



Regulatory Barriers for the Foundation Industries

FIVE commissioned AMION and CIVIKAS to undertake a research project into the regulatory barriers to innovation within the foundation industries. This will support FIVE's future activities and will provide research-based insights to support future interventions or activities.

This document summarises the network engagement and research exercise looking at regulatory barriers to innovation for the foundation industries.

AMION
CONSULTING

Civikas.



Regulatory barriers

Regulatory frameworks are pivotal in shaping the Foundation Industries landscape. While they are essential for environmental and public health protection, they must be balanced to avoid impeding investment, innovation, and competitiveness. Understanding the interplay between various regulatory drivers helps identify critical issues and opportunities.



Economic regulations

Economic regulations aim to stimulate competition and innovation by influencing market dynamics and pricing. Key issues identified include:

- **Market entry and compliance:** New businesses face substantial regulatory hurdles that can stifle innovation. Streamlining processes and supporting startups can aid market entry. Additionally, varying standards across markets create additional burdens, suggesting a need for cross-sector standardisation.
- **Pricing and incentives:** High costs and limited capital for SMEs hamper innovation. Directing government support to low-carbon products and creating market incentives are crucial. Regulatory impacts on demand and pricing, especially for waste-derived products, need addressing to foster recycling and innovation.
- **Access to capital and training:** SMEs often struggle with capital access and training not suitable for industry needs. Enhanced support structures and training aligned with industry demands are necessary to support innovation.



Industry Regulations

Industry regulations focus on environmental protection and public health, impacting innovation in the Foundation Industries. Key points include:

- **Environmental protection:** The high carbon emissions from these industries necessitate rapid transformation for sustainability. Inflexible regulatory frameworks can hinder technology rollouts, and inefficient recycling processes and costly licensing for material reuse pose significant challenges.
- **Planning and permitting:** Slow permitting processes and the need for specialist facilities can delay innovation. Effective coordination in planning and place-based regulations, especially for industrial clusters and carbon capture, is critical.
- **Health and safety:** Compliance with health and safety standards is vital. However, delays in consumer protection regulations can impact product innovation and market entry.





Institutional Regulations

Institutional regulations link legal frameworks to innovation. Key issues identified include:

- **Intellectual property:** Onerous IP agreements and lengthy negotiation processes between businesses and academia can obstruct collaboration. Streamlining IP arrangements and adopting standard contracts can facilitate partnerships and innovation.
- **R&D agreements:** Larger companies have a resource advantage in early-stage research, which can dissuade smaller firms from engaging in collaborative R&D. Reducing the complexity and time required for IP agreements can enhance participation.



Cross-Cutting Themes


A series of cross cutting regulatory themes have been identified which have an impact upon innovation:

- **Regulatory alignment:** Differences in regulations between the UK, EU, and other trading partners, such as the US Inflation Reduction Act and the forthcoming UK Carbon Border Adjustment Mechanism (CBAM), create competitive challenges. Harmonising regulations and addressing international discrepancies are vital.
- **Regulatory sandboxes:** Sandboxes provide controlled environments for developing new products, balancing innovation with safety. They can streamline testing and permitting processes but need to maintain high standards and regulatory flexibility.
- **Skills and training:** Addressing the skills gap and aligning training with industry needs is crucial. Investment in STEM education and training is necessary to support innovation and meet future industry demands.

Overall Conclusions

The impact of regulation on innovation varies by sector and company, highlighting the need for tailored approaches across the Foundation Industry sectors. The research has identified several key challenges including high costs, complex compliance requirements, and inconsistencies in environmental legislation, particularly around carbon emissions. Similarly, the research has also identified some legislation was not significant a concern (e.g. employment laws) but other areas like permitting delays, IP barriers, and rigid regulatory frameworks were flagged as obstacles to innovation. The research also explored several solutions (e.g. simplifying standards, improving funding access, expediting permitting processes, and creating regulatory sandboxes to foster innovation, advocacy networks). These are to be explored further in future work.

This work has been funded through the Regulatory Science and Innovation Network competition delivered by Innovate UK as part of UKRI.



Does this resonate with you? How can we take action to unlock innovation in the Foundation Industries and drive sustainable growth? We would love to hear from you. Please contact us:

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