

Industrial Innovation for Competitiveness

The key role innovation plays as far as the achievement of climate objectives is concerned is increasingly clear. Especially with the more urgent and ambitious goals set out in the Paris Agreement, there can be little doubt that both transformative and rapid systemic innovation is essential if the transition to a carbon-neutral economy is to be successfully achieved. In fact, twenty major world governments and a private sector counterpart, the Breakthrough Energy Coalition, announced "Mission Innovation" at the twenty-first session of the Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC) in December 2015.

From a European perspective, it is equally crucial to develop the policy framework that enables Europe to win the race to the top, and thereby demonstrate that climate leadership goes hand in hand with competitive advantage and success in the global new climate economy.

Indeed, European climate politics have been hindered by resistance from a range of energy-intensive industrial interests who argue that the European Union (EU) Emissions Trading System (ETS) is putting them at a competitive disadvantage on the global economic stage, and as a consequence it inhibits rather than encourages innovation. While competitiveness concerns are legitimate, criticisms focused on very specific short-term energy costs overlook both the broader and longer-term economic case famously set out by the Stern Report and further developed by the New Climate Economy initiative, as well as where strategic competitive advantage will lie in that transition for Europe.

It is important that the trench warfare that has developed around the EU ETS therefore diminishes, and attention focuses instead on a common agenda with innovation at its heart. The European Climate Foundation (ECF) provided thought leadership on the review of the ETS published by the European Commission in 2015 through studies and stakeholder engagement aimed at ensuring that the price signal improves in the period until 2030 and beyond. As part of these activities, the ECF has begun examining how the proposed ETS Innovation Fund, expanded to include industrial activities as well as renewable energies and carbon capture and storage (CCS), can be best designed and implemented. Even though the fund in itself may not be sufficient to have the scale of impact necessary across the industrial economy in Europe, if combined with other funds and approaches, and operated with the latest thinking on how best to enable innovation, it has much potential.

Against this background, in 2016 the ECF is supporting the development of new ideas and recommendations on the best ways to design and implement the Innovation Fund with companies from the key industrial sectors involved – and linking this with the latest results and plans from the ECF's Industrial Innovation for Competitiveness (i24c) initiative, a new research and engagement platform launched in 2015.

i24c aims to help solve the challenge of identifying and integrating solutions for industrial decarbonisation and competitiveness. Its agenda seeks to develop a deeper common understanding of new industrial economics and to provide clearer evidence for how industrial ecosystems can successfully innovate for competitive advantage. Ultimately, i24c will develop a strategy, pathway and activities agreed within a public policy framework that enables broad-based, systemic innovation, boldly tackles inconsistencies of policy or market operation and thereby helps to both guide the industrial economic opportunities and manage difficulties inherent in such a transition.



In co-developing its research with industrial and other stakeholders, and with support from the Organisation for Economic Co-Operation and Development (OECD), i24c relies on a High Level Group composed of senior industrial entrepreneurs, experienced policy makers, leading academics and representatives from civil society, including Máire Geoghegan-Quinn (former EU Commissioner for Research, Innovation and Science), Mikko Kosonen (President of SITRA), Bruno Lafont (Co-Chairman of LafargeHolcim Group), Pascal Lamy (former Director General of the World Trade Organization), Bernadette Ségol (former Secretary General of the European Trade Union Confederation), and Lord Adair Turner (Chairman of the Governing Body, Institute for New Economic Thinking).

Under their auspices, a series of studies were undertaken or commissioned in 2015 that demonstrate the centrality of innovation as the most important factor for competitiveness, either for the economy as a whole (by

ECF Chief Economist Thomas Fricke), or for key sectors and sub-sectors (by Vivid Economics and the Carbon Trust). Through work with the University of Westminster, i24c has also synthesised cutting-edge policy thinking and best practices on both industrial and innovation policies, and applied this integrated framework and paradigm to the current challenge.

i24c recently completed two additional studies that examine the impacts of innovation (technology, product, organisational and business model) on two key value chains of the economy: mobility and construction. These reports describe the new growth and value prospects that innovation provides to businesses and other stakeholders, the comparative advantage of European companies along with the potential disruptions (for example, sector consolidation, new players entering the market), and challenges to scaling innovations. Further studies are currently underway with eminent think tanks such as Bruegel and the Centre for European Policy Studies (CEPS), amongst others.

The Paris Agreement boosted global as well as European interest in new industrial strategies that harness the assets of their economies to compete in a transformed world. As a result, i24c will move to a more engaged and public set of activities in 2016, as ongoing research comes to fruition that can contribute to the EU's Energy Union and other strategic European agendas – through enabling smart, systemic, and challenge-led innovation.

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