

Carbon Trading Yorkshire

Pete Stevens CIWM
Partner Account Manager

co₂sense yorkshire[®]



What is CO2Sense?

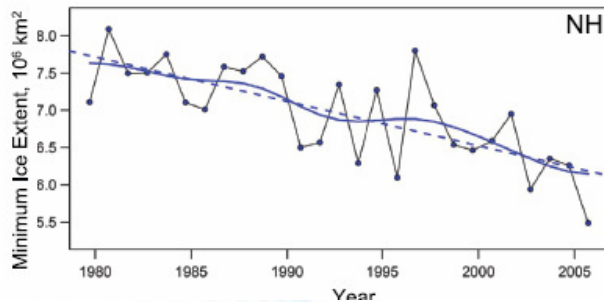
- CO2Sense helps businesses and organisations in Yorkshire and Humber to prosper and grow in the new Low Carbon Economy.

Why?

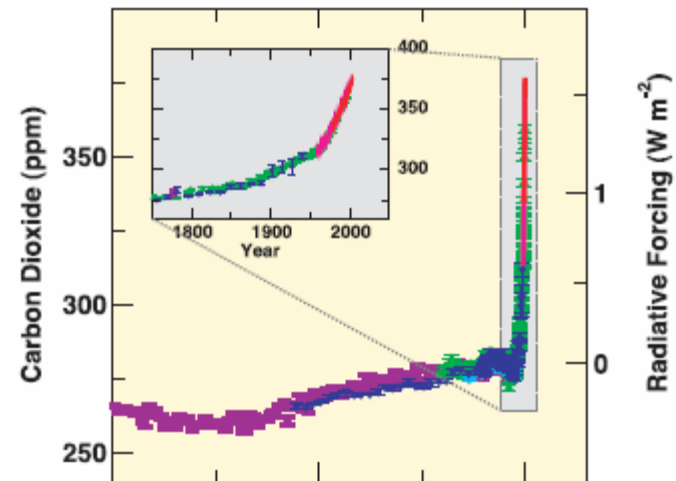
- Yorkshire most carbon intensive region in the UK
- Avoid risk
- Meet opportunities.

The challenge!

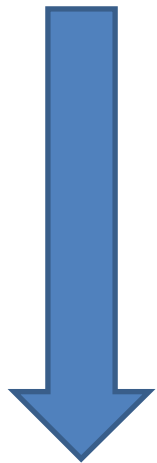
- What does Climate change mean to me and my business?



co₂sense yorkshire®



The real challenge



- China seeking opportunities in low carbon agenda
- One generation compared to three generations for industrial revolution
- One generation to become low carbon economy?
- Where does that leave Europe let alone UK?
- What about USA?



Policy Background

- Climate Change Act 2008 (includes aviation and shipping)
 - 80% cut in GHG by 2050 From 1990 level
- Other Legislation
 - EU ETS (40% EU emissions) 2billion tonnes
 - Climate Change Levy & Climate Change Agreements (2.3 million tonnes saving)
- Carbon Reduction Commitment - ~53 Million tonnes

What is CRC?

- Mandatory cap-and-trade scheme for emissions targeted at large companies in the non-energy intensive sector in the UK.
- It is anticipated that 5000 organisations as diverse as banks, supermarkets, cinemas, hotels and public organisations will be required to participate. More like 15,000 companies!

Government aims:

Carbon Reduction Commitment

- The government estimates that the CRC sector represents 10 percent of the UK's emissions at 51 million tonnes of CO₂ annually
- To achieve a 4.4 million tonne annual saving of CO₂ by 2020
- Scheme to be revenue neutral though NPV to scheme's participants estimated at £755m, this positive value to be realised through energy savings

Who is in CRC?

- Qualification year 2008
- One or more half hourly meter (HHM) settled on half hourly market
- Annual consumption through all HHM's was at least 6000MWh
- Companies with above 3000 MWh for above still need to make information disclosure
- If you have HHM will be affected in some way.

What will companies need to do?

- Forecast/Report on fixed point emissions
- Buy allowances to cover each tonne of CO₂
- Trade via secondary market
- Surrender allowances at end of each year
- Reduce emissions, as a result of:
 - Additional cost
 - League Table/Recycling payments

Buying allowances

- Phase one
 - Buy at beginning of each compliance period at fixed price (£12) per tonne
 - Buy on secondary market at £?
 - Buy from EU ETS!!!
 - Banking?
- Phase two
 - Buy via sealed uniform bid auction
 - Cap on market (2%?)
 - Buy on secondary market at £?
 - Buy from EU ETS!!!

League Table Repayments

- League table will report on every participants position
- Position determined by three metrics
 - Absolute consumption
 - Early Action
 - Growth metric
- League table will determine bonus/penalty payments
 - +/- 10% in year 1 + 10% per year up to 50%.

Putting CRC into context

What is a tonne of Carbon?

- ~4854 KWh of gas burnt in your heating system

(average UK price paid industry = 1.745p/KWh 2009, excludes CCL)

- ~1862 KWh of electricity used in a building

(average UK price paid industry = 7.3p/KWh 2009, excludes CCL)

- Carbon allowances in CRC

£12

- Surely its a no brainer to reduce energy consumption?

£85

£136

Why Have CRC? Or Carbon Trading?

- Financial value on Emissions CO₂
 - Use of NPV and MACC
 - Speaking the financial language
- League Table
 - Reputation is important
 - Removing Green wash
- Data
 - Better monitoring and management
 - Penalties for inaccurate reporting

Carbon Trading Yorkshire

- A risk free introduction to CRC
- Uses real data but can be flexible about 90% footprint
- Follows phase II in that:
 - Cap on market
 - Auction for available allowances
 - No banking allowed
- Monthly trading platform (Online)
- 3 -4 learning events

The scheme in figures

- 44 Organisations taking part
- Two phases January and July
- Total baseline emissions 1.17 Million tonnes
- Allowances on market 1.11 Million tonnes
- CRC scheme will represent 51 Million tonnes
- CTY is a good sample!

Trading activity on CTY

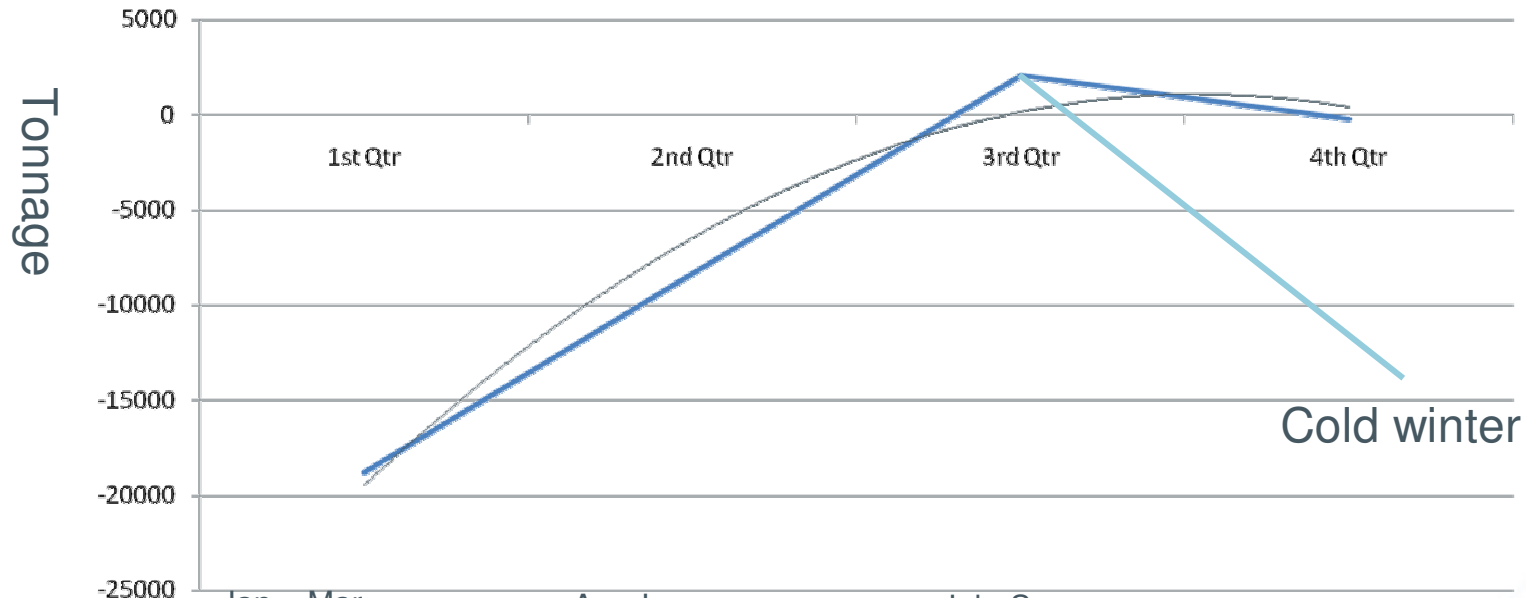
- Two trading days to go
- 31,505 tonnes offered onto market
- 12,645 actually traded
- Where is the market?
- The mad dash?

Trading Month	Price (£)
Feb.	12*
Mar.	15
Jul.	14*
Aug.	17.50 - 19.25
Sept.	18.50 – 20
Oct.	20
Nov.	18
Dec.	18-20
Jan.	18-20

* Auction price

Market position

Total



Jan – Mar.

- 18,802t short
- shortest member
 - -3900 t
 - -£47k
 - 6% of total budget

- Longest member
 - 990 t
 - +£12k
 - 4% of total budget

Apr-June

- 8397t short
- shortest member
 - -5545 t
 - -£65k
 - 8% of total budget

- Longest member
 - 2205 t
 - +£26k
 - 12% of total budget

Jul - Sep

- 2054t Long
- shortest member
 - -8400t
 - -£101k
 - 14% of total budget

- Longest member
 - 7950 t
 - +£95k
 - 15% of total budget

?

- Economy
- Winter temp.
- CAP

Lessons learnt – Participants point of view

- Data collection
 - Quality of 90% footprint
 - 15% companies struggling to give us data
 - Delay – biggest delay 18 months for billing data
 - AMR vs Smart meters
 - Using data to forecast and trade?!?

Lessons learnt – Participants point of view

- Need monthly data to trade effectively★
- Some trading strategies emerging as a result – zero trade strategy
- Procurement is not the same as trading
- Presenting it on balance sheet
- What contracts are required?
- Basic trading strategy
- League table position and trading not linked
- Interesting relationships between landlord and tenant
- Strategic forecasting not being carried out★
- Use of tools such as marginal abatement curves not in use
- Closer links between business model and carbon★

Where next for Carbon and business

- Adaptation
 - Risk
 - Opportunity
- Mitigation
 - Carbon Trading is coming your way!!
- Reputation and supply chain
 - Reputation
 - Reporting
- Opportunities
 - CCS = 40,000 – 50,000 jobs
 - Cheap Flood management
 - Renewables/low carbon products

Future Policy Agenda

- 80% reduction by 2050
- Carbon Trading is favourite mechanism
- Transport?
- Population management?
- Agriculture
- Water

Conclusions

Three basic strategies emerging

- See it as a tax – Fight or flight
- Minimum basic requirement
- Embrace and change



- CRC threshold likely to be reduced
- Other global carbon trading schemes on the way
- Opportunities for flexible businesses!