



**Materials  
Processing  
Institute**

# **INDUSTRIAL STRATEGY: POLICY PRIORITIES FOR SUPPORTING PRODUCTIVITY AND RESPONDING TO BREXIT**

A speech delivered at the Westminster Business Forum Keynote Seminar:  
Supporting Innovation in UK Industry – Policy priorities for UK  
manufacturing - investment, competitiveness and innovation

21 June 2018



## Introduction

I wish to consider two factors that will significantly influence industrial competitiveness post-Brexit: energy and productivity.

By way of introduction, I lead the Materials Processing Institute, which is a private sector research and innovation organisation, working with industry in advanced materials, low carbon energy and the circular economy. I am also the innovation lead for the UK Metals Council and policy chair for innovation at the Federation of Small Businesses.

## Energy Policy

The bedrock of industrial strategy is an energy policy that supports international competitiveness. Forecasts of energy pricing drive decisions on future investment and the relative competitiveness of energy costs between nations can determine the location of new factories. The difference of a few percentage points in energy prices can tip the balance between profit to loss for energy intensive users.

Fundamental economic competitiveness will become far more important as the UK seeks to trade outside the EU. A level playing field in energy is crucial, but currently energy intensive users in the UK typically pay £15 per Mwh more for electricity than their competitors in France and Germany. This could increase by a further £5 per MWh. This is partly due to higher wholesale cost of energy in Britain and partly due to higher taxes, but mostly it is about higher transmission costs. In other countries, industry receives a rebate, to recognise the wider economic and social benefits of employment. This does result in relatively higher domestic energy bills, the primary reason cited as to why such a policy is politically unacceptable in the UK. To put it succinctly, the UK prioritises giving people lower energy bills, whereas France and Germany prioritise highly paid jobs.

If Britain is to have internationally competitive industry, then we need a proper debate about how an industrial strategy prioritises a level playing field for British manufacturers against EU competitors, let alone America and China, who currently enjoy a significant competitive advantage.

Of course, we must acknowledge government's responsibility to ensure Britain meets carbon and climate change commitments. It is self defeating, afterall, to have a thriving industrial sector, if our children live in a world facing climate chaos.

Therefore, competitive energy must also be low carbon, and a potential solution exists in the transition from an oil-based to a hydrogen-based economy.

The Materials Processing Institute is working with industrial companies and public bodies in this field, but recent foreign government-funded projects in countries such as Austria, Germany, Japan and Sweden, risk leaving the UK behind. I am pleased to say that I have met and continue to meet with Claire Perry the Energy minister to discuss this and sense an openness in government to accelerate UK innovation here.

## Productivity

If energy policy is about setting the foundations for business, productivity ensures their survival.

The relatively poor performance of the UK in this area can be seen in the headline figures where record levels of employment sit alongside stagnating wages. This is also an issue of regional disparity. With the UK having both London as the wealthiest region in Northern Europe and 9 out of ten of the poorest regions<sup>1</sup>.

Bank of England Chief Economist Andy Haldane has noted that regions do have high performing firms in terms of productivity, but there is a long tail of low productive firms.

A careful approach to tackling productivity on a regional basis is required. For instance, in the area of services, a significant factor in productivity relates to how much a client is prepared to pay.

Plumbing services in London, for instance, are considerably more expensive than for my home in North East England. There is a danger here of characterising firms as low productivity, simply because they lack access to a wealthy client base.

This is just like the problems that governments have assessing key infrastructure projects where traditional cost-benefit analysis assigns greater value to yet more transport initiatives in the capital whilst under-assessing the long-term opportunities and necessity to better link up the North's great cities, for example.

Industry specific measures are required, that acknowledge the particular markets, operations and products of a firm.

Government can support companies to invest in innovation and develop the leadership skills to drive productivity in their businesses. For example, initiatives such as Sir Charlie Mayfield's Be The Business, which is led by industry and aims to support the development of productivity leadership skills in small businesses.

We can also do more around innovation. Particularly in removing some perverse incentives around certain grant schemes that require a commitment to create more jobs. Such schemes can lock out productivity improving technologies, and instead encourage low productivity growth. Currently they incentivise low productivity job creation, over high productivity wealth creation.

There is an opportunity for government to address this issue as an anticipated new 'Shared prosperity' fund is introduced to replace the previous EU regional development funds on exiting the EU.

## Recommendations

### 1 ENERGY

The UK requires an energy strategy that delivers reliable, competitively priced, low carbon energy to industry. Investment by government in new technologies to enable the hydrogen economy, could deliver this result.

### 2 PRODUCTIVITY

The requirement to introduce a new mechanism for regional support on exiting the EU presents an opportunity to move from interventions that disincentive productivity to interventions that drive productivity growth.

Thank you to the Westminster Business Forum for the invitation to speak this morning and I look forward to the discussion.

<sup>1</sup> [http://inequalitybriefing.org/graphics/briefing\\_43\\_UK\\_regions\\_poorest\\_North\\_Europe.pdf](http://inequalitybriefing.org/graphics/briefing_43_UK_regions_poorest_North_Europe.pdf)

## INDUSTRIAL STRATEGY: POLICY PRIORITIES FOR SUPPORTING PRODUCTIVITY AND RESPONDING TO BREXIT



**Chris McDonald** is the Chief Executive Officer of the Materials Processing Institute. The Institute carries out industrial research and innovation in advanced materials, low carbon energy and the circular economy. Chris's background is in industrial research and manufacturing, where he has worked internationally. He led the divestment and return to independent, not-for-profit ownership of the Institute in 2014, the year the organisation celebrated its 70th anniversary.

In addition to leading the Institute, Chris provides expert consultancy support to companies, Governments and public bodies, in technology strategy and the technical due diligence aspects of mergers and acquisitions. He is prominent in the development of public policy, around innovation, steel and SMEs, where he works to support growth and inward investment. He is the policy chair for Innovation and Enterprise for the Federation of Small Businesses, a member of the CBI Regional Council for the North East and is the Innovation Lead for the UK Metals Council. Chris is also a member of the Steel Advisory Board for UK Steel (EEF).

A graduate of Cambridge University, Chris is a Fellow the Institute of Chemical Engineers and of the Institute of Materials, Minerals and Mining. He sits on industrial advisory boards at a number of universities, including Oxford and Sheffield.

He is often called to commentate in the media on innovation leadership and the steel industry.

**Chris McDonald**  
Chief Executive Officer  
Materials Processing Institute

“Chris provides expert consultancy support to companies, Governments and public bodies in materials, technology and innovation strategy”



## Materials Processing Institute

**The Materials Processing Institute is an independent, open access and not-for-profit technology and innovation centre working with industry, government and academia worldwide. Support ranges from small scale, site based investigations, through to long term collaborative research programmes.**

The Materials Processing Institute is expert in advanced materials, low carbon energy and the circular economy, specialising in challenging processes, particularly those involving high specification materials, high temperatures and difficult operating conditions.

The Institute has over 70 years' experience as a leading UK technology provider. Extensive materials processing knowledge is supported by state-of-the-art facilities with a broad range of equipment, from laboratories through to demonstration, scale-up and production plant.

Scientists and engineers work with industry and apply their expertise to develop and implement robust solutions to research and development and improvements for products and processes.

**Expertise is spread across a wide range of disciplines, including:**

- > Materials Characterisation, Research and Development
- > Simulation and Design
- > Monitoring, Measurement and Control in Hostile Environments
- > Process Development and Upscaling
- > Specialist Melting and Steel / Alloy Production
- > Engineering / Asset Management
- > Materials Handling
- > Minerals and Ores

**Research and project management teams deliver support across a wide range of industrial and manufacturing sectors including:**

- > Metals and Metals Manufacture
- > Chemicals and Process
- > Nuclear
- > Oil & Gas
- > Energy
- > Aerospace and Defence
- > Mining and Quarrying





**Materials  
Processing  
Institute**

---

Materials Processing Institute  
Eston Road  
Middlesbrough  
TS6 6US  
United Kingdom

+44 (0)1642 382000  
[enquiries@mpiuk.com](mailto:enquiries@mpiuk.com)  
[www.mpiuk.com](http://www.mpiuk.com)

