

Roundtable summary: Industrial strategy

Executive Summary

The industrial strategy is a critical opportunity for the government to set out a strategic vision for the UK's economy, to help businesses make long term plans with confidence, and to coordinate the various government departments.

It also presents an opportunity to fill the 'vision gap' for the chemicals sector – which last had a government strategy in 1999.

To be a success, the strategy will need to address the UK's high energy costs and workforce challenges. The government will also need to set the right incentives to encourage growth in green industries and technologies, and intervene to make sure that the UK has the right infrastructure in place to support innovation.

The Institution of Chemical Engineers (IChemE) calls on the UK Government to:

- develop a National Engineering and Technology Workforce Strategy to support the delivery of the industrial strategy
- address the 'vision gap' for the chemicals sector by ensuring that this industry is featured prominently in the industrial strategy
- publicly recognise the pivotal role of chemical and process engineers, and chemical and process engineering in achieving a sustainable world and in the transition towards this;
- designate chemical and process engineering as subjects of national strategic importance, alongside explicit references to chemical and process engineering in relevant discussions, documents, and legislation
- prioritise chemical and process engineering education and training at all levels – supporting significant expansions in technical and apprenticeship, undergraduate and postgraduate, and post-doctoral routes as well as reinstatement of 'National Engineering Scholarships', designed to encourage and enable young people from currently under-represented groups

Background

The UK Government has set growth as its most important mission, and in October 2024, it published out its plans to achieve this in a draft industrial strategy. Alongside promoting growth, the strategy also seeks to “support net zero, regional growth, and economic security and resilience.”

With the final strategy expected in a matter of weeks, IChemE convened a roundtable at this year's CHEMUK, chaired by IChemE Deputy President Professor Raffaella Ocone, to discuss the strategy and what is needed to make it a success. This document provides an anonymised write-up of key themes from this discussion.

The foundations for success

The panel felt that a successful industrial strategy would require a number of fundamentals to be in place. Firstly, it needed to take action to address the UK's uncompetitive energy costs. Secondly, it needed to ensure that there was a sufficiently large and skilled workforce to deliver the strategy (particularly chemical engineers and engineers more generally). Thirdly, it needed to set out a strategic vision for the chemicals sector in the UK that industry could align behind - the last Government chemicals strategy was in 1999. Fourthly, it will require effective government intervention to set up the right market incentives to allow businesses to see the opportunity for long term profits in industries that support net zero. Fifthly, it will require setting up the right infrastructure to support innovation, and to ensure that people take promising new ideas to scale in the UK instead of going abroad.

Supporting innovation

Participants agreed that the UK was strong at developing new ideas, but less good at getting them across the 'valley of death' and taking them to market. Providing better access to scale-up facilities would help companies make the jump from research to commercialisation more easily. This could include providing additional funding support to make such facilities cheaper to access, or supporting the development of new scale-up facilities in parts of the country currently where they are currently lacking. The government was also seen to have a key role in promoting collaboration between industry and academia (e.g. supporting exchanges and placements), which is crucial to driving innovation.

Market interventions

It was agreed that the industrial strategy is a critical opportunity for the Government to create the right market interventions to drive growth and net zero, with tools such as contracts-for-difference (CfDs), emissions trading schemes, and green finance seen as essential for crowding in private investment and reducing the cost of industrial decarbonisation.

It was felt that if the government uses the industrial strategy to give a clear signal about where it wants the economy to go – and if this is followed through consistently - businesses will respond in turn. For instance, the landfill tax escalator massively reduced landfill waste from 20 million tons in 2000, due to the clear long-term incentives set out by the government.

The need to prioritise sustainability

Participants felt that for the industrial strategy to achieve its net zero aspirations, sustainability will need to run through the entire document. Without meaningful and consistent follow-through, the aspirations will remain unfulfilled. This will have to be seen in the sector-specific and regional plans being developed to drive forwards the strategy, as well as the overall national document.

While the government has a key role to play in promoting sustainability, panellists also felt there was a broader cultural challenge that had to be addressed, and that there is a critical role for individuals and employers, and organisations like IChemE in embedding sustainability into education and professional training. It was noted that there was a hugely successful culture change around safety in recent years in the process safety field, and this should give us hope for seeing sustainability being similarly embedded.

Follow-through and consistency

It was noted that the UK has seen considerable political turbulence in recent years, and this has meant that policymaking has not been consistent or long term. This is the opposite of the clear and predictable long-term direction of policy travel that businesses like to work with. The industrial strategy was seen as having a critical role to play in setting out a long-term vision for the country and delivering certainty and stability.

Conclusions and recommendations

The industrial strategy is a critical opportunity for the government to set out a strategic vision for the UK's economy, to help businesses make long term plans with confidence, and to coordinate the various government departments.

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About IChemE

The Institution of Chemical Engineers (IChemE) is the qualifying body and learned society for chemical, biochemical, and process engineers in the UK and worldwide, with over 32,000 members. Our mission is to champion the input of chemical engineers to create a sustainable future. Find out more about IChemE and our strategic vision of engineering a Sustainable World at icheme.org