



CHEMICAL INDUSTRIES
ASSOCIATION

***SUBMISSION TO
PIU ENERGY
REVIEW***

Introduction

The Chemical Industries Association is the major representative body for the UK chemical industry. We welcome the opportunity to contribute to this important review.

General Remarks

The chemical industry is one of the UK's most successful and internationally competitive business sectors, whose products are traded in world markets subject to global competition and generate a contribution to the country's balance of payments in excess of £4 billion annually. With annual gross output approaching £50 billion, the industry accounts for 2.5% of GDP; employs around 230,000 people directly and supports many tens of thousands of additional jobs throughout the economy nationwide; and up to now long term growth has exceeded that for both GDP and manufacturing as a whole.

The industry is one of the most energy intensive sectors of the economy, accounting for around 5% of the nation's gas and electricity consumption and is manufacturing's largest consumer of gas and electricity. In addition to its consumption of energy for fuel and power, the industry uses energy as an essential feedstock for the start of many chemical processes, which add value to the basic raw materials. The industry's combined energy and feedstock bill amounts to around £2.5 billion.

The industry also has an excellent record of improving energy efficiency. Between 1967 and 1990 the output of chemical products more than doubled, while energy consumption per unit output was reduced by almost 60%, and 1998 data shows a further energy efficiency improvement from CIA member companies of 19% since 1990. As part of its on-going commitment to energy efficiency the CIA has entered a negotiated Climate Change Agreement with the government to deliver an aggregate improvement in energy efficiency 1990 – 2010 of 34%. This Agreement will "save" over 1 million tonnes of carbon by 2010, more than any other industrial sector. A significant proportion of the improvement is expected to come from additional combined heat and power (CHP)

schemes. (The industry already generates around 25% of its own electricity requirements, most of which is from CHP).

Not only is the industry making its own contribution to improving energy efficiency and reducing greenhouse gas (GHG) emissions, it is important to recognise the contribution made to improving energy efficiency by many of the industry's products such as plastics and light weight materials for use in packaging and transport; coatings and insulation material for reducing heat loss in buildings; fuel additives and catalysts for enhancing the performance of motor vehicles, etc. Polyethylene is an excellent example of a lightweight and energy efficient product, which touches and enhances our lives in many different ways. In the area of distribution, polyethylene packaging means lower distribution costs by delivering more product and less packaging; and fewer trips means fuel saving too. In the past 15 years a major UK producer has reduced power consumption in polyethylene manufacture by 40% per tonne of product with further reductions planned.

Improvements in energy efficiency come very largely from investments in new plant, equipment, technology and education. The industry presently spends some £3 billion annually on new plant and equipment and some £3 billion on R&D. As you will be aware the industry argued vehemently against the introduction of the climate change levy (CCL) on the grounds that it would seriously damage international competitiveness, but would do little to change behaviour, whilst adding significantly to costs, which would absorb funds vital for new investment.

What is meant by security of supply?

We note with interest government concern that an increasing proportion of UK's energy requirements will need to be imported. We question whether from a security of supply angle this has any more relevance than for the myriad of other commodities or products now imported which were formerly sourced indigenously or in which we had a high degree of self-sufficiency. UK has long relied on the benefits of international trade to supply more cheaply goods and services that it could not produce itself or could do so only at greater cost. Our manufacturing heritage is rooted in the principles of free trade and the chemical industry has flourished under this open regime. After the Second World War we gave up all pretence of being self sufficient in food and in virtually every activity undertaken in the UK there is an increasing reliance on imports and or/imported expertise. Globalisation now permeates almost all aspects of our business lives and supply chains typically spread across the globe. Whilst we recognise the importance of considering security of supply - the need to take into account circumstances over which the EU, GATT and WTO have no control and the need to have an appropriate mix of energy sources, we question to what extent it is appropriate to do so from a purely national

standpoint. (We note the EU green paper on security of supply). We would be concerned if perceived national self-interest resulted in the pursuit of policies, likely to be prejudicial to optimum market solutions

As the EU energy markets become increasingly interconnected and hopefully more liberalised it will become more difficult for the UK to pursue policies in isolation. In the short term, however there are some major differences to be resolved in detailed policy measures in the UK and on the continent including energy taxation and emissions trading.

Competitiveness must not be subsumed

Having indicated above the importance of free trade and international competitiveness for the chemical industry, it is essential that we have access to secure supplies of energy and feedstock at prices, which enable us to continue to compete effectively and sustainably in world markets. Our belief is that this is best achieved by establishing cost competitive and liberalised energy markets, and we urge the UK government to continue to press for greater liberalisation of the EU energy market.

Within the framework of establishing a long-term energy policy, proper analysis of costs and benefits is paramount. Although we acknowledge the difficulty the Government faces in trying to reconcile conflicting environmental, social and commercial/competitive pressures in this policy field, nonetheless the extent to which least cost economic considerations need to be modified by environmental and social objectives must be made clear, and the costs identified and allocated according to a soundly based framework (Thus environmental policy considerations have resulted in industry being charged higher prices for energy through the CCL, but it is far from clear to what extent UK industry's lost relative competitiveness and wealth generating capabilities have been taken into account).

We remain very concerned that competitiveness should not be overridden by other considerations. We are particularly concerned that political factors should not result in higher weightings being given for social and environmental objectives. There are a number of striking examples of this for example the reduction in VAT rates for domestic fuel and heating in 1997, and the industrial and commercial focus of the climate change levy.

We acknowledge the importance of alleviating/avoiding fuel poverty but are not convinced this is best achieved within the remit of the regulator. We consider that there may be more appropriate routes to address this through the social security system.

We also consider that the whole of society should be encouraged to use fuel and energy more efficiently and that the burdens of meeting climate change objectives should be more evenly distributed across all sectors of the economy including final consumers.

In our responses to consultations on the Climate Change Levy and Emissions Trading proposals we emphasised the importance of moving in step with our main international competitors so that UK investment and growth potential are not inhibited

Chemical Company Requirements

At the micro level, chemical companies want to have competitively priced and sustainable energy supplies, with minimum tax; they want to have choice of supplier, choice of product and choice of contract. They also want to avoid unnecessary regulation, political interference, bureaucracy including the “hidden costs” of compliance and complexity. We believe that these things are best delivered through competitive markets, where various elements such as energy, transport, flexibility and supply risk are separately identified and costed. Where competition cannot be delivered effectively, regulation should be kept simple.

Underlying Pricing Mechanisms should be Cost Reflective

UK has taken a strong lead in liberalising energy markets, and, through a combination of unbundling assets, competition and regulation, has moved towards more cost reflective pricing of energy. There is still some way to go on this. One concern we have is the relationship between domestic and industrial tariffs and the extent to which domestic users are subsidised by industry. This occurs in both electricity and gas markets and relates to energy tariffs and transportation charges.

Thus, notwithstanding the need to protect against fuel poverty, we believe that domestic consumers should pay for the additional capacity required to meet demand peaks for electricity rather than industrial consumers with flat loads. It could be argued that if domestic consumers had to pay the full energy costs of having a cup of tea at the end of “East enders” they would switch on the kettle a little earlier. At the same time more sophisticated technology could be employed to adjust domestic loads and help flatten the peaks in individual households so that the need for additional capacity is minimized

It is interesting to compare the relationship between domestic and industrial electricity prices in the UK and on the continent. By and large on the continent industrial prices are lower relative to domestic prices than in the UK.

We would like to see much more transparency and openness in publication of gas and electricity prices for industrial and domestic consumers in the UK, on the continent and in the US.

Concerns about Regulation

Notwithstanding our desire for more efficient and cost reflective pricing, we are concerned that the trend towards unbundling the market and applying economic solutions to separate segments could be taken too far. This is especially the case if solutions are overly complex and may even be counterproductive if they discouraged widespread involvement from both sides of the market.

We believe there is a strong danger of this happening in the gas market with regard to capacity auctions. We are not convinced that capacity auctioning is the right mechanism to ensure that Transco delivers sufficient transportation capacity to avoid market constraints, and price spikes and at the same time minimize the need for interruptions. It is also apparent that, despite Ofgem's analysis on the first three months operations, some aspects of NETA are not working as well as they should be. Whilst in theory NETA provides for demand-side involvement, in practice it is far too complex and risks within the balancing and settlement are proving to be too great. This has resulted in recent upward movements in annual contract prices when comparing October 2001 starts with the previous October rather than the continued benefit of lower prices as predicted. In addition, NETA militates against CHP generators who either spill onto the system or cannot supply all their electricity needs, resulting in a high risk premium and additional costs, which is putting the government's own climate change objectives in jeopardy.

Clearly the regulatory system and mechanisms need to provide for existing market needs as well as facilitate longer-term energy policy objectives. Other concerns relate to the separation of responsibilities between offshore and onshore and the proper resolution of conflict between the interests of the oil and gas producers and downstream consumers. We feel that it might be more appropriate to have one body with over-arching responsibility so that for example issues of onshore-offshore capacity can be properly integrated.

Renewables and Technological Solutions

We accept that renewables has potential to contribute to a significant proportion of the UK's future energy supplies, but are concerned about the additional costs of bringing these on to the market. The mechanism chosen in the Renewables Obligation (RO) will progressively add to the average price of electricity as the proportion of renewables that electricity suppliers are obliged to purchase rises. Also we have serious doubts whether renewables will be able to deliver sufficiently cost effective large-scale options although solar and wind generation should be able to contribute greatly to a more decentralised/ local systems. The mechanisms selected by the PIU to track cost reductions in renewables technologies should prove to be adequate. However, as the costs of renewable technologies reduce, the buyout price of £30/MWH proposed in the RO consultation should also reduce or at least be subject to review rather than an automatic uplift in-line with the RPI .as the amount of renewable energy ramps up from 3% in 2002 to 10% in 2010.

In the past the fossil fuel levy was used as a mechanism to help fund the development of both renewables and nuclear generation. Whilst we are not in favour of penalizing existing energy consumers any further for the development of future generation, we are concerned that the proposed arrangements for RO disadvantages the nuclear option, which already suffers under the massive burden of unfavourable public opinion.

We are pleased that this review will open up a proper consideration of nuclear power. Much more needs to be done to tackle effective handling and disposal of nuclear waste, but this should not prejudice an objective assessment of its potential within the energy portfolio.

With regard to alternative energy technologies, it is highly probable that hydrogen will become viable within the specified time horizon.

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