



Davis Langdon 

CARBON REDUCTION
COMMITMENT ENERGY
EFFICIENCY SCHEME

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WHAT IS THE CARBON REDUCTION COMMITMENT?





What is the CRC?

A mandatory market mechanism to encourage organisations to reduce energy use

Background

Businesses that are intensive energy users are already subject to CO₂ emissions trading. The 2007 Energy White Paper proposed a new scheme, the Carbon Reduction Commitment (CRC), targeting a broader range of organisations outside of existing emissions trading schemes.

The CRC introduces a market mechanism to encourage organisations to reduce their energy use. It is based on the 'polluter pays' principle and requires organisations to take part in a carbon trading scheme within which they purchase allowances (based on a price per tonne of CO₂) for the carbon emissions they expect to produce in a year.

The scheme is designed to reward good and penalise poor performance. Organisations with falling energy consumption will receive bonuses paid from scheme revenues. Those whose consumption of energy is increasing will have to purchase additional allowances to cover their extra CO₂ emissions. A further disincentive to poor performance is that the Government will publish a 'league table' of participating organisations each year that shows their relative rankings.

The overall costs and scale of the scheme are difficult to identify. A Financial Times article estimated an annual total cost of allowances of £660m shared between 5,000 affected bodies. The range of exposure for individual organisations is expected to be between £30,000 and many millions of pounds.

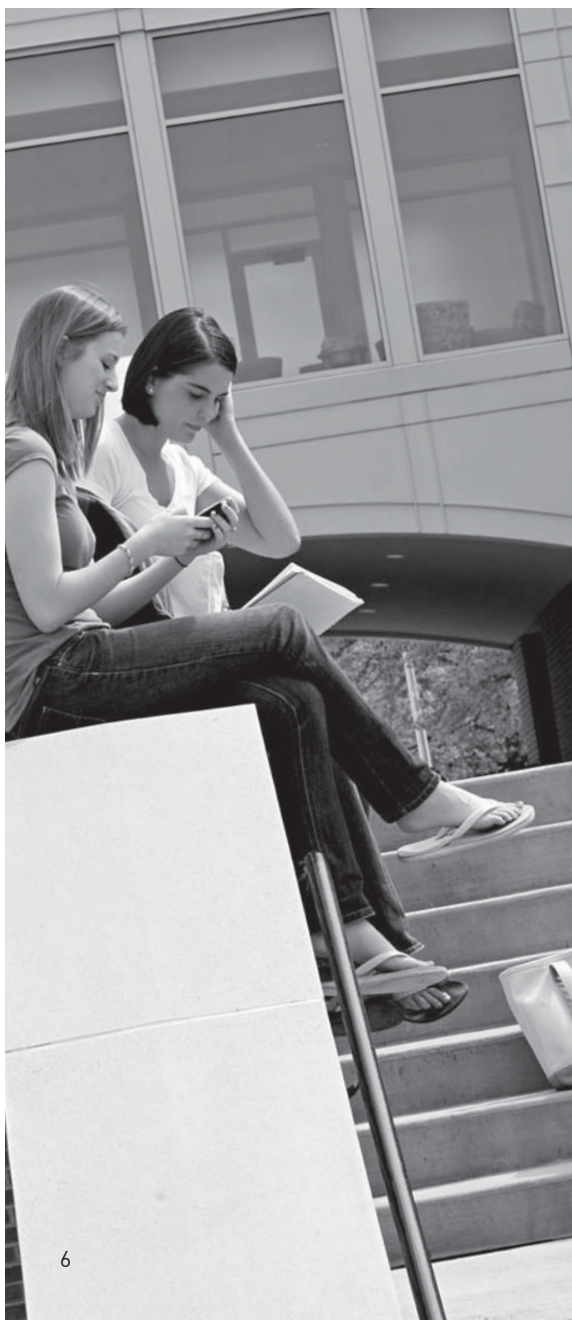
Does it affect my business?

If you answer yes to the below questions then your organisation qualifies for the CRC and you will be required to participate.

1. Are you the highest parent organisation or primary member?
2. Does any part of your organisation have half hourly meters?
3. Do you consume above 3,000MWh through all half hourly meters?

If your usage of electricity per annum is between 3,000 and 6,000MWh then you will only be required to disclose your consumption and not purchase allowances. However if your usage is 6,000MWh and above you will be required to commit fully.





How does it work?

Although electricity use determines whether you qualify for the scheme, fully committed businesses will have to purchase allowances to cover all CO₂ emissions generated from fixed energy sources, including fuels burned for heating, as well as un-metered electricity, however not emissions from transport. Organisations will be required to forecast and report annually all of their UK-based CO₂ emissions, including energy use for lighting, heating and cooling.

The scheme is divided into set time periods known as phases:

Introductory phase – runs for 3 years from 2010 – 2013; and

Subsequent phases – run for 7 years starting from 2014.

As a new legislation there are likely to be changes throughout its lifecycle especially for subsequent phases based on outcomes of the introductory phase. This document provides you with an insight into the CRC, however focuses on the introductory phase to minimise confusion.

Phase components

Each phase is made up of the below components:

Assess whether or not you **qualify** to make an **information disclosure** or **participate fully** in CRC.

Once you have been through the qualification period you must either **submit your information disclosure** or **register as a participant** with the administrator.

The footprint year requires you to monitor your total emissions from energy use and **determine what emissions must be included in the CRC**. This data must be reported to the administrator.

The compliance year runs from **April to March** like financial years. **Participating organisations must purchase allowances** for each tonne of CO₂ and then monitor their usage.



Qualification
Period
2008

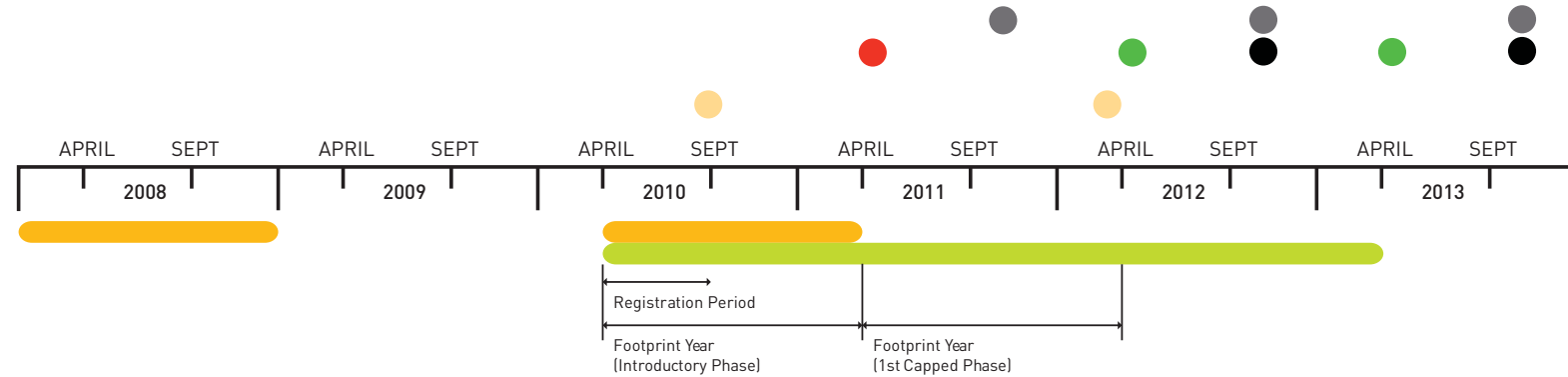
Registration
Period
April –
September
2010

Footprint
Year
April 2010 –
March 2011

Compliance
Year
April 2010 –
March 2011

Timeline of events

- Registration deadline
- Qualification period
- Introductory phase (April 2010-March 2013)
- First allowance sale
- Allowance sales
- Publication of annual league table
- Recycling payment issued to participants



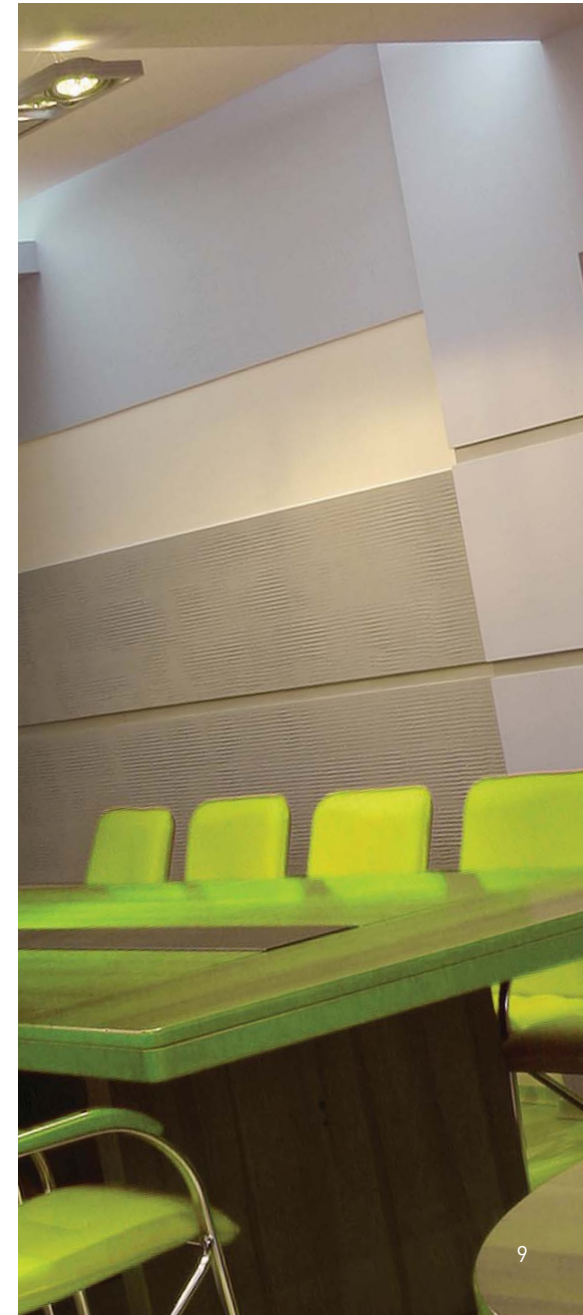
Compliance year

The first month of each compliance year is the sale period for participating organisations to purchase allowances. If you participate fully you will be required to **purchase one allowance for each tonne of CO₂ you emit.**

The allowances are sold by the Government at the start of each year and you purchase allowances based on a forecast of emissions. If you exceed this forecast more allowances will need to be purchased through the secondary market or via the safety valve. The safety valve is a mechanism which you can purchase allowances from the administrator throughout the year.

In the introductory phase carbon allowances will be sold at a **fixed price of £12 per tonne.**

The first compliance year of the Introductory Phase will be a reporting-only year. In April 2011 participants will buy allowances to cover year 2011/2012.





How is my performance measured?

At the end of each **compliance year** CRC participants performance is compared based on how well each has **reduced their emissions**.

Your individual performance is calculated through a comparative assessment using three metrics:

Absolute metric – This looks at your relative change in CRC emissions, it compares your current annual emissions to your average emissions over the preceding five years. This metric is not used in the first year, in subsequent years the current emissions will be compared against the average over the years available.

Early action metric – This accounts for 100% of your first years performance. It gives recognition for good energy management undertaken prior to the start of the scheme.

Growth metric – This recognises and provides context for your organisation if you are growing or declining commercially. This metric is not used in the first year.

For **each metric you are ranked**, these then are **multiplied by a specified % weighting**. These are all **added together** giving an overall score which determines your league table position.

Revenue recycling

The CRC is intended to be revenue neutral for the government. The revenue raised through allowance sales will be recycled back to CRC participants. The revenue recycled will be based on an organisation's preceding year emissions. This is then adjusted with either a bonus or penalty payment according to participants' position on the emissions performance league table.

What now?

If you are affected by the CRC you will need to look, first of all, at your operations and management approaches in an effort to reduce energy.


Further changes will tend towards real estate improvements:

- a) **Enhancing any management savings with improved building operation and use**
- b) **Improving building management and controls**
- c) **Improving the condition of buildings and their systems**

The age and condition of building fabric and engineering services will fundamentally influence energy use, and in the longer term their maintenance and improvement is likely to emerge as the key focus area for ongoing year-on-year savings.

With our assistance we can help you maximise your recycle repayments as well as reduce your overall energy expenditure.





The CRC should not be seen as a 'tax'.
All revenue raised by the annual sale or
auction of allowances is 'recycled' back
to participants.

OUR APPROACH



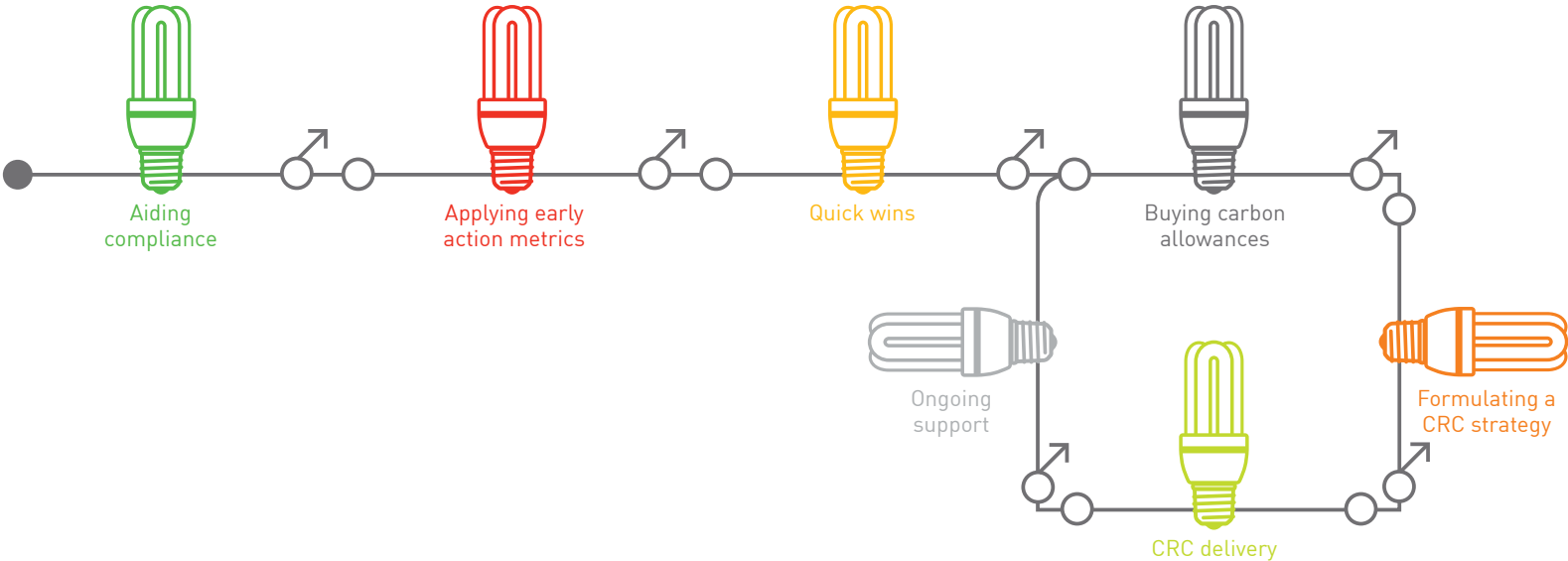
A fundamental aim of the CRC is to incentivise the improvement of non-domestic property outside the energy intensive industrial sectors.

We are divided into specialist divisions that provide the extra skills necessary to identify and deliver the real estate improvements that will be necessary to achieve significant savings under the CRC.

Most of these will play a role at key stages in the creation and implementation of a comprehensive CRC strategy. Equally, our flexible approach means that we can provide targeted expertise as necessary to support your own real estate teams or existing advisers.

We can provide a simple logical approach with options for advice, guidance, or hands on support to minimise the cost and impact of the CRC.

We offer a suite of services which complement each other or alternatively can be used as and when you feel will benefit your energy objective best.



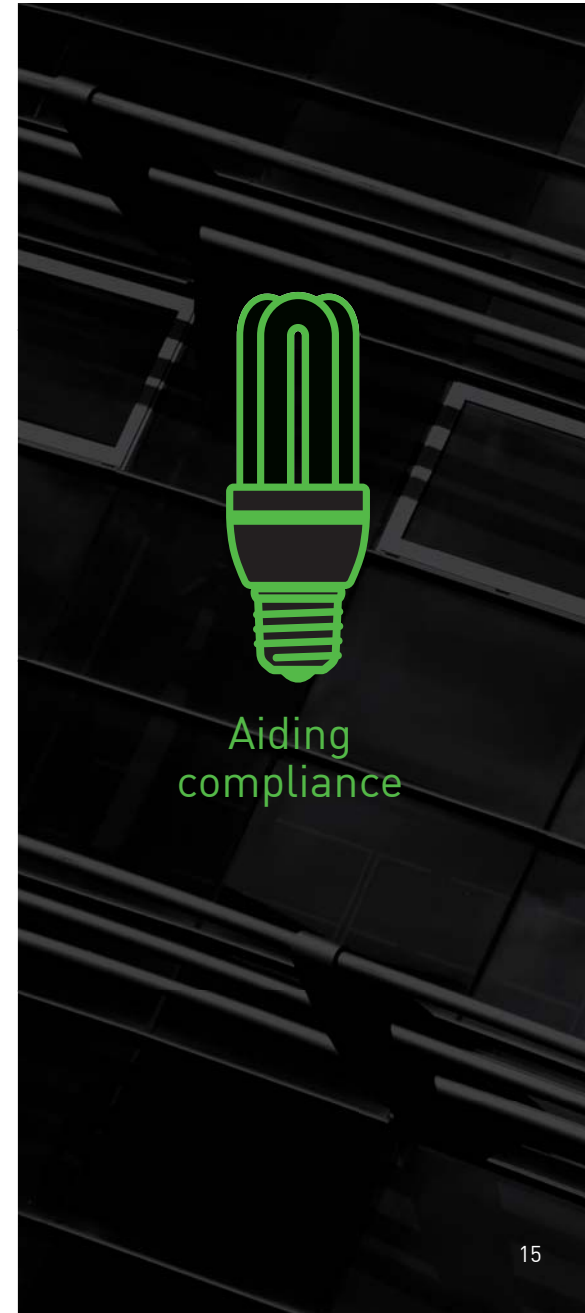
Aiding compliance

Although the initial qualification is based on electricity consumption of 6,000 MWh, once in the scheme all CO₂ emissions from fixed energy sources are covered. These emissions will need to be measured in the 'Footprint' year and will form the basis for identifying the total sum of carbon allowances needed to be purchased for the initial two years in April 2011.

This stage of the CRC requires you to produce a footprint report and compile an evidence pack, which must be kept and regularly updated.

Our consultancy team can provide essential guidance towards this and help by providing you with a compliance methodology; a process method along with templates to ease the compliance process.

With our assistance you can focus on your bottom line. Dealing with the CRC will be complex and time-consuming which may mean diverting key staff from critical roles. Additionally, we can return your data to you in a creative functional way, assisting you to interpret this easier and helping you to position yourselves better.





Applying early action metrics

Applying early action metrics

As discussed in detail on page 10 (How is my performance measured?), the CRC performance is assessed based on 3 metrics:

Early action

Growth

Absolute

In the first year your league table position is based solely on your application of the early actions, (this gives recognition to organisations for good energy management), which are undertaken prior to the start of the scheme.

Essentially there are two ways in which you can qualify for the early action metric by adopting the Carbon Trust Standard or equivalent or installing Automatic Meter Readings.

With our expertise working with The Carbon Trust in developing the Carbon Trust Standard we will assist you to ensure certification helping you to achieve early action metrics. This will maximise your recycle payments by ensuring you start in a strong position on the league table.

Quick wins

Developing a quick win strategy can maximise your position on the league table and increase your energy efficiency.

Below are a few ways in which we can help you achieve this:

- 1. Building operation audits.** Prepare an audit on your building operations analysing the current energy efficiency.
- 2. Immediate energy efficiencies for current assets.** We can provide you with a strategy to quickly improve your energy performance.
- 3. Low cost improvements.** After an audit and identifying methods for improvement we can provide you with a cost value analysis of your buildings.

For many existing buildings, achieving high levels of energy performance will be challenging, especially if the building fabric and plant installed is below current standards. However it should still be possible to identify cost-effective improvements via a robust energy assessment and an appropriate low-carbon strategy that exploits the potential for 'quick wins'.

The opportunity also exists to set higher aims, and to utilise initiatives such as the new BREEAM-in-Use to create exemplar buildings.

Incorporating a quick win strategy into your business can not only help you improve your overall CRC performance but can inevitably reduce your carbon allowances by improving your energy efficiency and reducing your energy bills.



Quick wins



Buying carbon allowances

Buying carbon allowances

The CRC requires you to purchase allowances based on a cost per tonne of CO₂ emissions. Besides the first year of the introductory phase, where you purchase allowances after the year, you will be required to forecast your emissions and buy allowances accordingly. This will have cash flow implications for all participants – getting this forecast right is important.

By modelling your current and future energy use we can help you purchase the necessary amount.

Formulating a CRC strategy

We see the CRC as a long term process that needs a clear, appropriate and well-managed strategy to optimise energy performance across your property portfolio/estate. We can assist you to lower your energy consumption and carbon allowance expenditure.

Some of the key ways we can help you achieve these savings is through:

Desktop portfolio energy review

Utilising benchmarking systems such as Display Energy Certificate methodologies an overall understanding can be established of the relative performance of buildings within a portfolio.

Identifying energy inefficient buildings

From the desktop review process, poor performers can be selected for Buildings Operational Audits which will review use and set out objectives for improvement. This becomes a holistic approach to encompass how the built form operates and how well it is operated by its users.

Modelling improvements

Most buildings will have a range of options available to reduce their emissions ranging from quick wins and simple efficiencies leading on to light touch refurbishments and more extensive works. A broad consideration will need to co-ordinate with the underlying commercial strategy for the expected life of the asset.

Helping you to establish a strategic timeline

We can work with you to identify when we need to implement the plans to maximise your return and ultimately achieve your energy objectives.



Formulating a
CRC strategy



Formulating a CRC strategy

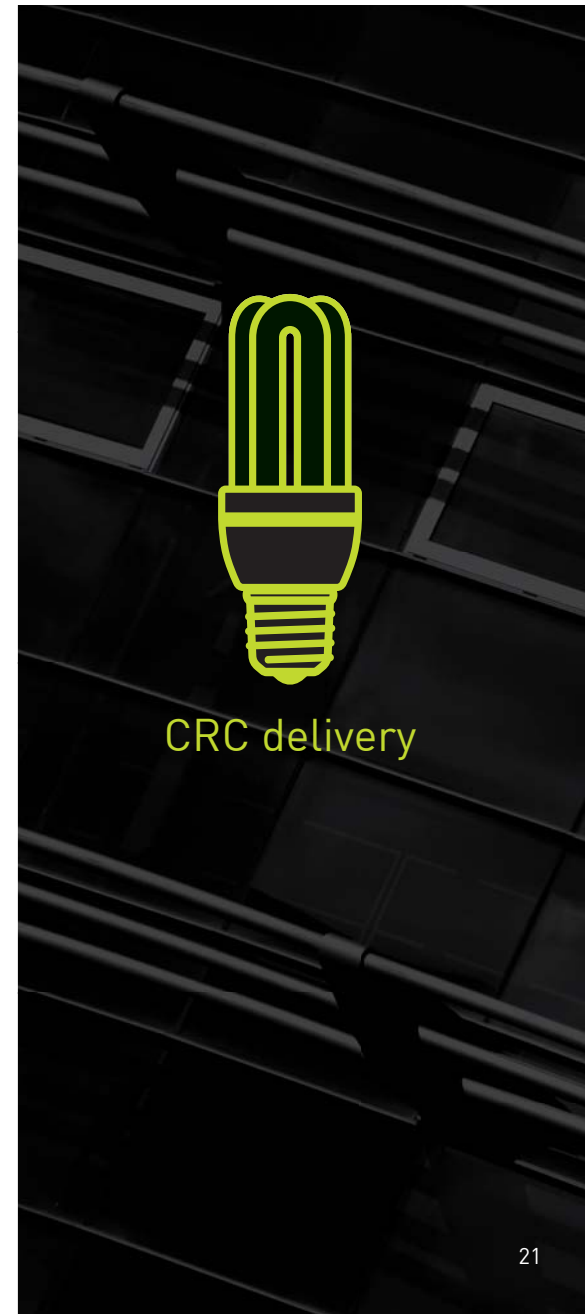
We can develop with you a financial model for your portfolio that identifies the capital expenditure to deliver the strategy and the impact on its whole life cost cycle. We will also identify the affect in the reduction of carbon allowances, the reduction in energy emissions and the resultant cost benefit, and the potential tax advantages in adopting the strategy. Year on year improvement has the potential for you to benefit from an enhanced recycled payment.

Overall we will be able to develop with you practical workable plans that we can implement together to achieve your carbon objectives.

CRC delivery

After identifying the most appropriate quick wins and long term CRC strategies for your organisation we can help you implement them. Our cost and project management experience ensures that we can deliver the refurbishment of building fabric and engineering services in line with your strategic plan. Further to this we have expertise in reviewing and re-negotiating facilities management contracts to drive efficiencies in your energy performance all the way to your utility provider.

Our combined expertise of formulating strategies and implementation show our ability to be a one-stop shop CRC advisor for your organisation.





Ongoing support

Ongoing support

Part of the ongoing strategy for CRC will be to ensure that your portfolio's energy performance is managed effectively year on year.

Our Facilities Management team can assist in the procurement of contracts that address energy performance and ensure that energy optimisation forms a key part of the contract.

ABOUT DAVIS LANGDON





Davis Langdon is a global construction consultancy with a dedicated team of energy specialists who can help you achieve maximum energy efficiency.

Our services

Our roots are in cost and project management. As part of our reputation for working on large and complex projects, such as Kings Cross Central, we also offer a Program Management service. These three services are augmented by a comprehensive range of specialist services which complement what we do at the core, add value, and make us the unique firm we are today.

But it is not just the range of services that makes us unique. It is the quality. We invest in making sure they are the best in market. No one else invests in research as heavily as we do, with a department of 25 individuals dedicated to keeping our services at the cutting edge and delivering industry-renowned thought leadership.

Who we work with

Leveraging off our extensive service offering and our premium delivery we are able to work with some of the best names in the energy sector. These include developers, funders and utilities. For example; Central Electrical Generation Board, CEZ Group, United Utilities, Wessex Water, British Land, Land Securities, The Crown Estates, Peel Investments, Fluor and HSBC to name a few.

Our people

We are proud of our talented people and our record as an employer of choice. Davis Langdon was voted 19th in the 2008 Sunday Times 100 best companies to work for – up ten places from the previous year. In fact, we are the only firm of our type to feature in the top 50. This gives clear blue water between us and our competitors. Why should you care? Because it means that the most talented individuals, whether experienced or graduate hires, want to work for Davis Langdon. Simply put, it means we can give you the best people in the industry for your projects. And you will notice that they are great people to work with. We are known for our collaborative nature and we are confident that you will like having us on the team.

Our people are business-sector facing, and working on a national and international basis, with coverage spanning 31 offices just across Europe and the Middle East. What this means for you is that you get people who are not just expert cost or project managers, but they are expert in energy. They are specialists, not generalists – and with that comes a wealth of experience that will add real value. And because of our global reach, they are adept to working in new countries and cultures.





Key contacts

For further information on how we can help you contact any of our CRC energy specialists highlighted below.



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