

## INTRODUCTION

Make UK and UK manufacturers strongly support the drive towards a low-carbon economy; there can be no question about the need to drastically reduce greenhouse gas emissions across the economy and there are significant opportunities for manufacturers in enabling this transition. The tools for decarbonising and driving energy efficiency, from steel wind turbines to building insulation, are the products of manufacturers. Green and growth in UK manufacturing can and should go hand in hand provided we have the right policies to ensure decarbonisation does not entail a weakening of industrial competitiveness.

UK manufacturers have for some time been concerned about rising energy costs, both in terms of the damage to competitiveness and the more immediate impact on profitability and firms' ability to invest. The issue is of particular concern to energy intensive sectors and those exposed to international trade, but it is increasingly clear that it cuts across industry with energy costs affecting manufacturers from a broad range of sectors.

There are of course a wide range of factors influencing the price differentials that have emerged between the UK and competitor countries in recent years, not all are within government's power to influence. But government does have options. Government can respond by minimising the impact of climate change policy on energy bills, shielding the most energy intensive industries from pass through costs as much as possible, and by stripping out charges that are ineffective or superfluous to climate change aims. This approach, coupled with continuing energy efficiency improvements and industry innovation, will go some way towards strengthening industry's resilience to global competition and make the UK significantly more attractive to investors in manufacturing while meeting the need for low-carbon energy infrastructure.

EEF surveyed its membership on a wide range of environmental, energy and climate change issues in July 2014. The responses to the energy-related questions, published here, indicate major concerns over the impact of current energy and climate change policies. To address this concern, EEF is calling for:

- Cross-party commitment to full implementation of the Energy Intensive Industry (EII) compensation package as soon as possible and a longer term view of protection measures required
- A reformed approach to industrial energy efficiency and decarbonisation, drawing on the outcome of the industrial 2050 low carbon roadmaps
- Review and reform of the costs to energy consumers of decarbonising the power sector, ensuring emissions related taxes and policies are aimed at emission reductions as opposed to raising revenue

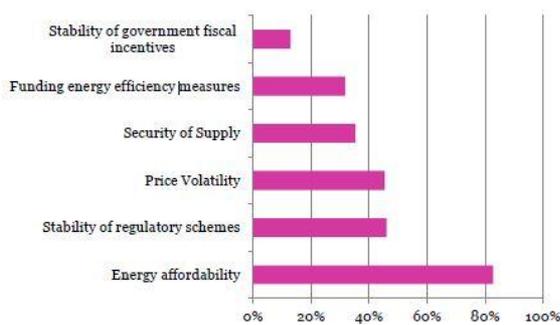
## EEF ENERGY SURVEY FINDINGS

The cost of energy is the greatest energy related concern for 51% of manufacturers and a concern for 83%

It is not surprising that the cost and affordability of energy is the number one concern for manufacturers with 83% of respondents highlighting it as a key concern, and 51% citing it as their most important energy related issue. Almost half of respondents indicated that the long-term stability of regulatory schemes and price volatility were also important issues whilst around a third cited security of supply and the need to fund energy efficiency measures.

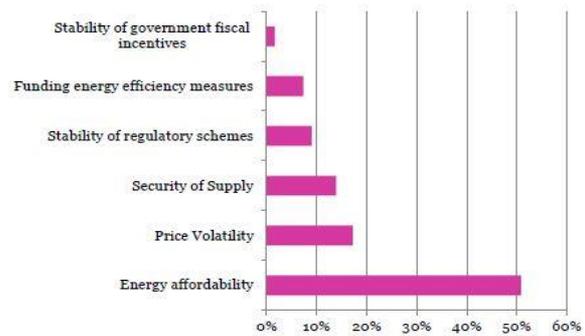
### Charts 1<sup>1</sup> & 2<sup>2</sup> – Energy related issues of greatest concern to manufacturers

*Percentage of companies citing issue as of concern<sup>1</sup>*



Source: EEF, Climate, Energy and Environment Survey 2014

*Percentage of companies citing issue as the greatest concern<sup>2</sup>*



Source: EEF, Climate, Energy and Environment Survey 2014

### Energy spend represents 6% or more of total company turnover for 27% of UK manufacturing companies<sup>3</sup>

The case for the impact of rising energy costs on energy intensive industry has been made extensively and government is to be commended for the action it has taken in extending the longevity and scope of the EII compensation package at the 2014 Budget. However, energy spend represents a large element of production costs for a significant proportion of manufacturing companies which will not have access to the compensation package. Costs could have a significant impact on these businesses in the coming years. The government is again to be commended for taking action to reduce the impact of climate change policy on the energy bills of non-energy intensive users through the freezing of the carbon price

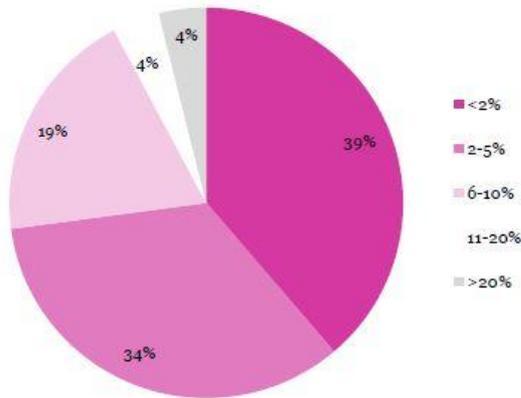
<sup>1</sup> In response to the question 'Which of the following issues are currently the greatest concerns to your organisation in terms of energy?'

<sup>2</sup> As a follow up to the question: 'Which of the following issues are currently the greatest concerns to your organisation in terms of energy?' respondents were asked: 'Please state which of these issues is of greatest concern?'

<sup>3</sup> In response to the question: 'What proportion of your UK company turnover is currently spent on energy?'

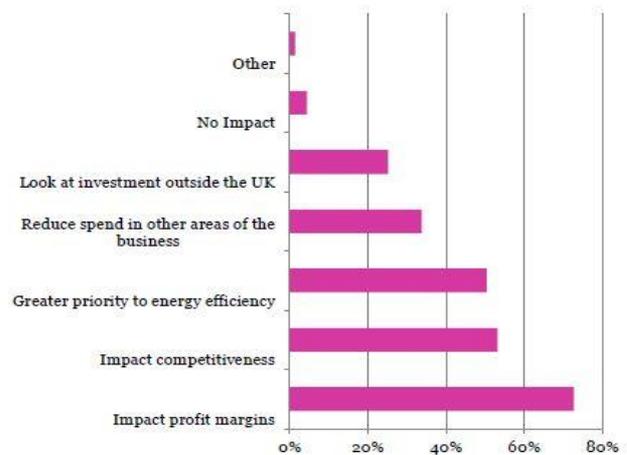
floor at £18/tCO<sub>2</sub> until 2019/20 but further action is still possible to minimise energy bill increases without impacting on the governments strategic plans for decarbonisation of the power sector.

**Chart 3 – Distribution of manufacturers according to energy spend as proportion of turnover**



Source: EEF, Climate, Energy and Environment Survey 2014

**Percentage of companies citing anticipated impact**



Source: EEF, Climate, Energy and Environment Survey 2014

## Projected energy price rises could reduce the competitiveness of 53% of manufacturers<sup>4</sup>

EEF estimates that UK and EU energy and climate change policies could increase industrial users' electricity bills by as much as 50% between now and 2020<sup>5</sup>. This increase in costs can be absorbed by some companies without a noticeable impact, particularly those outside manufacturing where energy costs represents a much smaller percentage of turnover, but for many manufacturing companies there will be significant implications.

Fifty three percent of manufacturers said that cost rises of this scale would have a noticeable impact on their competitiveness, 25% said they would consider investing in facilities outside the UK, and 34% said this would force them to cut spending in other areas of their business. It is positive to see that half of respondents would give greater

<sup>4</sup> In response to the question: 'EEF projections show that electricity bills could increase by 50% between now and 2020. In these circumstances what would be the impact on your business?'

<sup>5</sup> The 50% projected increase refers to an EEF projection of a 47% increase in electricity prices for large industrial energy consumers between 2014 and 2020

priority to energy efficiency measures under this scenario, but it is vital policy makers find a means of unlocking the drivers for energy efficiency in a manner that minimises or neutralises any negative competitive effects.

When considering just those organisations where energy spend represents 6% or more of total company turnover, we naturally see a significant increase in the level of respondents for each impact with; 31% indicating they would consider investments outside the UK, 69% anticipating an impact on competitiveness and 86% expecting an impact on profit margins. The majority of these companies are not what is typically classified as “energy intensive” industry. Competitive impacts are expected to extend far beyond those companies that will qualify for access to the range of compensation measures.

## **Only 22% of manufacturers feel the CRC provides the right incentive to improve energy efficiency performance<sup>6</sup>**

Whilst we believe government can do more to minimise projected energy price increases, continued industrial energy efficiency and innovation is also vital. UK industry has already made significant efforts and it is becoming apparent that continued improvements of the scale called for will become increasingly hard as many of the easiest gains, the so-called ‘low hanging fruit’, have been made.

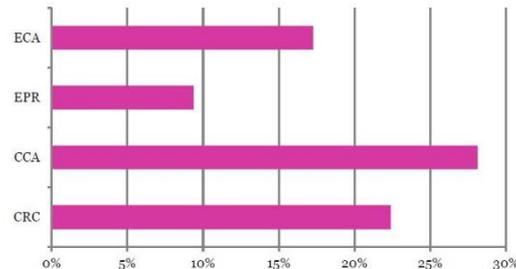
There is a worryingly low level of confidence in the current range of UK energy efficiency schemes ability to deliver these improvements. Only 22% of manufacturers believe that the CRC Energy Efficiency Scheme provides the right incentive to improve and only 28% feel the Climate Change Agreements (CCA) continue to provide that incentive. The low level of confidence in the CCA scheme to drive further improvements is particularly illuminating as this has historically delivered significant energy efficiency gains and met with high levels of approval from industry.

---

<sup>6</sup> In response to the question: ‘Thinking of each of the key energy efficiency schemes listed below, please tick the appropriate boxes to indicate whether you agree with the following.’

## Chart 5<sup>7</sup> – Approval levels for effectiveness of UK energy efficiency schemes

*Percentage of companies citing whether scheme provides correct incentive to improve*



7

Source: EEF, Climate, Energy and Environment Survey 2014

There is also widespread concern about the EU's emissions trading system (EU ETS) in terms of the future costs it will place on participating manufacturers and its ability to effectively deliver emissions reductions. EEF and UK Steel published an in depth report in August 2014<sup>8</sup> setting out the problems the scheme is facing and calling for a series of fundamental reforms. Amongst the extensive reforms called for, of particular importance are;

- Reform to the carbon leakage provisions within the EU ETS must ensure that the top performing 10% of installations, within those sectors at risk, receive free allowances to cover actual production levels
- Mechanisms to reduce surplus allowances should only be introduced in conjunction with reform to carbon leakage provisions
- Greater support is required for decarbonisation of 'hard to treat' EII sectors. The EU ETS alone will not deliver the investment, innovation and emissions reductions being called for
- Governments must create a more supportive regulatory environment, understanding the cumulative costs and burdens placed on industry from energy, environment and climate change regulation in the round

<sup>7</sup> ECA - Enhance Capital Allowances, EPR - Environmental Permitting Regulations, CCA – Climate Change Agreements, CRC – CRC Energy Efficiency Scheme

<sup>8</sup> EEF (2014): The Future of the EU Emissions Trading System

## RECOMMENDATIONS

The government is to be applauded on the action it has already taken to minimise the impact of power sector decarbonisation on consumer energy bills and on the approach it has taken to tackling the decarbonisation of EIs through the 2050 low carbon roadmaps. It is vital this positive approach and momentum is continued after the next election. In advance of next May and the finalisation of party manifestos EEF is calling for three broad commitments in support of manufacturers:

### 1. Completion and of the EI compensation package and long term commitment

Analysis conducted on behalf of BIS in 2012 indicated that without action the impact of climate change policy on electricity bills for EIs in the UK would be significantly higher than elsewhere in the EU at an estimated £37/MWh compared to £13/MWh in Germany, £17/MWh in Italy and figures close to zero in the US. BIS has estimated that for eligible companies, the proposed UK compensation package should reduce this £37/MWh to around £11/MWh comparing favourably with elsewhere in the EU. The package represents a significant step forward for UK EIs and is greatly appreciated; however there remains two key commitments that industry would like to see to complete the package;

- There remains an element of uncertainty surrounding the implementation of the package in the event of a change of government and about the longevity of the scheme beyond 2019/20. We seek cross-party support for the continuation of the full package to 2020 and beyond.
- Compensation for the costs of renewables support is not due to start until April 2016. We believe the scheme can be designed and approved under EU state aid rules within the next 12 months and should be introduced at the nearest available date after this to ensure EIs are not exposed to these costs any longer than strictly necessary.

### 2. A fresh approach to industrial energy efficiency and decarbonisation, drawing on the findings of the industrial 2050 low carbon roadmaps

A lack of confidence exists in the ability of the current array of industrial energy efficiency schemes to continue to deliver the required level of energy efficiency improvements in the coming years. For many EI sectors that produce greenhouse gas emissions as a result of chemical reactions as well as energy consumption, the solutions are often not yet available. They will require significant development and vast sums of investment from both industry and government to achieve. Even where options are available to increase energy efficiency, those taken in the future are likely to become more expensive, or have a smaller impact, as the cheaper and more effective options are progressively deployed. Government policy must reflect these difficulties and develop solutions that unlock the remaining potential within industry in a manner that does not simply rely on increasing energy and regulatory costs. A future approach to industrial energy efficiency should include:

- A comprehensive EI decarbonisation strategy drawing on the findings and conclusions of the 2050 low carbon roadmaps
- The CRC effectiveness review and the CCA target review in 2016 provide an opportunity to review existing schemes in the round and assess their potential to deliver increasingly expensive efficiency measures

- A greater focus on supporting low-carbon innovation in the manufacturing sector as funding and attention is currently too heavily focussed on power producers
- EU ETS reforms that, as detailed in EEF's recent paper, go beyond tackling the surplus in allowances and low carbon price to address industry concerns about increasing costs and the potential for carbon leakage

### 3. Review and reform of the costs to energy consumers of decarbonising the power grid

Government has made considerable progress with this already with the flattening Carbon Price Support levels and moving to competitive allocation of Contracts for Difference (CfDs) among 'established' low carbon technologies and offshore wind projects. However more can be done. Of some concern is the current hybrid approach to funding low-carbon electricity generation which sees consumers pay for a carbon price in order to establish a market based approach to low carbon generation investment but then prevents the operation of the market by the introduction of renewables targets and various support mechanisms.

Within the UK's system of Contracts for Difference low carbon generators are guaranteed a fixed price/MWh for a fixed period; it is of little concern to them what proportion of that fixed price comes through the wholesale price (inflated by a carbon price) or consumer levy, in short the carbon price is not acting as a driver for low carbon investment, this job is solely done by

renewables targets and government support mechanisms. In these circumstances, the carbon price simply means energy consumers ends up paying more for the same level of low carbon investment. EEF estimates that the Carbon Price Floor will cost consumers an additional £23billion<sup>9</sup> from 2014/15 to 2019/20 for no additional benefit in terms of emissions reduction or low carbon generation investment.

A future approach to power sector decarbonisation should include the following measures:

- The carbon price floor should be scrapped as soon as fiscally possible, it should not allowed to resume its planned trajectory post 2019/20
- Future emissions linked taxation should be assessed against the criteria of achieving emissions reduction at an EU or global level. There is no benefit to reducing emissions at a UK level if it is offset by increases in emissions elsewhere in the EU as a result of the single cap within the EU ETS. Carbon taxation must result in a net reduction in emissions, if it fails in this aim it simply becomes a means of raising revenue
- When possible, future taxation aimed at reducing emissions should aim to be revenue neutral
- It is vital that the move towards technology neutral allocation of CfDs is maintained and realised as soon as practically possible

---

<sup>9</sup> EEF (2014) The Future of the EU Emissions Trading Scheme pp13

# Energy Policy for Manufacturers: an Agenda for Government



## Make UK

Make UK champions British manufacturing. We are a powerful voice at local, national and international level for small and medium sized businesses and corporates in the manufacturing and engineering sectors.

We're determined to create the most supportive environment for UK manufacturing growth and success, and we present the issues that are most important to our members, working hard to ensure UK Manufacturing remains in the government and media spotlight.

Together, we build a platform for the evolution of UK manufacturing.