

Sustainable Manufacturing Inquiry: Call for Evidence

Introduction

Since the beginning of the year, the manufacturing sector has played a crucial role in the UK's response to the COVID-19 pandemic. Firms have repurposed production and reorganised their businesses to respond to unprecedented new demands, in particular for medical supplies and Personal Protective Equipment. In spite of this response, the sector is likely to be amongst the worst affected by the current recession, which appears to be deeper than either our G7 or EU peers.

The current crisis also offers an opportunity to reflect on the resilience of the manufacturing sector and formulate a roadmap for how it can build back better and stronger. The manufacturing commission's forthcoming inquiry seeks to determine **how the sector can grow to become more resilient, sustainable, and productive, whilst remaining on track to achieve net-zero carbon emissions by 2050.**

The aim of this inquiry, is to answer this question and by doing so develop a comprehensive set of recommendations on the future of the manufacturing sector for policy makers and businesses. This will be particularly relevant as the UK prepares to host the COP26 Climate Change Conference next year.

Inquiry co-sponsors

 Enginuity ERA
FOUNDATION CATAPULT
High Value Manufacturing

Instructions

The Manufacturing Commission will gather evidence through a series of online roundtables, 1-2-1 interviews with expert stakeholders, and issuing this call for evidence. We have included a series of questions below, which relate to the key topics that we wish to explore. We appreciate that you may opt to respond only to the questions that fall within your area of expertise.

Please also feel free to include wider insights into this topic area or submit papers, data, or reports that you or your organisation has completed. Submissions of evidence will not be published or shared with third parties. We will publish the names of organisations who have responded to this call for evidence within the final report, unless you inform us not to.

The deadline for submission of evidence is Friday 5th February 2021. Evidence can be submitted to robert.allen@policyconnect.org.uk For more information about the Commission or the inquiry visit <https://www.policyconnect.org.uk/apmg/manufacturing-commission> or contact Rob Allen on 07858 253646.

Research questions

1. Improving resilience of the manufacturing sector to external shocks, such as the 2020 Coronavirus Pandemic

- a) Parts of the sector demonstrated a high level of resilience and adaptability during the pandemic. What are the key attributes of these successes?
- b) What interventions are required to enable these successes (e.g. collaboration, onshoring, supply chain resilience, repurposing, etc.) to translate into everyday practice?
- c) What impact has the pandemic had on R&D and innovation?
- d) What are the weaknesses that the disruption in 2020 has exposed within the sector?
- e) What principles should the sector adopt in order to increase its resilience to external shocks in future (e.g. implications of Brexit, a financial crisis, the climate crisis, or 'black swan' events)?
- f) How can developments in technology (e.g. automation, real-time information, and communications) improve the resilience of the sector in future?
- g) What are the benefits associated with re-shoring production? What should be prioritised when determining industry sectors or product types to re-shore? How can re-shoring build resilience in jobs and supply chains? Are there intangible aspects to re-shoring that should also be considered?
- h) How did the sector's ability to operate throughout 2020 compare with its overseas peers?

2. Skills for sustainable manufacturing

- a) Which skills areas should be developed for the UK to achieve its goal of net-zero carbon emissions by 2050 and to make the UK competitive in the low-carbon global economy of the future? What needs to be done to develop the skills required to meet these goals?
- b) Which skills areas should be developed in order to produce the technologies that will be needed to achieve net-zero carbon emissions by 2050? How can we close any skills gaps that may exist?
- c) How can Government, industry, and academia work together to ensure that the manufacturing sector is equipped with the skills required to compete internationally?
- d) Which sub-sectors and businesses will be winners and losers as part of a Green New Deal? How can we ensure a just transition to green jobs and skills?
- e) How can apprenticeship standards be raised and linked to nationally recognised qualifications?
- f) Should apprenticeship schemes be conditioned within public procurement of national infrastructure projects?
- g) How can the Apprenticeship Levy be redesigned to maximise its impact?
- h) How do we ensure that people are not left behind within transitional industries and what opportunities are there for re-skilling and up-skilling?
- i) How do we better match people with career opportunities?
- j) What are the benefits of moving towards a more devolved and employer-led skills system?
- k) How can we ensure that incentives associated with responses to the Coronavirus Pandemic are not create unintended consequences and inadvertently increase carbon emissions?

3. Transitioning to a globally competitive, sustainable manufacturing sector

- a) How do we make the manufacturing process sustainable, without sacrificing productivity and global competitiveness?
- b) What challenges does the UK's net-zero target pose for the sector? Is the sector on-track to meet this target? What intervention from Government is required to achieve this?
- c) How can we turn the UK's ability to innovate in sustainable technology to strategic competitive advantage?
- d) How can decarbonisation, energy efficiency, pollution reduction, and resource conservation play a role in meeting the UK's net-zero target?
- e) What are the collateral benefits of adopting sustainable working practices (e.g. employee wellbeing, CSR, waste reduction etc.)?
- f) How do attitudes to sustainability differ within the sector, do you have any examples of businesses that lead in this area?
- g) How can we better embed circularity in the way that companies operate (e.g. promoting reuse, remanufacturing and recycling etc.)?
- h) How can executives and managers be encouraged to put sustainability at the heart of the businesses and what are the benefits of doing this?
- i) How do the UK's overseas competitors promote sustainability in manufacturing? Are there any stand-out examples?

4. What does the manufacturing sector need to build back better?

- a) What help will the sector need from Government to build back better (e.g. investment, tax incentives, infrastructure, public procurement, national standards etc.)?
- b) How can digitalisation and the introduction of 5G networks accelerate recovery?
- c) What role will innovative technologies such as Internet of Things, Carbon Capture and Storage, Industrial Symbiosis and others play?
- d) How can businesses be encouraged to make energy efficiency and resource conservation a priority when faced with competing demands?
- e) How will communities be shaped by this transition to sustainable manufacturing (e.g. influence of remote working, off-site manufacturing, the future of the high street etc.)?

About the Manufacturing Commission

The Manufacturing Commission is the research arm of the All-Party Parliamentary Manufacturing Group. It comprises leading figures from across the manufacturing sector and carries out in-depth research into manufacturing policy. The Commission is Chaired by Lord Bilimoria CBE DL, it is cross-party and cross-sectoral, and makes recommendations to Government and industry in order to instigate positive change in the UK manufacturing sector.

The following personnel have kindly agreed to make up the Manufacturing Commission for this inquiry: Lord Bilimoria (Chair), Jack Dromey MP (vice-Chair), Mark Pawsey MP (vice-Chair), Sarah Olney MP (vice-Chair), Professor John Latham (vice-Chair), Rosa Wilkinson (HVM Catapult), Keith Robson (ERA Foundation), Jacqueline Hall (Enginuity), Verity Davidge (Make UK), Professor Steve Evans (IET), Professor Tim Minshall (IfM), Paul Everitt (ADS), Margot James (Warwick Manufacturing Group), Steve Turner (Unite), Beverley Neilsen (Birmingham City University), Lynn Tomkins (Skills 4), and Professor David Seall.