

23 February 2012
For immediate release

Progressive future for UK manufacturing says new report

Future trends, challenges and opportunities for UK manufacturing have been identified in a new study by Cambridge Institute for Manufacturing (IfM). The report was commissioned by the Technology Strategy Board, the nation's innovation agency, to examine the global manufacturing environment and map out the future of high value manufacturing in the UK over the next fifteen to twenty years.

The IfM study was announced at the Government's Growth Summit in Bristol on 23 February. It will be used to inform public policies, research strategies and investment programmes, particularly in the high value manufacturing Catapult centre, opened in October 2011.

The report identified important trends influencing the changing nature of manufacturing, whilst considering the greatest challenges and opportunities manufacturing firms are likely to face – captured in five strategic themes.

The five strategic themes identified were:

- 1. Resource efficiency**
Securing UK manufacturing technologies against scarcity of energy and other resources.
- 2. Manufacturing systems**
Increasing the global competitiveness of UK manufacturing technologies by creating more efficient and effective manufacturing systems.
- 3. Materials integration**
Creating innovative products through the integration of new materials, coatings and electronics with new manufacturing technologies.
- 4. Manufacturing processes**
Developing new, agile, more cost-effective manufacturing processes.
- 5. Business models**
Building new business models to realise superior value systems.

The report also identified the most promising research and development innovation opportunities in the future. A selection of these technologies (processes, products and services) includes: additive manufacturing, robotics and automation, micro and nano-manufacturing processes, low carbon vehicles, sensor technologies and energy storage (hydrogen fuel cells).

"Using tried and tested Roadmapping techniques, coupled with a highly structured consultation process, this report reflects the views of a broad cross-section of senior industrialists, academics and institutions. Their collective expertise provides an excellent foundation on which to build robust and focussed policies to support our vital manufacturing industries." **Professor Sir Mike Gregory, Head of the University of Cambridge Institute for Manufacturing.**

"The UK has a well-deserved international reputation for the quality of its science and engineering research. However, the pathway to impact from excellent research can be convoluted. This report highlights a number of areas of clear national advantage, where the prospects for successful innovative outcomes are strong. The strategic focus described within this report provides an opportunity to build and sustain manufacturing competitiveness over the long term."
Mark Claydon-Smith, EPSRC Lead, Manufacturing the Future

The study has been developed using an evidence-based approach, based on consultations with industry, academia and government. The approach is fully traceable, allowing findings to be integrated and updated to take account of evolving circumstances.

Electronic copies of the summary report are available from <http://www.ifm.eng.cam.ac.uk/free/>

Notes for Editors

For further information please contact:

Jo Riches

PR and Communications

Institute for Manufacturing

M: 07854 210837

Email: jr572@cam.ac.uk

The Institute for Manufacturing (IfM)

The University of Cambridge's Institute for Manufacturing (IfM) is a division of the Department of Engineering. The IfM brings together expertise in management, economics and technology to address the full spectrum of industrial issues. Its activities integrate research and education with practical application in companies, providing a unique environment for the creation of new ideas and approaches to modern industrial practice. The IfM disseminates its research and education outputs through the University-owned company IfM Education and Consultancy Services Limited which works closely with industry and governments, at a regional, national and international level, providing strategic, technical and operational expertise to help companies to grow and to become more competitive.

Technology Strategy Board

The Technology Strategy Board is the UK's innovation agency; its goal is to accelerate economic growth by stimulating and supporting business-led innovation. Sponsored by the Department for Business, Innovation and Skills (BIS), the Technology Strategy Board brings together business, research and the public sector, supporting and accelerating the development of innovative products and services to meet market needs, tackle major societal challenges and help build the future economy. For more information please visit: www.innovateuk.org

Catapult Centres

Catapults are centres of excellence that bridge the gap between business, academia, research and government. They are a powerful new element in the UK economy, helping businesses develop relevant and exciting ideas in receptive and invigorating environments.