总体说明企业参与碳排放权交易机制应该履行的权利和义务
Brief introduction of industrial enterprises' obligation and rights under ETS

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Guangdong, 28 February 2013

BP's Emissions Trading Scheme 1998-2001

In September 1998 Sir John Browne, CEO of BP at the time, announced that BP would operate an emissions trading system to **reduce** its greenhouse gas (GHG) **emissions 10% below 1990 levels by 2010.**

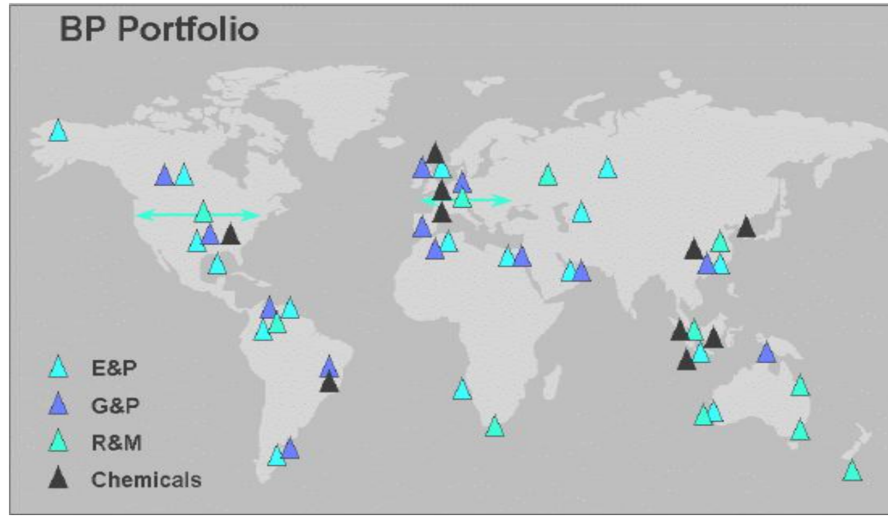
Target represented a reduction of 30M tonnes from 1990 baseline (adjusted to take into account late 90's acquisition).

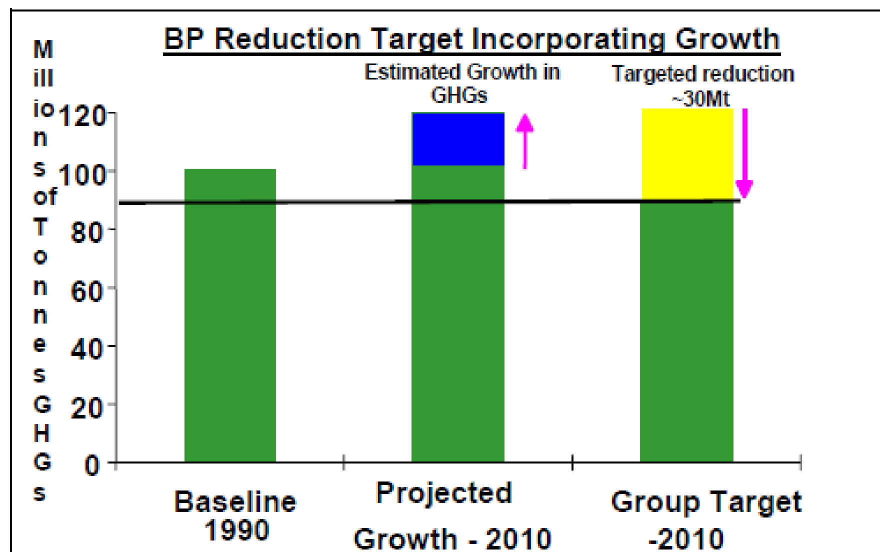
Pilot was developed between 1998 and 1999. It included 12 Business Units (out of 150).

40 BUs represented 80% of emissions.

The group wide system 'went live' on **1st January 2000** and included the main business streams**. Lessons from pilot fed into design of wider scheme.**

The involved four business streams in 100 countries:
- exploration and production
- refining and marketing
- chemicals
- gas and power





BP’s Emissions Trading Scheme 1998-2001
- Academic Journal References:

Trading example from the BP ET system 2000

A deepwater offshore production unit had plans to increase its production rate during year 2000. This would have caused the BU to have emissions above its annual allocation of allowances. As the business unit's on-site cost of abatement to reduce these emissions was higher than the market price of CO_2, it made a decision to purchase CO_2 allowances. A chemicals business unit had fast-tracked a furnace upgrade project, allowing it to shutdown a second furnace and giving it spare allowances to sell. Hence a trade took place between these two businesses.

“*Greenhouse gas emissions trading in BP*” by Mark Akhurst, Jeff Morgheim, Rachel Lewis

Published in Energy Policy 31 (2003) 657–663

“*BP’s emissions trading system*” by David G. Victor, Joshua C. House.

Published in Energy Policy 34 (2006) 2100–2112

BP Emissions Trading Scheme - Conclusion

- This was the **first global greenhouse emissions trading scheme** of its kind anywhere in the world

- It set **an example for the development of future regulatory emission trading initiatives** (UK Emissions Trading Scheme and its successor the European Union Emissions Trading Scheme)

- **BP achieved its target in 2002**. BP was then covered by the UK Emissions Trading Scheme

- **Built understanding** within the organization through extensive consultation and participation of business units

- Key to **build GHG targets within each business unit** performance metrics

- Most of trading accounts that ended with deficit were non-operated assets

- Business units that didn't trade had outstanding issues with emissions data. **Data is key**.

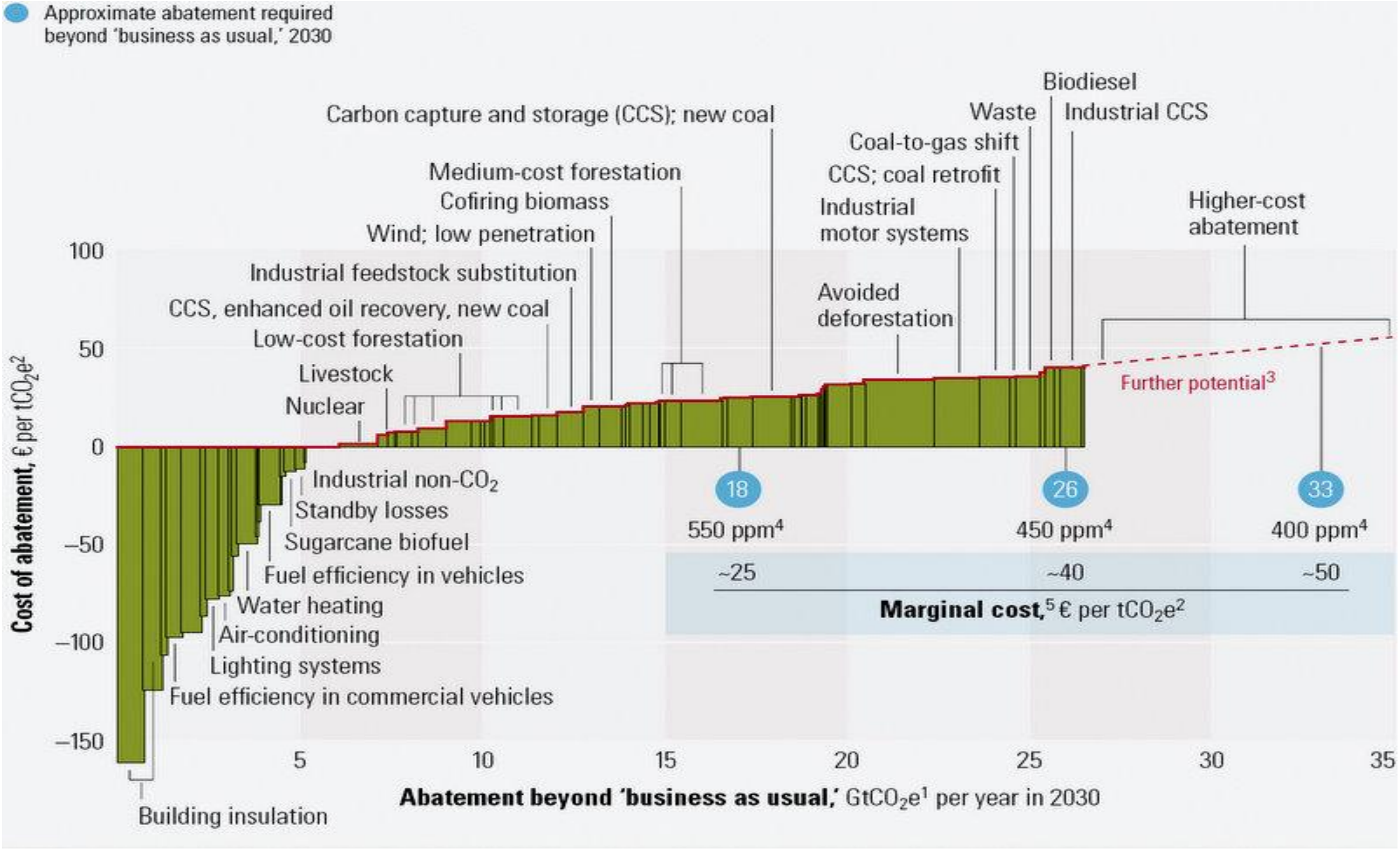
- Met objectives very quickly. It's key to put a **price on carbon** to understand where the efficiencies can be achieved.

- **Long term goal is necessary** to influence planning decisions and true costs of technology.

Marginal Abatement Cost Curve

• A marginal abatement cost curve (MAC) curve is a set of options available to an economy to reduce pollution, it shows the costs of abating greenhouse gas emissions and plot the costs against the amount of emissions reduction available from each abatement measure

• It is a valuable tool in understanding emissions trading, driving forecasts of carbon allowance prices, prioritising investment opportunities, and shaping policy discussions



Source: McKinsey (2009)

Finally…

Thank you for your attention!

谢谢！

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