. They therefore purchase allowances for 110,000 tCO₂ at £12 per tonne, which works out to £1,320k. 	<p>2011/12 allowance purchases:</p> <p>£1,080k</p>	<p>2011/12 allowance purchases:</p> <p>£1,320k</p>

Allowances covering 2012/13:

For the following year, both companies are predicting to continue growing at the same rate and plan to continue on their previous year's emission trends. So:

- Clean Corp plan to reduce emissions by a further 10%. They therefore purchase allowances for 81,000 tCO₂ at £12 per tonne, which works out to £972k.
- Big Emissions expects their emissions to continue rising at the same rate as their turnover. They therefore purchase allowances for 121,000 tCO₂ at £12 per tonne, which works out to £1,452k.

Clean Corp Big Emissions

<p>2012/13 allowance purchases:</p> <p>£972k</p>	<p>2012/13 allowance purchases:</p> <p>£1,452k</p>
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Recycle and bonus payments 2011/12:

A few months after they purchase the allowances, they receive their recycle payments. Recycle payments are calculated according to each participant's share of the total emissions pot at the very start of the scheme (2010/11), plus or minus a bonus or penalty according to their league table position.

In the 2010/11 reporting year, both Clean Corp and Big Emissions emitted 100,000 tCO₂. As the total UK emissions covered by the scheme at this time come to 50m tCO₂, their base share of the total recycling pot is 0.2% each.

2011/12 Repayments:

- Clean Corp's base recycle payment of 0.2% of the total allowance pot comes to £1.2m. In addition, as their early actions placed them at the top of the league table, they also get the maximum bonus of 10% (£120,000). Their total repayments thus come to £1,320k.
- Big Emissions' base recycle payment is also 0.2% of the total allowance pot (£1.2m), but as their low league table placement is punished with the maximum 10% penalty (£120,000), they get back a total of just £1,080k.

Clean Corp Big Emissions

<p>2011/12 base recycle payment:</p> <p>£1,200k</p>	<p>2011/12 base recycle payment:</p> <p>£1,200k</p>
<p>2011/12 bonus:</p> <p>£120k</p>	<p>2011/12 penalty:</p> <p>£120k</p>
<p>TOTAL 2011/12 repayments</p> <p>£1,320k</p>	<p>TOTAL 2011/12 repayments</p> <p>£1,080k</p>

Recycle and bonus payments 2012/13 :

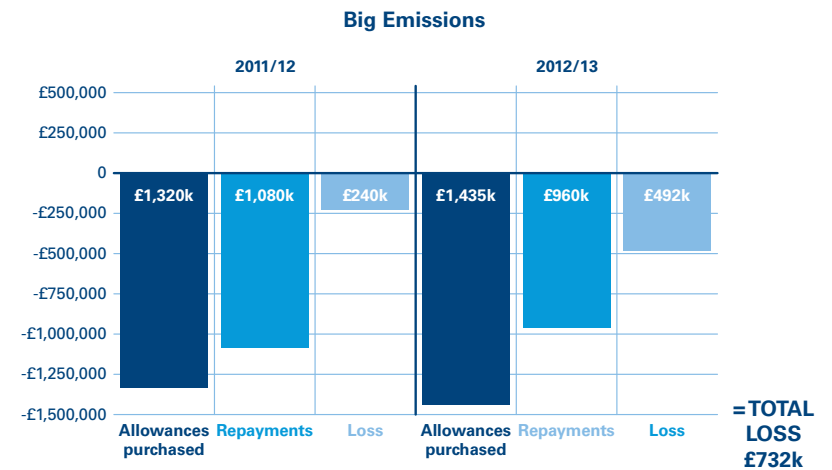
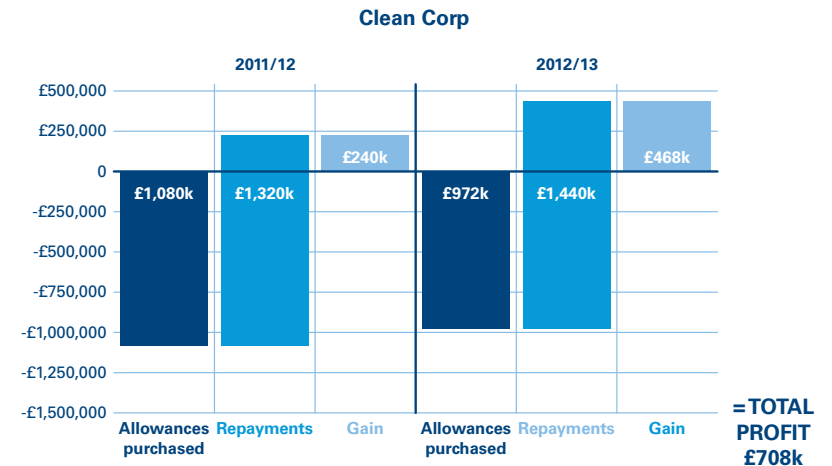
	Clean Corp	Big Emissions
2012/13 Repayments:		
<ul style="list-style-type: none"> Clean Corp again receives a base recycle payment of 0.2% of the total allowance pot* or £1.2m. And as they're still at the top of the league table (due to their good performance on the absolute and relative reduction metrics, as well as their early actions), they again get the maximum bonus which now equates to 20% of their base recycle payment, or £240,000. So their total repayment comes to £1,440k. Big Emissions also gets the same base recycle payment of £1.2m. Still at the bottom of the league table, having performed badly on all three metrics, they're again punished with the maximum penalty, which now equates to 20%, or £240,000. Their total repayment is therefore only £960k. 		
	2012/13 base recycle payment: £1,200k 2012/13 bonus: £240k	2012/13 base recycle payment: £1,200k 2012/13 penalty: £240k
	TOTAL 2011/12 repayments £1,440k	TOTAL 2011/12 repayments £960k

*For simplicity's sake, we're presuming the total pot stays the same. We've also ignored any interest the companies could have earned on their money had it not been tied up in the CRC.

Looking at the two companies' net benefit/cost for the years 2011/12 and 2012/13:

	Clean Corp	Big Emissions
<ul style="list-style-type: none"> Clean Corp paid out a total of £2,052k for allowances and got back £2,760k, for a net gain of £780k. Big Emissions spent £2,772k and got back £2,040k, for a net loss of £732,000. 	Net gain: £708k	Net loss: 732k

Clean Corp vs Big Emissions:



Lower energy bills – an even bigger opportunity

The benefits of lower allowances payments and higher bonuses are just half the story. The other opportunity lies in the money saved by cutting energy bills. Let's assume, for simplicity, that a tonne of CO₂ equates to 3,000 kWh used and that the two companies spent an average of 5p per kWh of energy throughout 2010-2013.

In that case, Clean Corp would have spent £15m on energy in 2010/11 (100,000 tCO₂ X 3,000 X £0.05). After their 10% emissions reduction, that would have dropped to £13.5m in 2011/12, and to just £12.15m in 2012/13.

On the other hand, Big Emissions' £15m energy spend in 2010/11 would have grown by 10% to £16.5m in 2011/12, and to £18.15m in 2012/13.

Taking both energy spend and CRC-related gains/losses into account, Clean Corp is now over £10m better off than Big Emissions.

Examples of major energy savings through no and low cost actions

By implementing a mix of no and low cost measures, O2 reduced its energy consumption by 20%, while the London Fire Brigade was able to save in excess of £350,000.

Ronan Dunne, CEO of O2 UK explains:

After consulting with our teams, O2 found that by simply changing the heating and cooling patterns in their office and call centres, they could improve their energy efficiency by 20%.

It may have been a small change, but saving 47,000 tonnes of CO₂ meant hundreds of thousands of pounds in revenue over a period of three years.

“ We've made a lot of savings... without spending a large amount of capital. ”



Ronan Dunne, CEO,
O2 UK

Ron Dobson, London Fire Commissioner explains:

It's often the simplest measures that produce the greatest savings. In the case of the London Fire Brigade, it was simply a matter of installing more efficient light fittings, low energy bulbs and using lighting controls to automatically switch off lights when they weren't needed.

These simple measures have drastically reduced the London Fire Brigade's carbon footprint – and already saved them over £350,000.

“ Working with the Carbon Trust shows the outside world just how committed we are to reducing our carbon footprint – and we are already reaping the economic benefits of being more energy efficient. ”



Ron Dobson,
London Fire Commissioner

What you can do now

1. Understand if and how the CRC will affect your organisation

Does your energy use – or that of a subsidiary – qualify you for participation? Does responsibility lie at your level or at a higher level?

2. Refer to the Department of Energy and Climate Change's User Guide

Which you can download from http://www.decc.gov.uk/en/content/cms/what_we_do/lc_uk/crc/user_guidance/

3. Allocate internal responsibility

Within your organisation you need to decide who will be responsible for the ongoing data collection and CRC reporting. You may wish to create a dedicated resource for this or it may have to be added to someone's job

description. In most organisations, day-to-day CRC management basis would be dealt with by an energy or facilities manager.

However, considering that compliance costs will need to be budgeted for and the implications for corporate reputation, it is advisable that a financial director and board member are also involved.

4. Collect the right data

You will need to monitor your fuel and energy use and report your CRC emissions to the scheme administrator at the end of each compliance year.

In the first year – the 'footprint year' – you will need to report all of your emissions (including those covered by EUETS and CCAs).

To work out your total footprint emissions, add up all energy use across your organisation in the form of:

- Electricity
- Gas
- Other fuel types such as coal, LPG, diesel, etc. (CRC *regulations* provide a full list of which fuels and energy use you are required to monitor under the scheme.)

As evidence, you will need original copies of energy bills, meter readings or fuel delivery invoices.

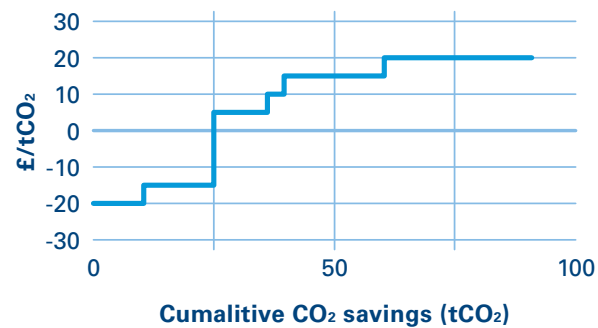
5. Assess and document your carbon reduction initiatives

If your organisation has already initiated any carbon-reducing projects, it will help to bring together evidence of their:

- Initial cost
- Maintenance cost
- Project lifetime (years)
- Carbon reduced
- Energy reduced
- Cost savings

More advanced metrics:

- Net present value
- Cost per tonne of CO₂ abated



6. Prepare a business case to gain internal buy-in

To ensure buy-in for early CRC action, you may need to present a business case to your internal stakeholders, which could include the board, finance, CSR and other functions.

This should focus on the cost savings that your energy reduction projects can achieve, the reduced number of CRC allowances you will need to purchase as a result, an estimate of your higher recycling payments, and the enhanced corporate reputation that will follow a high position on the CRC League Table. The next section will show what help the Carbon Trust can offer you in constructing your business case.

7. Start reducing now

Once you get the go ahead, prompt action will ensure that you maximise the benefits. Again, the next section shows how the Carbon Trust can help you manage your carbon reduction efforts.

8. Achieve the Carbon Trust Standard

The Carbon Trust Standard certifies that an organisation has genuinely reduced their carbon footprint and is committed to making further reductions year on year. It is one of just two early action measures that enable you to cut the cost of CRC compliance from the very beginning.

For more information on how to apply and qualify for the Carbon Trust Standard, visit www.carbontruststandard.com

9. Register for CRC updates with the Environment Agency

If you need advice or assistance or you would like to be put on a mailing list to receive CRC updates, email the Carbon Reduction Commitment (CRC) helpdesk at CRChelp@environment-agency.gov.uk

“The Standard will also make a positive contribution to our standing in the league table of the government’s new carbon trading scheme, the Carbon Reduction Commitment (CRC).”



Dr Steven Boorman,
Director Corporate,
Royal Mail Group

10. Contact the Carbon Trust for support tailored to your organisation

We’ll tell you more about the specific services that we offer on the following pages.

Services offered by the Carbon Trust

The Carbon Trust was set up by Government in 2001 as an independent company, to accelerate the move to a low carbon economy. Today, our broad range of services are helping organisations of all sizes and in all sectors to reduce their carbon emissions, cut their energy bills and enhance their corporate reputations.

Our free on-site carbon survey

The starting point is our carbon survey, tailored to your business and free of charge to most businesses. A consultant will spend a number of days on-site, delivering a list of carbon-reduction measures and showing what they can save you. You’ll also receive ongoing support from the Carbon Trust to help you implement the suggested measures.

Carbon Management for large corporates

The larger and more complex your business, the more challenging it will be to develop, implement and maintain your carbon reduction strategy.

To address this, the Carbon Trust provides a comprehensive and flexible range of advisory services through dedicated Carbon Trust Sector Managers.

We’ve worked with over 70% of the FTSE 100 and have the proven capabilities and know-how to accelerate carbon reduction within your business.

Our services incorporate knowledge and insights from both the Carbon Trust’s innovation and insights teams, ensuring that recommendations meet both your business and carbon-reduction goals.

Contact us to talk about:

- A reduction programme, including guidance on prioritising actions, developing targets and embedding Carbon KPIs.
- A mid-term plan requiring technical feasibility studies with preparation of board level CapEx requests and support with project implementation to realise operational efficiencies.
- Assistance with your defined carbon reduction plan to help you achieve competitive advantage through carbon leadership.
- A simple 'health check' to assess your current performance.

ECAs and the ETL

The Enhanced Capital Allowance scheme allows businesses to take advantage of 100% tax relief on the capital cost of energy-saving equipment. As the administrators of the Energy Technology List, we can help you identify appropriate ECA-ready equipment for your requirements. Find out more at www.carbontrust.co.uk/eca

The Carbon Trust Standard

The Carbon Trust Standard provides a clear, robust and objective benchmark against which to assess an organisation's commitment and success in addressing its carbon emissions.



It certifies that an organisation has genuinely reduced its carbon footprint and is committed to making further reductions year on year. As one of just two early action measures that enable you to cut the cost of CRC compliance from the very beginning, it offers real value to any organisation affected by the CRC. For more information on how to apply and qualify for the Carbon Trust Standard, visit www.carbontruststandard.com

The Carbon Trust Standard – Trinity Mirror’s perspective

“ To date we have cut our electricity usage by at least 4.0%. In 2003 group electricity usage was 150,000 MWh. In 2007 this had been reduced to 122,352 MWh. Over the same period we cut our gas usage from 34,289MWh to 31,954MWh. The Trinity Mirror Carbon Management Project Team is currently working on a target to drive through further savings of 10,500 tonnes of CO₂ per year by 2010. ”

“ What I really like about the Standard is that it recognises and rewards actual reductions in carbon usage. It is not one of those schemes which allows people to shout about being carbon ‘neutral’ whilst burning as much fuel as they did before by just planting a few trees somewhere. ”



Paul Vickers,
Secretary and Group Legal Director

Useful contacts and links

The Carbon Trust

0800 085 2005

www.carbontrust.co.uk/crc

Carbon Trust on-site carbon surveys

0800 085 2005

www.carbontrust.co.uk/surveys

Carbon Trust private sector carbon management

www.carbontrust.co.uk/carbon/privatesector/

Carbon Trust public sector carbon management

www.carbontrust.co.uk/carbon/publicsector/

Carbon Trust Standard

www.carbontruststandard.com

Department of Energy and Climate Change

www.decc.gov.uk/en/content/cms/what_we_do/lc_uk/crc/crc.aspx

Environment Agency

www.environment-agency.gov.uk/crc

CRChelp@environment-agency.gov.uk

08708 506506

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The Carbon Trust is funded by the UK Government. It is an independent company set up by the Government to accelerate the move to a low carbon economy.

This document has been prepared by the Carbon Trust with the assistance of the Institute of Chartered Accountants in England and Wales. It is intended for your information only and is not a comprehensive guide to the Carbon Reduction Commitment, nor should it be used as a substitute for professional advice. The Carbon Trust has no control over the content in any websites or documentation provided through any links in this document. As the legislation governing the Carbon Reduction Commitment has not been finalised, you should not take any action, or refrain from taking action, based solely on the information contained in this document. If you need advice on how to obtain the Carbon Trust Standard, general advice regarding how to reduce your carbon emissions, or any other information connected with this document please refer to the relevant contacts provided on page 34.

