

Towards Sustainable Industrial Competitiveness Policy

Issues paper to EU Ministers of Industry

Executive Summary

Client: Ministre de l'Economie, des PME, du
Commerce extérieur et des Technologies nouvelles
du Gouvernement Wallon

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Executive Summary

1.1 Introduction

1. This ‘Issues Paper’ has been prepared at the request of the Government of the Walloon Region in advance of the forthcoming Belgian Presidency of the Council of the European Union. It aims to provide background discussion of some key issues that may be pertinent in the context of forthcoming meetings of the EU's Ministers for Industry.
2. The Paper is set against the background of the Commission’s proposals for the Europe 2020 Strategy. Within the Strategy, the recent events of the economic and financial crisis – which saw industrial output fall by around one-fifth and employment in manufacturing decreased by around ten percent – are portrayed as a “*wake up call*” for the EU, while the EU is presented as being at a “moment of transformation”.
3. Beyond seeking to instil a sense of urgency for the development of policies necessary “to deliver smart, sustainable and inclusive growth”, the Strategy indicates that required actions – both by policy makers, the private sector and citizens – go beyond incremental adjustments and tinkering with conventional practices. Within this context the EC is preparing a Communication on Sustainable Industrial Policy to be issued in the autumn of this year.
4. Against this background, and with a new European Commission recently installed, expectations about the EU's ability to advance in the development and implementation of coherent and coordinated economic and competitiveness policies are high. Accordingly, while policy priorities over the recent past have largely been determined by the need to respond to the impact of the economic and financial crisis, it is now a good moment to take a ‘step back’ from immediate concerns in order to identify some of the key issues that will need to be addressed by a ‘modern’ and integrated industrial policy.
5. The articulation between sustainable development and industrial competitiveness is inevitably going to be among the central themes – and most likely the main overarching theme – for future industrial policy. It is for this reason that we have chosen the label of ‘*Sustainable Industrial Competitiveness Policy*’ as an indicator of a new forward-looking industrial policy.
6. This Issues paper consists of three parts that are closely interlinked. It starts with the presentation of a general framework for Sustainable Industrial Competitiveness

Policy (Part I), followed by two contributions where this framework is applied to specific domains: SMEs, Innovation and Growth (Part IIA) and Transformation and Resource-intensive Industries (Part IIB). This Executive Summary will present the highlights of each of these contributions.

1.2 General framework (Part I)

Context and background

1. The ability of emerging economies to position themselves as major competitors in so-called ‘high-tech’ sectors has demonstrated that the intrinsic technological level of a sector is not a shield against competition. In fact, the external competitiveness of EU industry has less to do with its relative position in sectors with different technology categorisations (i.e. low-, medium- or high-tech) and more to do with capabilities of EU enterprises across a range of sectors to *successfully apply technologies in innovate ways or to adapt technologies to specific market requirements* (i.e. product differentiation and specialisation).
2. Transformation processes linked to technology developments do not only involve high-tech manufacturing sectors but also involve *innovative applications of technology* in lower-tech sectors. Competitiveness may be more greatly enhanced by strategies (e.g. smart specialisation) that build upon existing assets (e.g. skills and expertise, available physical inputs, environmental conditions, market access conditions, etc) than jumping upon current technology ‘bandwagons’.
3. While tangible factors provide the bedrock for (external) competitiveness, increasingly the factors that underpin the ability of firms to differentiate themselves from their competitors are *intangible*. Factors such as quality, branding, customisation and provision of product-related services, can also be identified as crucial for enabling EU industries to innovate and to position themselves in ‘up-market’ and ‘high value-added’ product segments.
4. *Industrial sectors can no longer be treated as homogeneous, independent and national*. Value chains are increasingly complex and intertwined, cutting across traditional sector-based categories and geographical boundaries. This fact points to the increasing importance of networks of suppliers and innovation partners, of maintaining a diversified industrial base, and of access to specialised supporting competences.
5. As emerging economies, such as China, India or Brazil, increase their own technological capabilities, it may become far from evident to identify those industrial activities and market segments where they will become important competitors in the future. Moreover, as other ‘advanced’ economies struggle with low domestic growth and increased competition from emerging economies the pressure of competition in international markets, in particular in those ‘up-market’ and ‘high value-added’ product segments where EU industry is present, can be expected to increase. Accordingly, *the possibility of unforeseen and sudden shifts* in relative competitiveness may increase in the future.

Implications for industrial policy

6. *Industrial policy requires a finer level of resolution* than offered by traditional classifications of industrial (and service) sectors, which permits to look inside traditional notions of industrial sectors and to understand the drivers of competitiveness and their implications for different industrial activities. At the same time, a more holistic picture is needed that takes account of the wide ranging inter-linkages that influence industry performance and competitiveness, and accommodates the evaluation and integration of measures across the broad spectrum of policies that impact on industry.
7. It is perhaps time to draw a line through the normally used distinction between horizontal and sector-based (or sectoral) policy approaches. In designing and implementing Sustainable Industrial Competitiveness Policies, *attention should rather be paid to combining generic policies with targeted policies*, directed towards specific categories of firms or elements within value chains, or towards strengthening linkages and creating synergies within value chains (e.g. focusing on young, innovative companies or cluster-based policies).
8. Greater unpredictability combined with a faster speed of change means a more difficult and complicated environment for businesses – and policy-makers – to formulate strategies for developing and maintaining competitiveness. A sustainable industrial competitiveness policy should *increase the emphasis placed on anticipation of potential future developments* – be they derived from technological or other factors – and the nature of their possible impacts on international competitiveness.
9. The speed with which industries are able to respond to sudden changes in competition and drivers of competitiveness is likely to become increasingly important. This implies that policy frameworks need to support the *flexibility* of industry to react rapidly to sudden changes and to facilitate their implementation of transformation strategies.
10. Frequent changes in regulatory conditions exacerbate problems of uncertainty and unpredictability, which can delay decisions that may have important implications for competitiveness and slow down processes of industrial transformation. *Stability – or at least predictability – and transparency of regulatory conditions are important* for enterprises to develop a long-term view as the basis for business planning and investment decisions.
11. The increasing geographical complexity of industry value chains, the integration of markets, and the global nature of many of the most pressing policy challenges for industry can be observe in increasing policy ‘spill-over’ effects – both positive and negative – across regions and countries, across sectors and business activities, and across policy areas. This raises a central issue of how to effectively and efficiently ensure coherence, coordination and integration of policy approaches across different policy domains and governance levels and argues for establishing *multi-dimensional policy governance frameworks* for an EU-wide Sustainable Industrial Competitiveness Policy.

1.3 SMEs, Innovation and Growth (Part IIA)

Context and background

1. Small and medium sized enterprises (SMEs) represent the *overwhelming majority of European enterprises* (more than 95%). In the EU-27, they also account for more than two-thirds of the non-financial business economy workforce and for almost 60% of the non-financial business economy's value added. Therefore, any attempt towards Sustainable Industrial Competitiveness Policy is potentially doomed to fail if not aligned to the SME population.
2. It is important to recognise that SME innovation does not just concern 'high-tech' innovation but also encompasses production processes, business models and organisational design as well as technologies. Although much of innovation in SMEs is incremental and lacking long term strategic direction, a number of recent studies highlight the *significance of highly innovative, high-growth SMEs for economic growth and industrial transformation*.
3. For a Sustainable Industrial Competitiveness Policy to be effective – i.e. *supporting the transformation to a green(er), sustainable economy* – there is a need both for more young innovative companies able to develop new businesses up to a minimum critical mass (cumulative process) and for more innovative SMEs able to absorb new (sustainable) technologies and innovations.
4. *Specific constraints on SME innovation* can be identified, when it comes to using and exploiting innovations. The most commonly mentioned constraints are: limited access to finance for innovation; difficulties in appropriating the benefits from research and innovation; lack of innovation absorption capacity; regulatory and administrative burden; and lack of effective training and education programmes.
5. Furthermore, *particular constraints on the growth of innovative SMEs* can be mentioned. Indeed, EU-based SMEs seem to suffer from a less dynamic growth profile than observed elsewhere, notably in the US. The reasons that may explain this lack of dynamism are many-fold, but two explanatory factors are often mentioned: market fragmentation and market access barriers; and financial market functioning, notably for venture capital.
6. The extent of adjustments required to face today's external challenges has led some commentators to argue that a fundamental '*paradigm shift*' is needed in the way in which businesses – and policy-makers – address competitiveness, economic growth and job creation, most notably in relation to moving to a sustainable ('green') long term growth path. SMEs may have greater flexibility to adapt than larger firms that are 'locked-in' to existing business practices and production processes. Overall, from a policy perspective, the aim would be to encourage existing firms to undertake the necessary adjustments to shift to a new sustainable growth path.

Implications for industrial policy

7. As a starting point for a policy response, the *Small Business Act* (including its effective implementation by the Member States) streamlines the large spectrum of SME-relevant policies. It has the potential to make an important contribution to

improving the growth conditions of European SMEs. However, there is a need to reinforce the ‘innovation dimension’ in the implementation of the Small Business Act, or to launch a specific ‘SBA for Innovation’. Moreover, it will be necessary to pay particular attention to the articulation between the SBA (and its implementation) and the upcoming, 2010 ‘Innovation Act’.

8. Paradoxically, globalisation increases the importance of local situations and local anchorage. *Innovative clusters* are a response: they facilitate the transfer of technology within and towards the SME population and they contribute to the internationalisation of SMEs by linking them more effectively to large companies or other international partners. At the same time, the integration of dynamic and innovative SMEs into clusters is particularly important for helping clusters achieve high levels of excellence and innovation. It is therefore important to foster the development of internationally competitive and innovative clusters that better integrate SMEs into their strategy and activities.
9. Generic policies towards SMEs should be combined with more *targeted instruments towards sub-sets of the SME population*. Specific support towards ‘high-growth, high-innovative companies’, however, should go hand in hand with tailored measures towards ‘lower-tech SMEs’ to ensure full deployment of innovations among the industrial texture. As part of such targeted policies, it is of utmost importance to foster dialogue between policy-makers and the SME population, for instance through an exchange of good practices about the instruments to be used.
10. It is essential to address the limited *access to finance for SMEs*, especially in the light of the credit squeeze caused by the crisis. It is very important to keep working on the construction of a Single Market for risk capital. However, it is also desirable that other financial instruments are broadened (e.g. guarantee schemes), allowing to widen and expand the innovation trajectory of SMEs.
11. Policies supporting innovation and technological development have long been focusing on the supply side. But the trend towards more *demand-driven policy* tools is also important and should be reinforced, because it offers another important way of reducing risk for SMEs by stimulating and expanding aggregate demand for new products and services. From the public side, procurement markets offer important leverage effects. There is also a need to better connect and integrate demand-side instruments and supply-side instruments.
12. As part of a new framework for policies towards SMEs, innovation and growth, the *multi-level governance dimension* needs not be overlooked. This dimension entails two types of coherence: one the one hand, more ‘horizontal’ coherence (i.e. between policies, policy tools), on the other hand, more ‘vertical’ coherence (i.e. across governance levels).
13. To improve the multi-level governance of innovation support towards SMEs, *several aspects* need to be taken into account. It is important to expand the use and application of impact assessments in the Member States, including the assessment of interactions between policies and governance levels. Furthermore, it is essential to agree on joint and shared thematic reference frameworks and common goals. Finally, it is important to better align regional innovation strategies with research and innovation agendas set at EU level.

1.4 Transformation and the Resource-intensive Industries (Part IIB)

Context and background

1. Until recently, by implementing extensive restructuring, the EU's resource-intensive industries were largely able to respond to the various pressures they faced. They have *implemented extensive restructuring measures* and positioned themselves as reliable suppliers of high quality and specialised products to the most demanding client sectors.
2. The economic crisis resulted in *strong decreases in demand*, as downstream markets contracted rapidly and severely. Demand for intermediate goods such as wood, paper and paper products, chemicals, metals, and non-metallic mineral products were all hit as final demand fell.
3. When looking ahead, *growth in demand for the industry's products will come mostly from emerging markets*. Countries such as China and Brazil are boosting infrastructure investments, and such investments are now propelling China's economy. It will be crucial for the future growth prospects of the EU's resource-intensive industries to benefit from these developments, which will depend not only on cost-competitiveness but also on market access (e.g. tariffs, non-tariffs and other informal barriers).
4. *Exposure to global competition*, especially in price-sensitive segments, is increasing and sectors such as the glass and ceramics industry that were previously relatively sheltered are coming under growing global competition. Most of the EU's resource-intensive industries have already undertaken significant adjustments to respond to increasing global competition. This has involved improving production efficiency, with some inevitable closure of production sites and loss of employment.
5. Over the years, *developments in commodity and energy prices have been nothing short of a rollercoaster*, and the unpredictability of such prices is likely to remain or increase. Fluctuations can only be partially explained by supply and demand, and additional factors related to financial markets could play a role.
6. The issue of higher costs for commodities and energy is unlikely to disappear for the foreseeable future, either short-term or long-term. Of even greater concern, however, is the increasing evidence that various non-OECD countries have opted for some sort of *energy price subsidies*. Overall energy subsidies are estimated to be at \$ 557 billion in 2008, a considerable increase from the previous year (\$ 342 billion).
7. A particular challenge relates to *securing continued access to both energy and natural resources*. Access to supply becomes particularly critical when strong demand and concentrated supply give rise to shortages on international markets and strategic positioning (e.g. stockpiling), mostly by non-OECD countries. Even when such actions may be justifiable from a purely domestic perspective, the sheer weight of, for example, the Chinese economy makes the impact of such strategic stockpiling measures on global markets for energy and commodities enormous.

8. Within the Community, considerations and concerns about the competitiveness of specific EU-industries tend to have been taken into account when drawing up energy- and environmental regulation. However, this tends to be done on an ad hoc basis and exemptions are often of a temporary nature, while underlying cost base differences are more of a structural nature. What is *lacking is a longer term policy framework* in which the future of the EU's resource-intensive industry can develop and transform.
9. Faced by higher costs in the EU – e.g. for energy or as a result of environmental compliance – the ability of EU producers to pass these on to customers through higher prices will be constrained by the nature of international markets (i.e. global market price setting), particularly for standard, homogenous products. Higher prices imposed on EU-based producers will *reduce competitiveness* both in domestic and export markets. In the absence of offsetting import tariffs or compensating measures for exports, this can be expected to draw in imports and reduce exports, with a negative impact on the EU's external trade balance.
10. The prospect of a weak future performance of the EU's resource-based industries has, in turn, *serious implications for other downstream EU industries* in the value chain. On the one hand, these downstream industries may become increasingly reliant on imported inputs from non-EU suppliers, with possible additional risks related to security of supply. Further, weakening the interaction between EU resource-based industries and other parts of EU industry may reduce inter-industry synergies (e.g. new product and materials development, and customisation) with negative implications for both parties.
11. Failure to address the challenge facing resource-intensive industries will not only have adverse effects on the industries themselves, but can also be expected to have *adverse global environmental impacts*: global energy-needs and negative environmental impacts may be increased by shifts from EU to non-EU based production.
12. Broadly three transformation strategies can be pursued by the EU-based resource-intensive industry.
 - a. *Process innovation and reducing resource-intensity*. Investing in technologies and production methods that reduce resources and energy-intensity are a key transformation strategy. In the energy-intensive basic material industries such as chemicals and steel, the potential for increasing energy productivity typically relates closely to core process technologies.
 - b. *Moving to 'up-market' segments*. EU industries have responded to globalisation pressures by specialising and differentiating their products, by moving into niche markets and by moving to 'up-market' segments. Increased differentiation and moving to higher value-added segments can however be difficult for parts of the resource-intensive industries, if they are unable to differentiate their products or compete on technological intensity. However, investment and

development in 'up-market' segments will reduce the industry's exposure to consequences of supply-side sensitivity.

- c. *Increase presence in growth markets and relocate to low-cost countries.* This strategy presumes both the capacity of EU firms to undertake such investments and the absence of foreign investments restrictions. It would also allow these EU companies to take advantage of the lower cost base in these markets. Despite clear advantages for industry, this strategy can hardly be called favourable from a European or global perspective.

13. Clearly, any choice between the above transformation strategies is not to be made for the resource-intensive industry as a whole. There is *no 'one size fits all'* and the ability to apply such strategies will vary depending on the sector and sub-sector, the location, size and strength of companies, etcetera.

Implications for industrial policy

14. The role for policy makers is to *provide the long-term framework conditions* – with appropriate incentives to facilitate transformation strategies that will contribute to a Sustainable Industrial Competitiveness Policy. Basically, four types of policy strands can thereto be distinguished: 1) Short-term mitigation policies; 2) Market regulation measures; 3) Coordination measures and action plans; 4) Capacity building and investment policies. Between these policy strands, competences between governance levels vary considerably.
15. *Short-term mitigation policies* allow to increase industry's flexibility to respond to temporary shocks and decrease the intensity of external shocks and alleviate or dampen adjustment pressure on the industry. Examples are the short time work arrangements and the automobile scrapping schemes that have recently been implemented in various Member States. Despite their short-term effectiveness, such measures alleviate adjustment pressure, and they are therefore unlikely to contribute to transformation from a longer term perspective.
16. *Market-regulation measures* (often at EU-level) are directed towards improving the energy efficiency and environmental impact of production processes. A generally regulatory approach is encapsulated in measures such as the Integrated Pollution Prevention and Control (IPPC) Directive and the Greenhouse Gas Emissions Trading System (EU-ETS). Other Community policies such as trade policy play a key role as well, especially when addressing the external competitiveness dimension.
17. *Coordination measures and action plans* are also important. An industry-policy dialogue is of utmost importance. Both industry and policy-makers have their own responsibilities, but transformation strategies and policy responses need to be aligned. The economic and financial crisis has also led to an increased importance of global governance. Particular attention is called for addressing the subsidisation of energy prices, which have perverse economic and environmental consequences. In this respect, the G20 can play a role as well.

18. *Capacity building and investment measures* aimed at ‘industry’ efforts to exploit new opportunities and respond in an active and positive way to threats created as a result of changing conditions. Investing in technology development and innovation is vital. Other supporting measures may include education and training policies and infrastructure investments, particularly in less developed Member States and regions. Cluster policies can be powerful as they are area-based and targeted. They have proven to be powerful complementary strategies, based on area-specific hubs of economic activity.

19. A key element of any new Sustainable Industrial Competitiveness Policy is that it needs to be developed and implemented through *multi-level governance*. Building a long-term and reliable framework for the EU's resource-intensive industries requires coordination not only between short-term mitigation measures and longer-term market regulation measures, but also with capacity building and investment programmes – which are mainly the competence of national and regional governments. The challenge for policy-makers will be to make further steps towards the development of such a framework, which will allow the EU's resource-intensive industry to transform and respond to its current and future challenges.