

Energy Pricing and ETS / JI / CDM

The Chemical Industries' View

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Energy: Global Facts & Trends

- **Energy fuels growth**, essential for economic & social development
 - ❖ **World** energy needs projected to be 60% higher in 2030, with 90% of growth from fossil fuels
- **Carbon Dioxide levels** in our atmosphere are rising, as is global temperature.
 - ❖ Developing countries CO2 emissions will overtake OECD emissions during 2020s
- **Large infrastructures** (such as for transport and energy) and the technological changes on which they rely **take decades to develop**

Implications for Energy Policy and Goals

- Energy and particularly **Climate Change** are **truly global issues**
 - ❖ Each policy evolution must bring us a step closer to common global solutions
 - ❖ Any leadership initiative must be judged on how effectively it encourages other (large CO2 emitters) to follow

- Proposal for an **EU Energy Policy Initiative** is **welcome**
 - ❖ A better integrated approach is vital as environmental challenges, energy supply & costs and the factors driving de-industrialisation are all closely interlinked

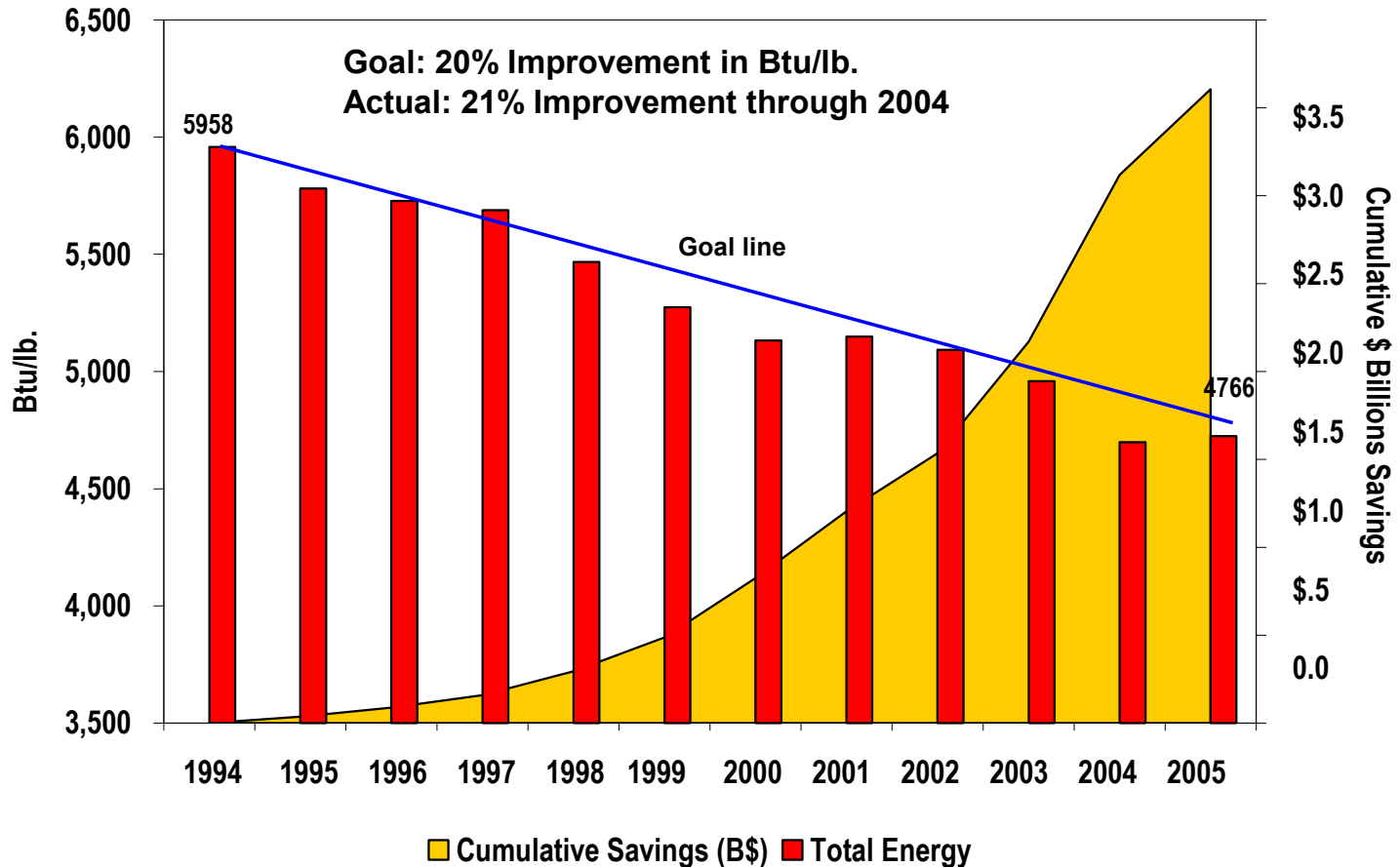
Energy and The Chemical Industry

- Largest and most diverse “industrial” user of energy
 - ❖ For example Dow’s major EU site in Terneuzen represents 5% of total industrial use for the Netherlands
 - ❖ Overall Energy costs (fuel and raw materials) at Dow now exceed 50% of total costs
- Unique amongst energy intensive industries as it uses energy/fuels for power and as a primary feedstock for many of its products
 - ❖ Chemical industry is an **enabling** industry. Many products have functionality to contribute to Energy Efficiency in society. Many products constitute the raw materials for **all** other industries
 - ❖ Chemical industry “rearranges the molecules” and does it efficiently

Energy and Dow

Long Term Energy Intensity Programme that continues independent of Oil Price Fluctuations or Regulatory Restrictions

Savings based on Dow weighted average natural gas price each year



24
Million
Tons
CO2
saved

Energy Pricing and ETS

- Energy price parities are important. The Crude Oil price increase magnifies the impact of policies that distort global competition
- Indirect and direct examples of unintended price impacts include
 - ❖ The “**dash for gas**” for electricity generation is leading us to repeat the USA experience in terms of shortages, price spikes and lack of competitiveness
 - ❖ In an oligopolistic market with national constraints the **cost of carbon is simply passed on** to the consumer via higher electricity prices

ETS Review

- Positive Progress
 - ❖ Increased **awareness that carbon has “another” cost**
 - ❖ Demonstrated that multi country market based mechanisms can function; this option is more likely to be taken up globally than a tax on carbon

- However, market mechanisms only work effectively over the long term in free markets
 - ❖ Time horizons too short for major investment decisions or significant research & technology initiatives
 - ❖ At current CO2 cost levels the financial incentive to sell the allocated credit can outweigh the alternative of investment in the Kyoto countries

Operational improvements (harmonisation, simplicity, transparency etc.) are also needed but are well addressed by the published UNICE position paper

ETS – Energy Intensive Users Perspective

- An analysis by “The Alliance of Energy Intensive Users” in Europe reinforces these concerns
 - ❖ For future electricity pricing their analysis demonstrated a **98% correlation between CO2 prices and increases in future electricity prices**
 - ❖ This analysis also showed a **significant transfer of wealth from the users irrespective of whether sector is included in ETS**
- The need for investment is understood, but if this encourages energy intensive users to produce outside Europe, it brings into question both the strategy and the contribution this makes to global CO2 reduction

ETS & JI / CDM – A Users Perspective

- ETS should **reward the efficient and restrict the inefficient**
 - ❖ Requires focus on “relative or performance based” caps/allocations rather than absolute caps
 - ❖ Needs measures to prevent production shift from EU to developing countries (with relatively less efficient production from overall CO2 perspective)
- More commitment to JI / CDM to speed **technology transfer to developing world**
 - ❖ Unrestricted access for EU industry to JI / CDM projects
 - ❖ Clear, strong and practical (resource) support for the Executive Board to ensure an efficient process
- For industries facing global competition, initiatives should take us a step towards **more global solutions to reduce the planning uncertainty** that delays EU investment and encourages production outside the EU

Summary & Conclusions

- Key question is not whether ETS functions but how it can most effectively achieve the **(global) goal of CO2 reduction**
 - ❖ Energy intensive industries will provide most visible test of whether CO2 reductions are achieved or simply “relocated”
- CO2 reductions and technology investments show Chemical Industry is focused on pragmatic solutions
 - ❖ However **integrating ETS** into a comprehensive energy policy based on a diverse energy mix and liberalised market **is urgent**
 - ❖ As is accelerating **EU leadership in technology transfer to developing nations** via a better supported JI / CDM process
- In summary an audacious rethink and higher level strategic dialogue is now needed to work out how market based instruments can best achieve our common (global) goal