



# Corporate Climate Response

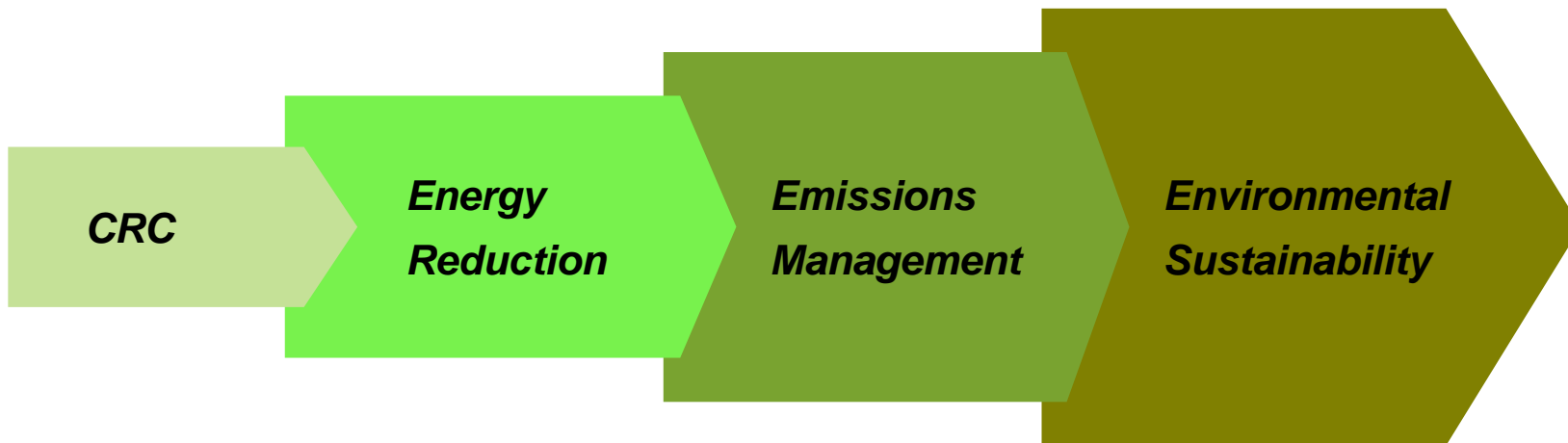
## *Carbon Intelligence*

*How to measure & manage emissions in light of the Carbon Reduction Commitment (CRC)*

**Jon Z Bentley**  
London, 20<sup>th</sup> May 2008



# Agenda



**1: Information needed for CRC**

**2: (Towards) An Energy & Environment Information Strategy**

# What do you need to know?



## *Now (Early '09)*

- *Are you in CRC?*

## *Late 2009*

*How many allowances to buy?*

## *During 2010*

- *How many allowances to trade (buy or sell)?*

## *End 2010*

- *How many allowances to surrender?*

# What do you need to know?

<i>Now (Early '09)</i>	<i>Late 2009</i>	<i>During 2010</i>	<i>End 2010</i>
<ul style="list-style-type: none"> <li>▪ <i>Are you in CRC?</i></li> <li>▪ <i>2008 electricity usage *</i></li> <li>▪ <i>Half-hourly meters</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>How many allowances to buy?</i></li> <li>▪ <i>How to register for CRC? How to buy / sell allowances?</i></li> <li>▪ <i>2009 emissions</i></li> <li>▪ <i>2010 predicted emissions **</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>How many allowances to trade (buy or sell)?</i></li> <li>▪ <i>CRC Strategy - buy or trade?</i></li> <li>▪ <i>Energy reduction plans &amp; targets</i></li> <li>▪ <i>Progress &amp; revised 2010 emissions</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>How many allowances to surrender?</i></li> <li>▪ <i>Actual emissions</i></li> <li>▪ <i>Allowances bought / traded</i></li> <li>▪ <i>Safety value requirement</i></li> <li>▪ <i>Evidence pack</i></li> </ul>

**\* Mwh half-hourly metered usage by non-exempt organisation units – as per Defra guidance**

**\*\* Electricity and gas usage, direct on-site fuel usage**

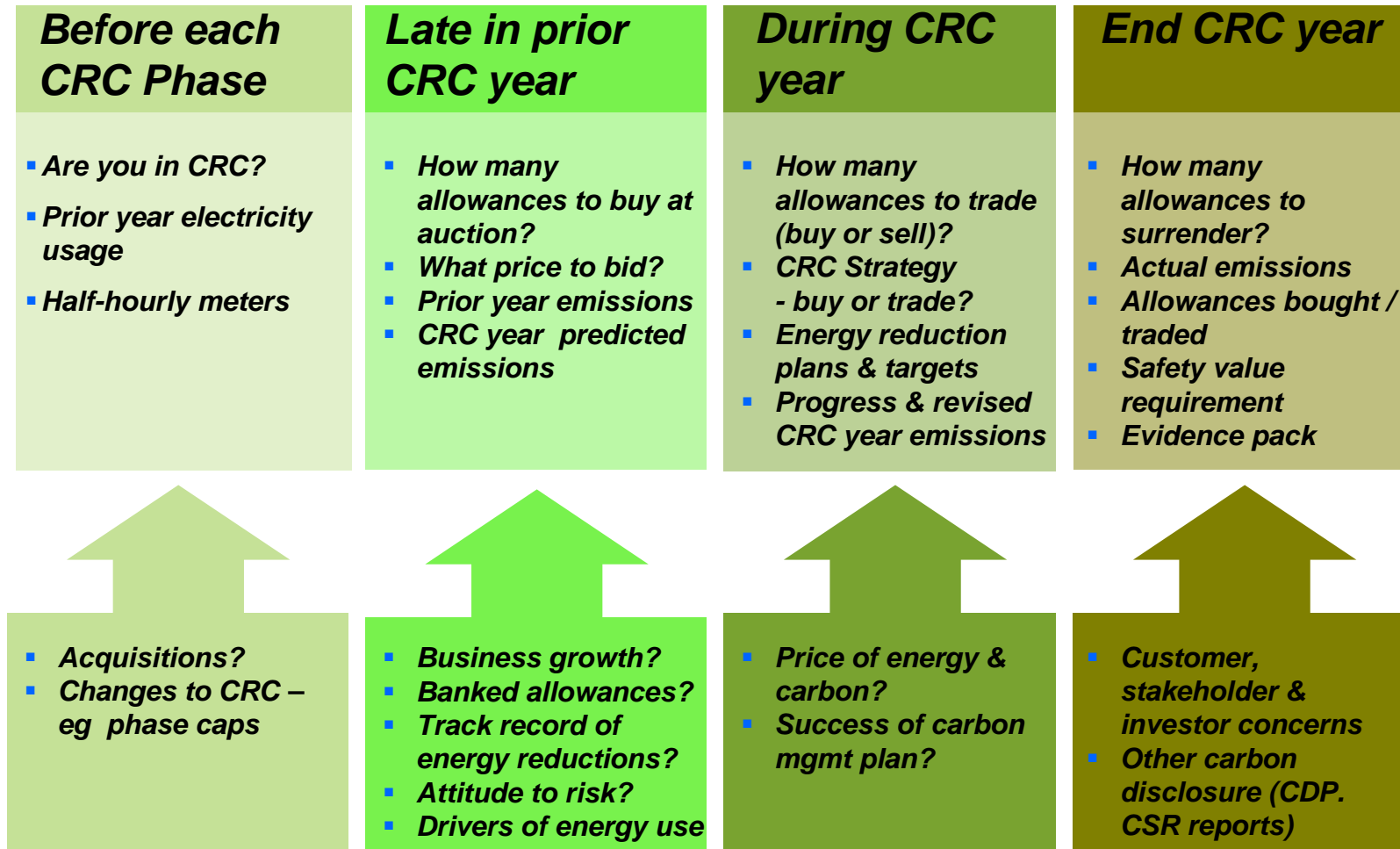
# What do you need to know?

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<p><b>2011</b></p>	<ul style="list-style-type: none"> <li>▪ <i>How to explain our CRC league position to stakeholders?</i></li> <li>▪ <i>2011 Energy reduction plan and targets</i></li> <li>▪ <i>How to justify our surrendered 2010 emissions for EA audit?</i></li> <li>▪ <i>Evidence pack</i></li> <li>▪ <i>Carbon emissions and energy management systems</i></li> </ul>		

# What do you need to know?

<b>Before each CRC Phase</b>	<b>Late in prior CRC year</b>	<b>During CRC year</b>	<b>End CRC year</b>
<ul style="list-style-type: none"> <li>▪ <i>Are you in CRC?</i></li> <li>▪ <i>Prior year electricity usage</i></li> <li>▪ <i>Half-hourly meters</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>How many allowances to buy at auction?</i></li> <li>▪ <i>What price to bid?</i></li> <li>▪ <i>Prior year emissions</i></li> <li>▪ <i>CRC year predicted emissions</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>How many allowances to trade (buy or sell)?</i></li> <li>▪ <i>CRC Strategy - buy or trade?</i></li> <li>▪ <i>Energy reduction plans &amp; targets</i></li> <li>▪ <i>Progress &amp; revised CRC year emissions</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>How many allowances to surrender?</i></li> <li>▪ <i>Actual emissions</i></li> <li>▪ <i>Allowances bought / traded</i></li> <li>▪ <i>Safety value requirement</i></li> <li>▪ <i>Evidence pack</i></li> </ul>

# What do you need to know?



# Three questions to start with



- How to manage risk? ..... Strategy  
What is our approach to managing energy and emissions related risks and opportunities?
- How to measure? ..... Information  
What and where are the emissions arising from our business activities and how will we know and prove what they are?
- How to manage reduction? ... Plan  
What can we do to increase our energy efficiency and reduce emissions and how will we track progress to inform our CRC allowances trading strategy?

## ***Framing CRC as a risk***

# Strategy: CRC brings 4 key business risks

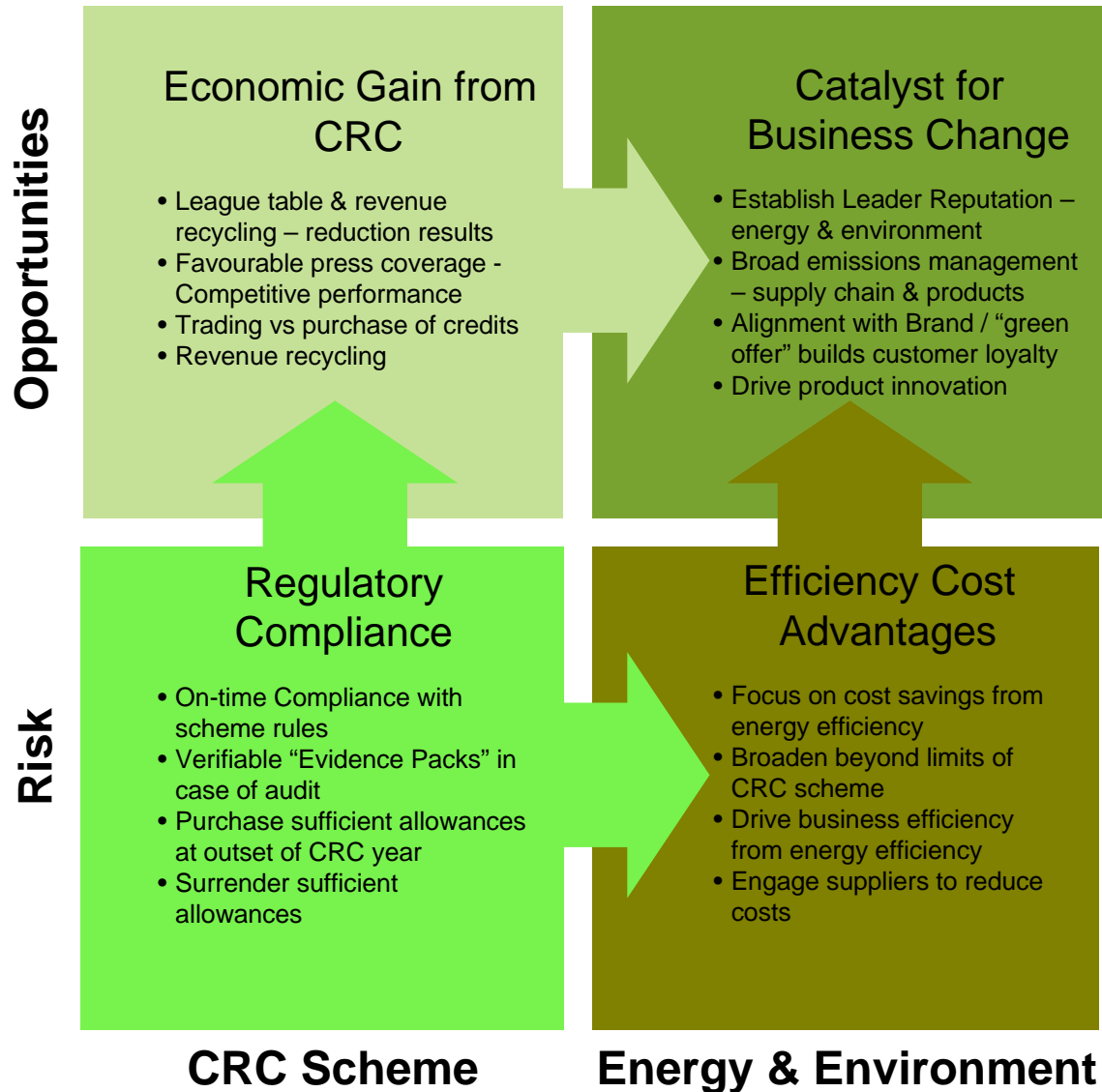


## ***Framing CRC as an opportunity***

# Strategy : CRC brings 4 key business opportunities



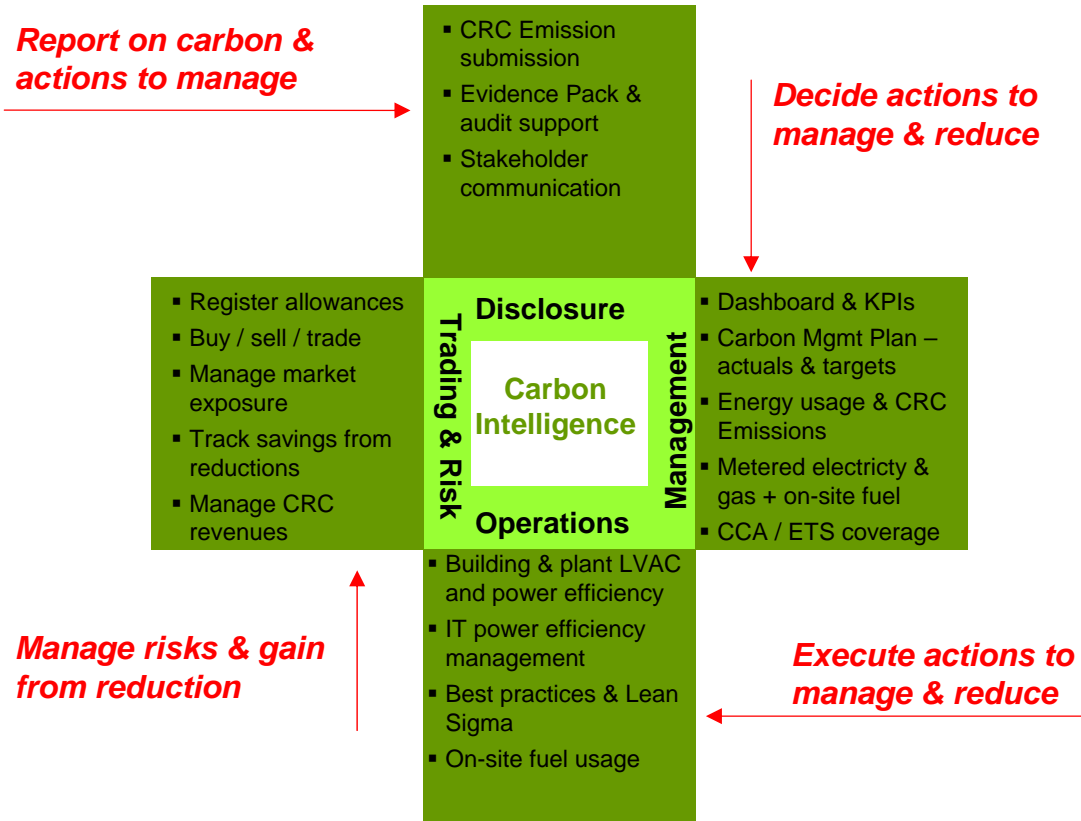
# Strategy development for CRC



# Carbon Intelligence:

*Managing carbon emissions requires carbon information*

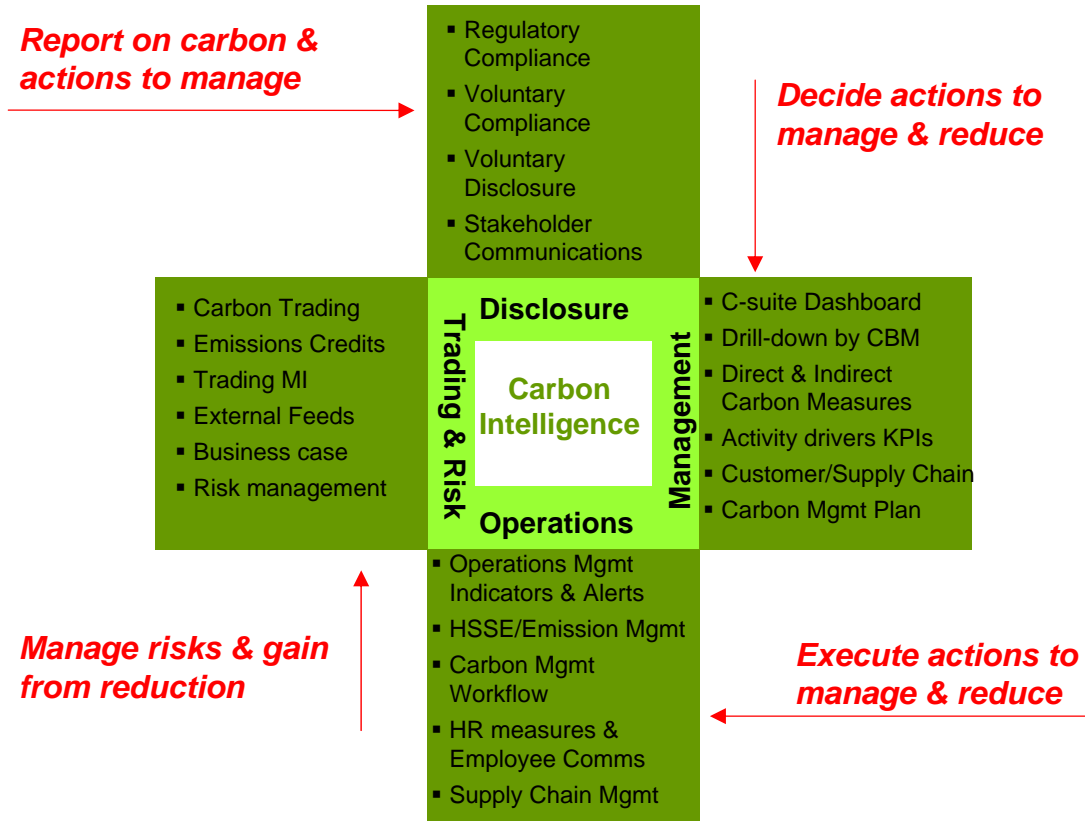
## Focus on CRC



# Carbon Intelligence:

*Managing carbon emissions requires carbon information*

## Focus on Energy, Emissions & Environment



# Plan: IBM “House of Carbon” provides a framework to manage & reduce emissions



## Strategy

- Where should we focus our carbon reduction efforts?
- How integrated is our carbon strategy with our business strategy?
- Do we have an integrated programme of action?
- How do we finance our carbon programme?

## Customer and product

- How do we communicate our green credentials to our customers?
- What are the new green market opportunities and how do we exploit them?
- How can we design our products to be more carbon-friendly?
- How do we optimise these benefits throughout the full product lifecycle?

## Supply chain

- How can we make our end-to-end operations more carbon-friendly:
  - Manufacturing?
  - Logistics?
  - Procurement?

## People

- How do we establish and implement effective green HR policies:
  - Strategy?
  - Travel?
  - Home working?
- How do we engage with our employees on the green agenda?
- How do we enable and sustain behaviour change across our organisation?

## IT

- How do we reduce carbon in our IT:
  - Data centres?
  - Distributed IT?
- How do we optimise to get more IT capacity for less carbon?
- How do we address immediate capacity/power issues?
- How can we manage IT to minimise energy consumption?

## Property

- How do we reduce carbon in our:
  - Buildings and offices?
  - Production plant?
  - Distribution centres?
- How does the property portfolio contribute to our carbon footprint and how can we improve it?
- How do we work towards a more sustainable property portfolio?

## Information

- How do we measure and monitor information on carbon consistently and efficiently?
- How do we demonstrate regulatory and policy compliance?
- Do we have a carbon scorecard and key performance measures?

1. Determine CRC qualification
2. Assess current level of emissions
3. Decide strategy for CRC participation
4. Plan energy efficiency / emissions reduction
5. Identify key measures and KPIs
6. Integrate with information strategy and systems

*CRC: Why should you care?*



*Your choice. Choose Both.*