

Introduction to the UK Carbon Reduction Commitment



Greenhouse Gas Strategies in a Changing Climate

November 2011



Outline

- **What is the CRC?**
- **Impacts of the CRC**
- **Establishing the Organizational Group**
- **The League Table**
- **Performance Metrics**
- **Emissions Trading**
- **Business Implications**
- **Strategies for Improving Performance**
- **Case Study**
- **Changes to the Program**
- **Your Next Steps**

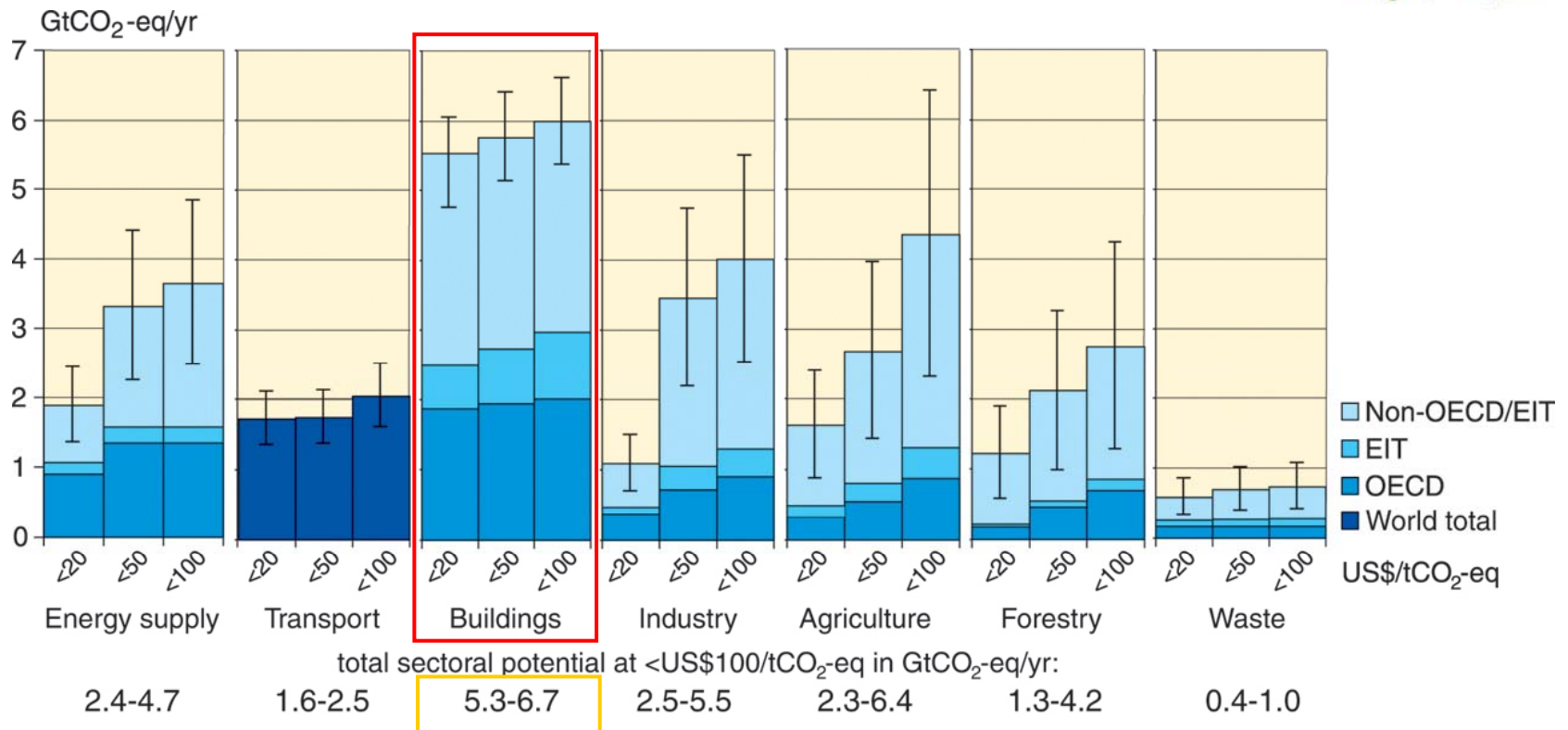


What is the CRC?

- 1. Mandatory energy efficiency program in UK**
- 2. Applies to organizations whose building(s) annually consume over 6,000 MWh of electricity per year (this correlates to roughly £500,000)**
- 3. The program consists of three parts**
 - 1. Carbon emissions reporting**
 - 2. Carbon allowance purchasing**
 - 3. Performance League Table**



Why Buildings?

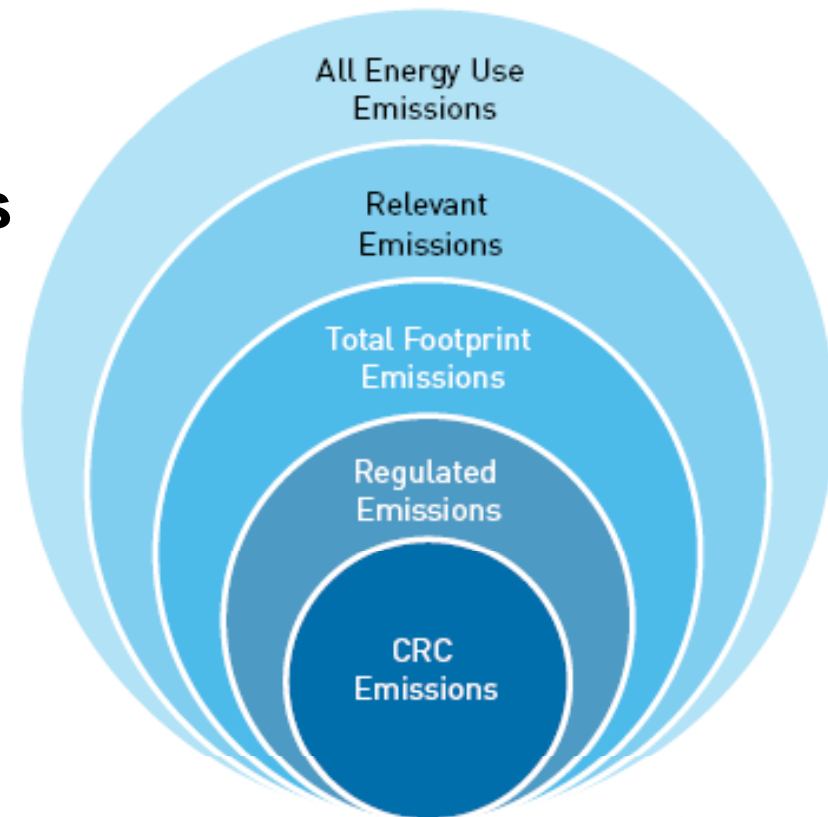


<http://www.ipcc.ch/graphics/syr/fig4-2.jpg>



Scope of the CRC

- Regulates around **10% of the emissions** in the UK
- Around **5,000 organizations in the UK** will be regulated
- For the first phase of the CRC, allowances will be purchased at a set price of £12 / MTCO₂e

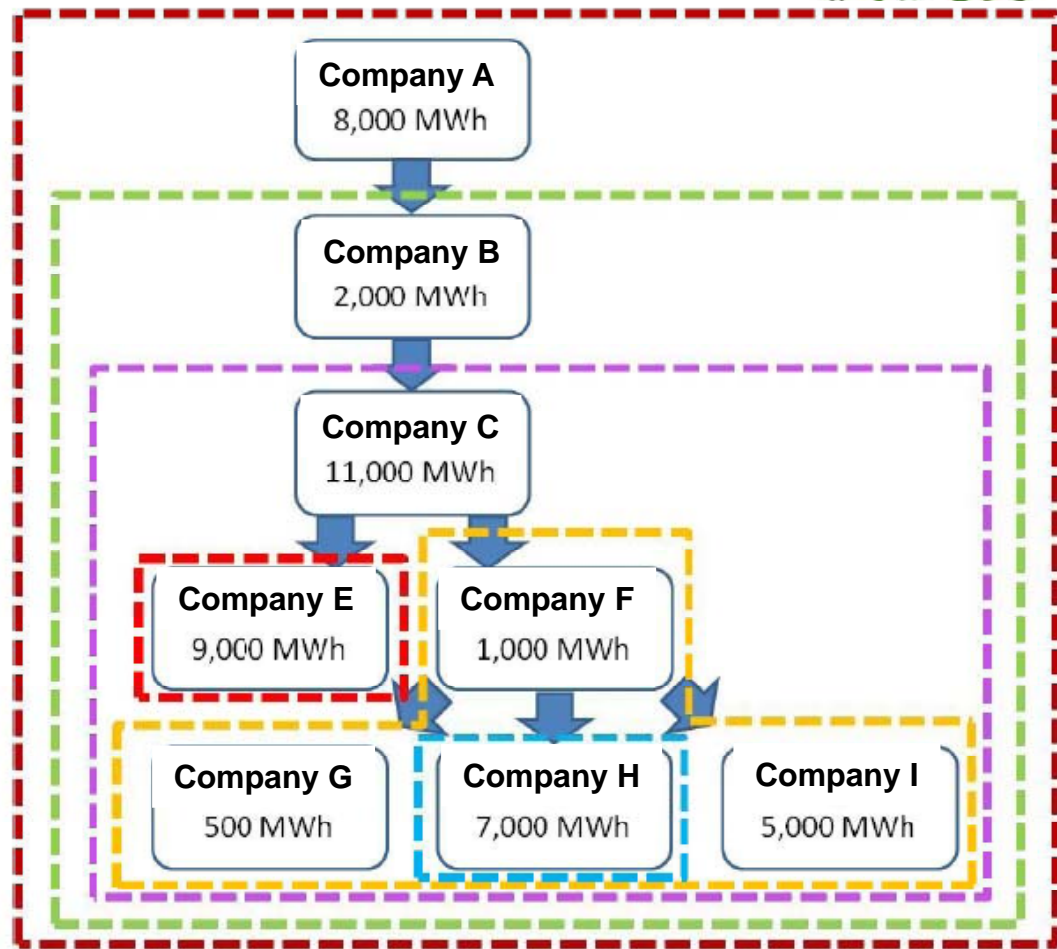




Establishing the Organizational Group

Diagram presents Primary Group vs. Significant Group Undertaking (SGU) within a Participant for reporting purposes

- Each colored, dotted box delineates a SGU grouping
- SGU can be either a single entity or a group of constituent entities





Associated Features of the CRC

- League Table
- Performance metrics

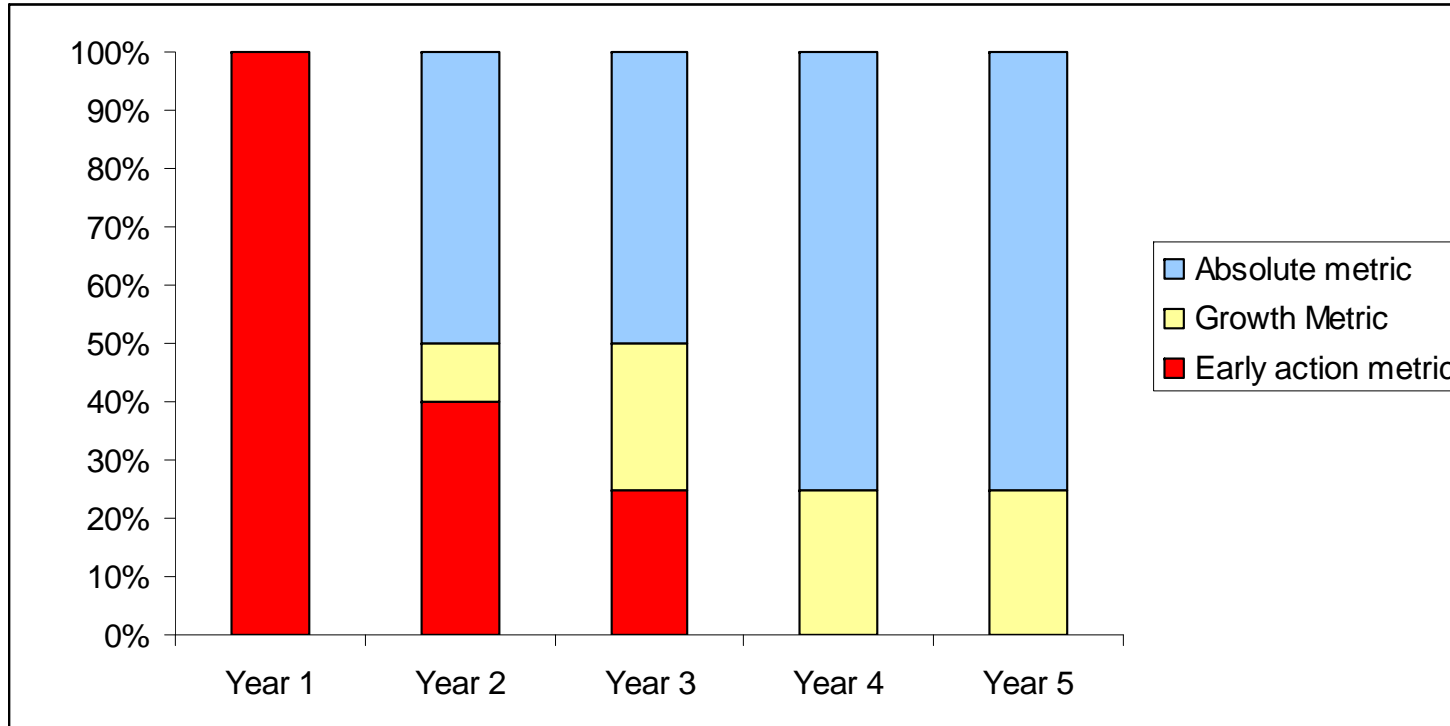


League Table

- The League Table will record:
 - Overall position based on performance under these metrics:
 - ▶ Early Action Metric
 - ▶ Growth Metric
 - ▶ Absolute Metric
 - The Early Action metric will account for 40% of a participant's overall performance in the second year of the CRC



Performance Metrics





League Table

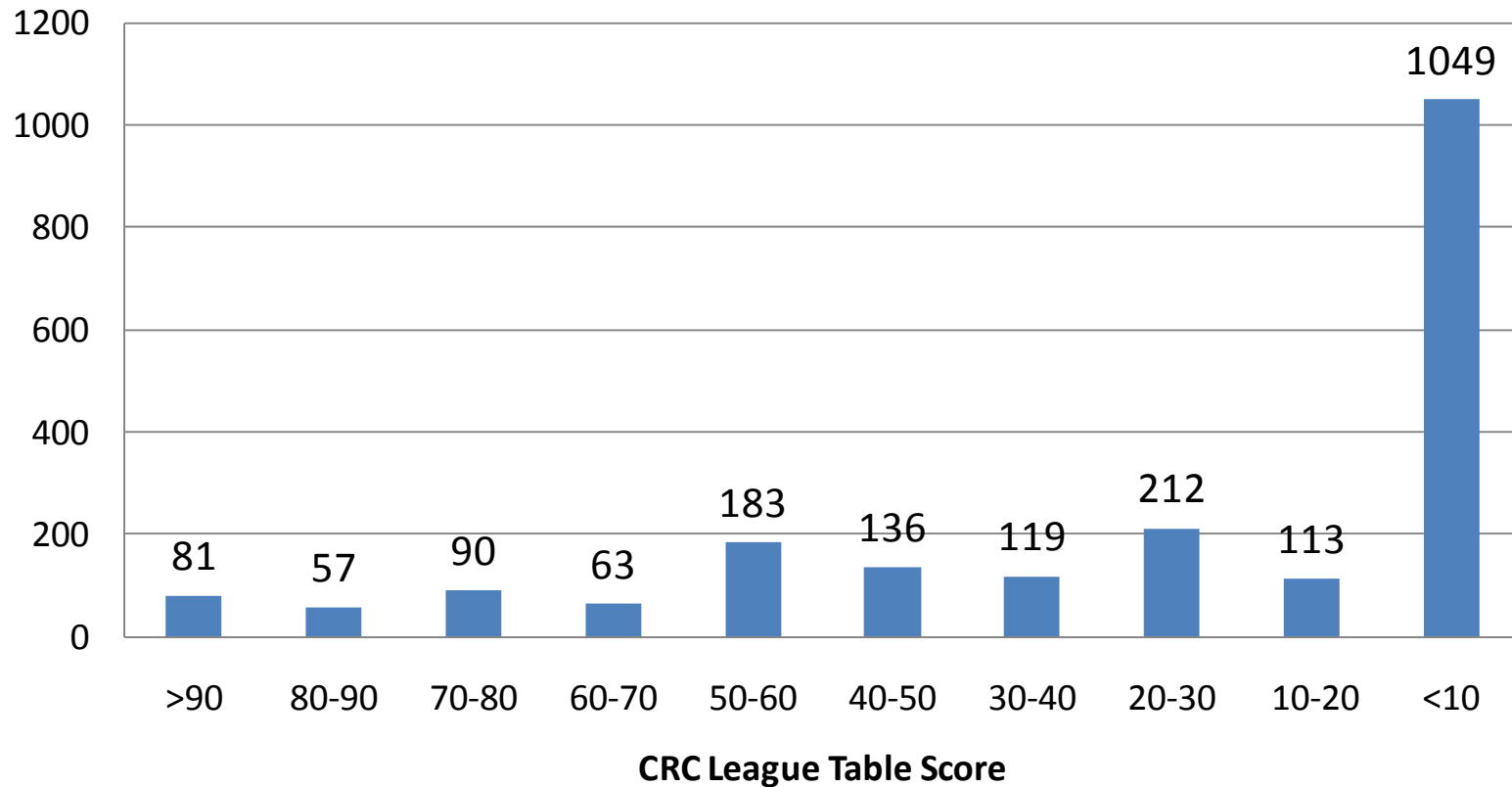
- The first League Table was released just last week.
- Based on 2,100 companies

Rank	Registration Number	Organisation Name	Trading Name	Weighted Score	Emissions (Tonnes of CO2)	Early Action Metric (%)	Absolute Metric (%)	Growth Metric (%)
1	CRC8861468	99 BISHOPSGATE MANAGEMENT LIMITED	99 Bishopsgate Management Limited	2092.5	12145	100	0	
1	CRC1641926	ARENA COVENTRY LIMITED		2092.5	6814	100	0	0
1	CRC5714114	Barnsley Hospital NHS Foundation Trust		2092.5	9085	100	0	0
1	CRC6677003	BRITISH AMERICAN TOBACCO P.L.C.	British American Tobacco	2092.5	18439	100	0	
1	CRC2977869	CB RICHARD ELLIS LIMITED		2092.5	4004	100	0	0
1	CRC2788597	Center Parcs (Operating Company) Limited	Center Parcs	2092.5	63117	100	0	0
1	CRC9480149	Colchester Hospital University NHS Foundation Trust		2092.5	12406	100	0	0
1	CRC1426712	Department for International Development		2092.5	3695	100	0	
1	CRC4628120	Department of Energy & Climate Change		2092.5	897	100	0	0
1	CRC2681146	FILTRONA PLC		2092.5	2670	100	0	0
1	CRC7596297	Invesco		2092.5	5397	100	0	0
1	CRC3949391	JOHNSON WAX LTD		2092.5	5174	100	0	
1	CRC4293589	Keele University		2092.5	12663	100	0	0
1	CRC1177687	MIDLAND QUARRY PRODUCTS LIMITED		2092.5	38006	100	0	0
1	CRC6582231	National Museums Liverpool		2092.5	9207	100	0	0
1	CRC0130228	North West London Hospitals NHS Trust		2092.5	16965	100	0	0
1	CRC6360223	OFGEM		2092.5	1424	100	0	
1	CRC4586734	RED FOOTBALL LIMITED	Manchester United Limited	2092.5	8809	100	0	0
1	CRC2693134	Slaughter and May		2092.5	6443	100	0	
1	CRC7943383	SYNERGY HEALTH PLC		2092.5	4511	100	0	0



League Table

CRC League Table Distribution





Emissions Trading

■ Calculating emissions

- Standard calculations which involve multiplying the electricity use by a defined emissions factor. (In this case it is 0.541 MTCO₂/MWh)
- Emissions from onsite fuel consumption are also included in the scheme and need to be accounted for.

■ The process of purchasing allowances

- Purchase allowances in the beginning of the compliance period
- Must surrender carbon allowances at the end of each period
- The amount surrendered must equal the amount of emissions calculated from energy consumption
- Failure to comply gives rise to **fin**es and **reputation risk**



Emissions Trading

- Phase 1 *Learning Phase* - April 2010 – March 2013
 - £12 (\$19)/tCO₂ fixed price uncapped sale

- Phase 2 *Capped Phase* - April 2013 – March 2018
 - Sealed bid uniform price auction – These prices will be the basis for the government's offset price development.
 - Secondary market – buying from those who have offsets to part with
 - Safety valve – injection of offsets from the ETS if the cost per offset increases too much



Business Implications

What's the \$\$ impact?

- Administration fees
- Penalties
 - Reporting delays
 - Reporting errors
- Allowance purchases
 - Cash flow requirements
- League table performance
 - Reputational impacts
- ...and finally, the cost of buying more energy than is necessary.





Administration *Fees and Penalties*

Civil and Criminal Penalties

Administration fees

- Registration fee - \$1,520 (£950)
- Subsequent annual admin fees - \$2,100 (£1,290)
- Transaction fees - \$475 (£300)

Fines

- Late reporting: \$8,000 (£5,000) + Days X \$800 (£500)
- Reporting error: 10% error at £40/tCO₂ = \$92,800 (£58,000)*

* = based on an organization with 29,000t CO₂ footprint



Business Impacts

- Cost and reputational impacts need to be managed
- Due diligence required on UK asset or corporation transactions
- Impacts on existing and new business and customer relationships
- Drives market for energy efficiency and carbon trading

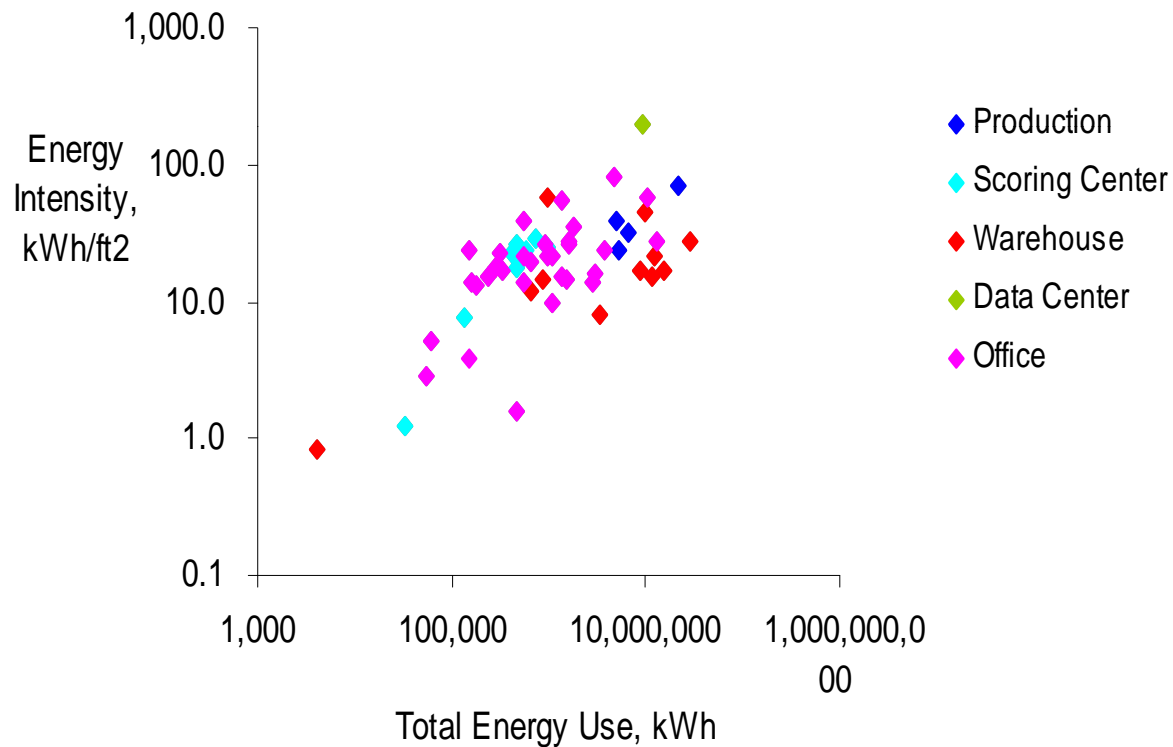


Managing the Risks of the CRC

- Focus on energy use reduction through a company's portfolio of properties. By doing this a company can:
 - Improve its standing in the league table
 - Decrease its compliance fees associated with allowance purchases
 - Decrease its overall energy use expenses
- Develop an energy use data collection and monitoring strategy to limit the potential for misreporting and extraneous legal costs.

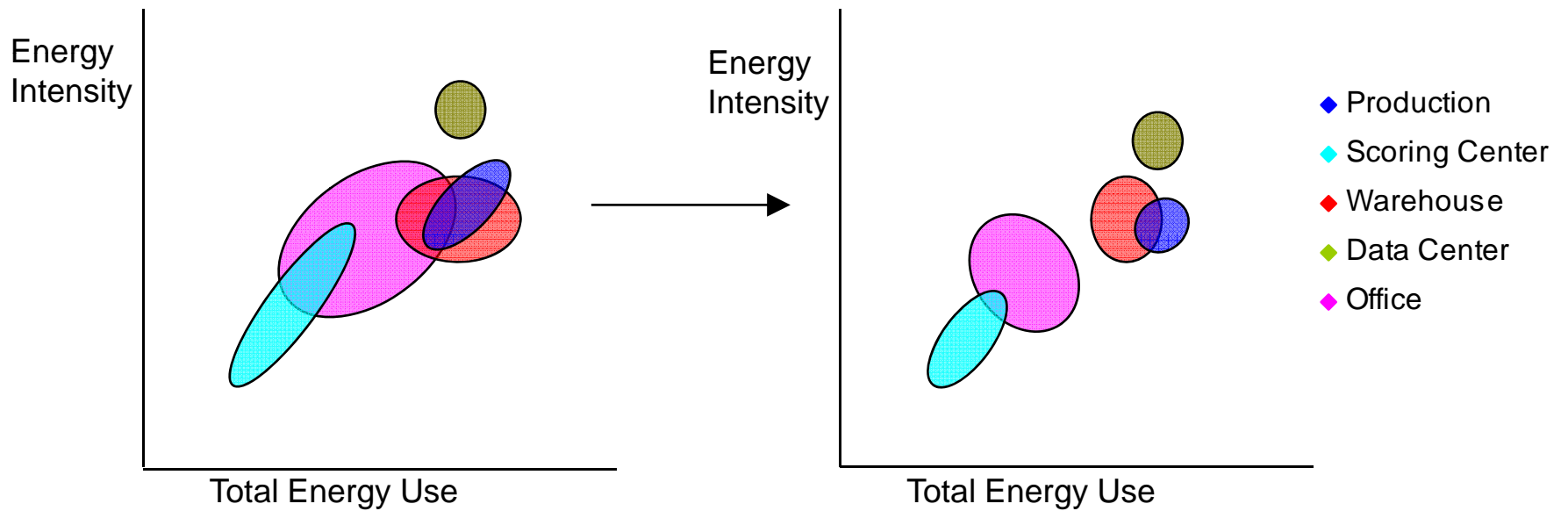


Gradual Reduction of Energy Use in a Portfolio





Gradual Reduction of Energy Use in a Portfolio





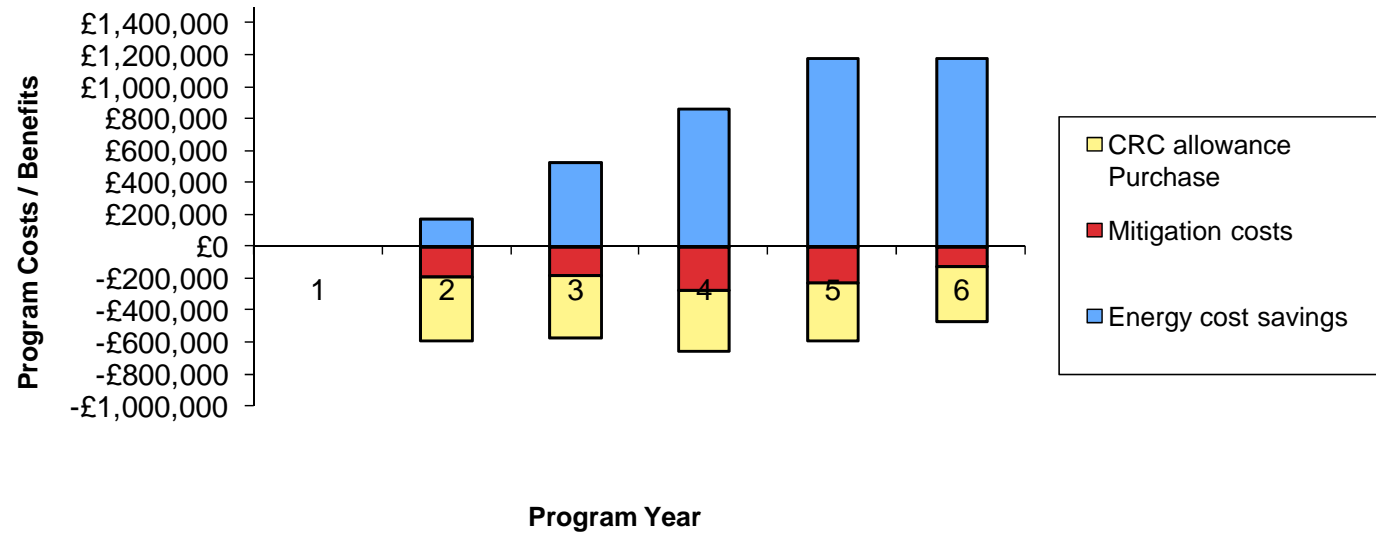
Case Study

UK based organization – real data extrapolated to determine costs and benefits associated with the program.

- Spends \$14,406,360 (£8,860,000) on electricity
- Consumed 61,520,000 kWh
- Emits 33,282 TCO₂e
- Purchases around **\$650,000 (£400,000)** of offsets for CRC compliance in the first phase
- **Value that is at stake for this specific case is \$3,900,000 (£2,500,000) over the six year period.**

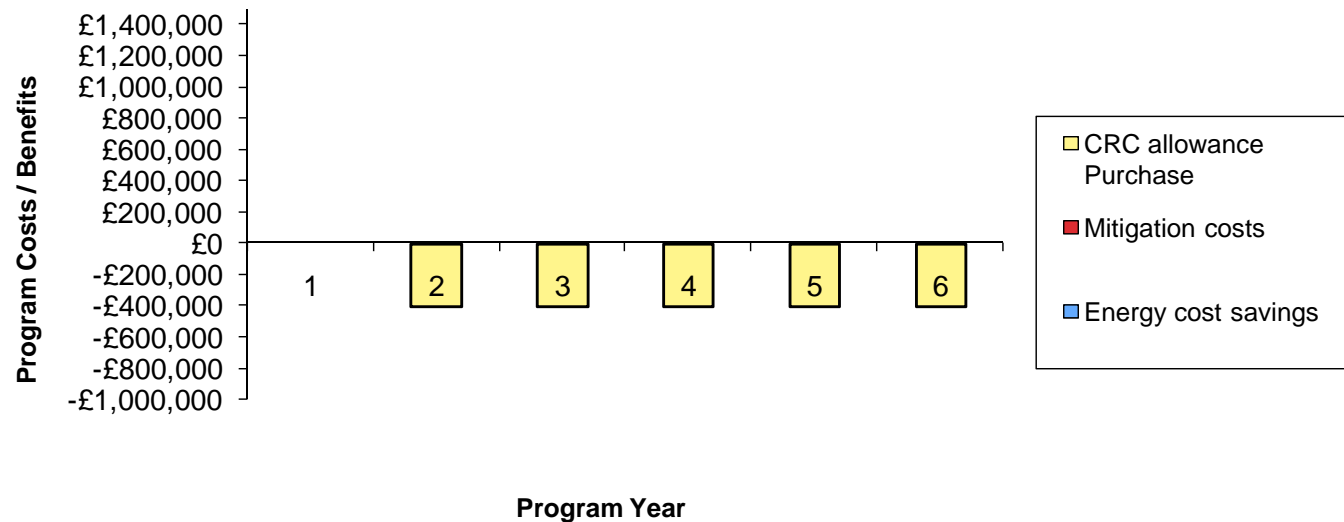
Best Case Scenario:
Performing at the top of the League Table

"Pro Forma" Corporate Sustainability Business Case



Worst Case Scenario:
Performing at the bottom of the League Table

"Pro Forma" Corporate Sustainability Business Case





Key Changes to the CRC

■ Phase 1

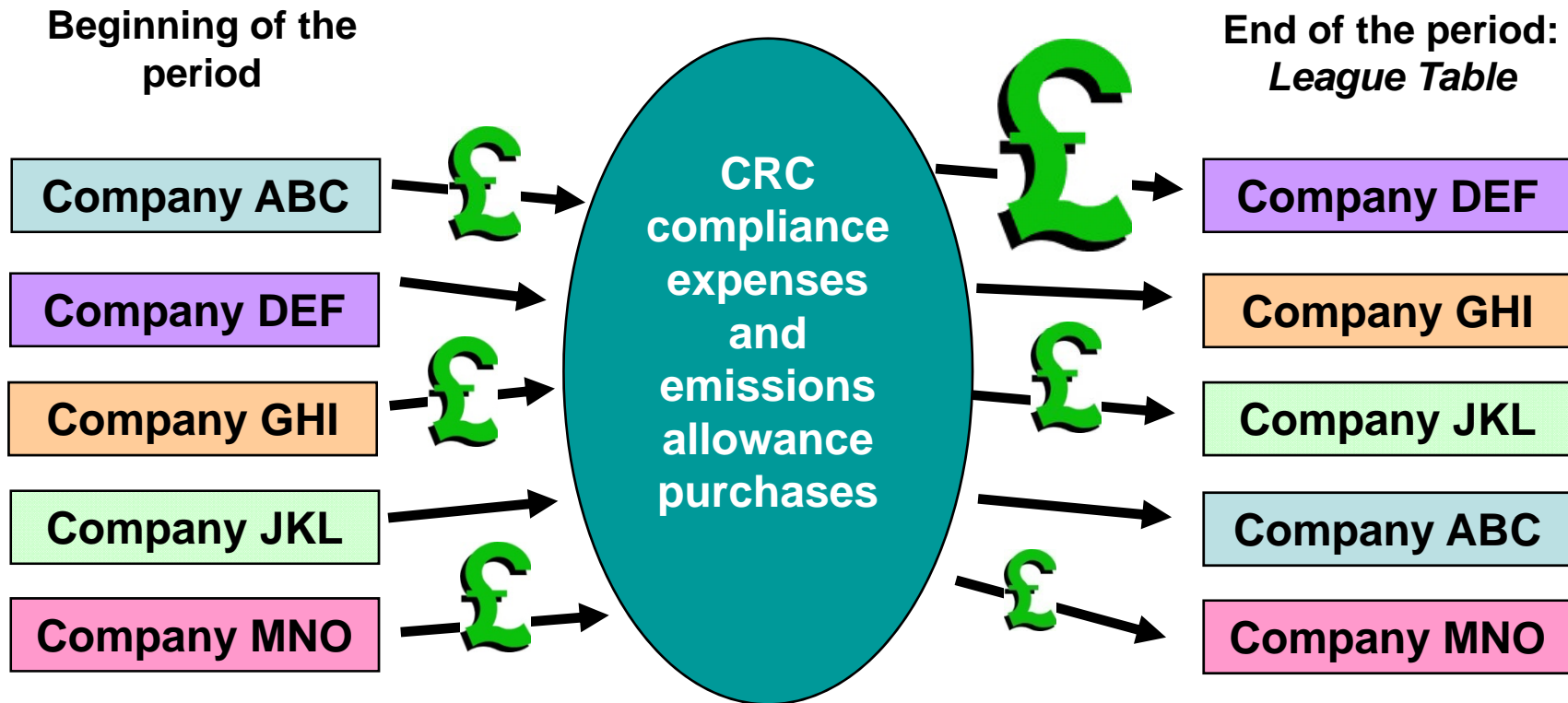
- Sale of Allowances pushed to April 2012, retroactively
- Recycling payment scrapped

■ Phase 2 – Proposed

- Reduce fuels covered from 29 to 4
- Fixed price offsets instead of auctioning approach
- More clearly define the organizational boundaries
- Make qualification for the program a one-step instead of two-step process
- Reduce overlap with other schemes, for instance sites that are capped under the EU ETS would be exempt from the CRC

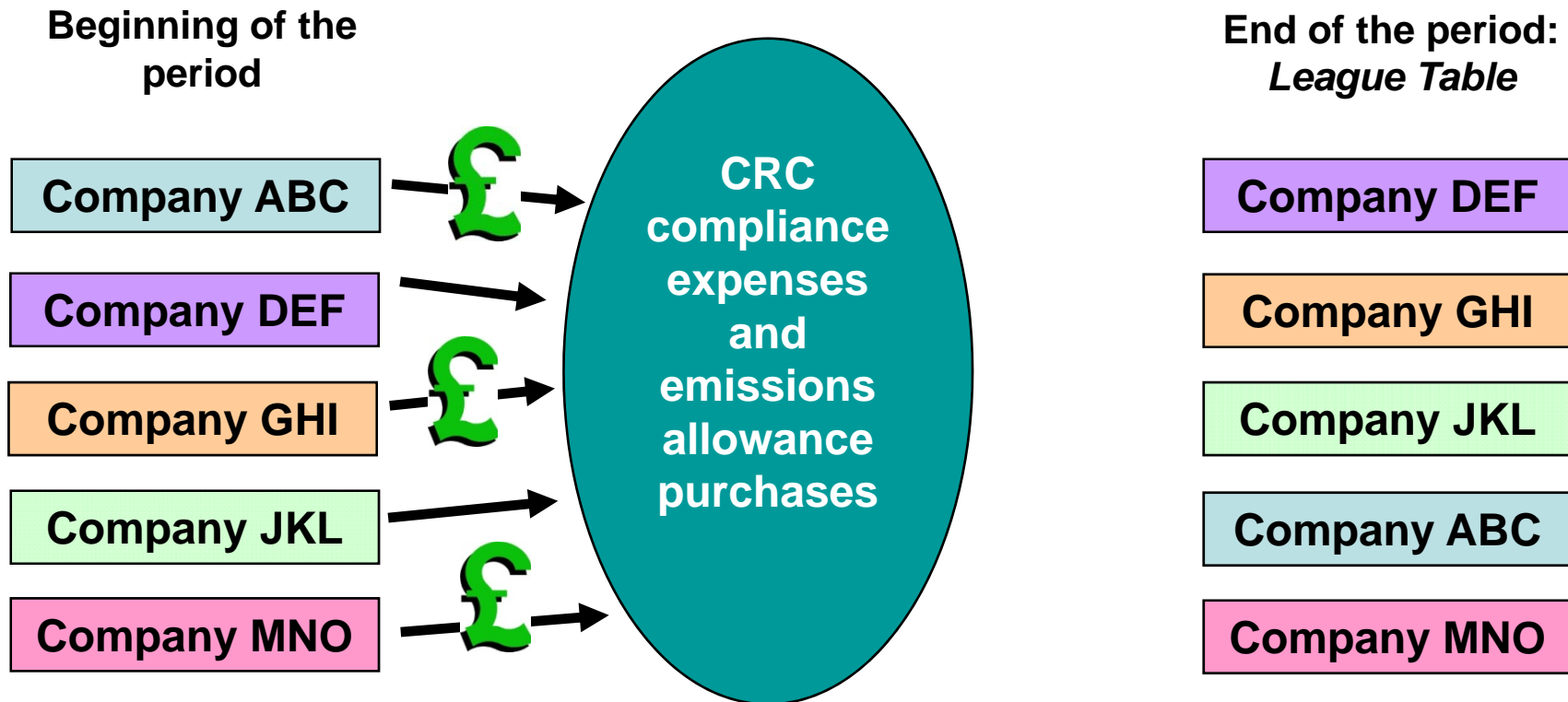


Recycling Payments - Original





Allowance Purchases - Now





Critics of the CRC

- The reporting is burdensome on businesses
- The fact that the recycling payments have been removed have made the CRC more of a carbon tax
- The program is complex and now that recycling payments have been removed a more effective and simpler carbon tax should be initiated
- The League Table ratings are based on year to year improvements, which potentially harm facilities that were built to a very high level of efficiency prior to the start of the program



Key Deadlines

Action	Deadline
Publication of first League Table	Autumn 2011
Buy allowances from government for compliance year 1	April 2012
Submit Annual Report using online registry	July 2012
Hold sufficient allowances in account to cover emissions for year 2	July 2012



Your Next Steps

- Urgent actions needed for AMR installation/ CTS certification for the Early Action Metric
- Year 2 data collection, management and reporting responsibilities
- Develop an effective energy/ carbon management strategy to perform well in League Tables
- Determine the potential CRC liability
- Develop an auctioning strategy

Thank you.

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