

Public EC consultation on Circular Economy

Turning into a Resource Efficient and Competitive Europe

Key Messages:

- The European chemical industry considers the concept of a circular economy as a useful approach to manage future scarcity of raw materials, but not an end in itself. The efficient use of resources and thereby avoiding production waste reduces costs in the chemical industry and, hence, improves its competitiveness.
- Transition to a circular economy will be an evolutionary process. To be sustainable in the long term, evolution must be market driven within a policy framework favouring innovative solutions and maintain competitiveness in a global market place. Subsidies and public funding should be limited to the pre-competitive phase and should not distort a level playing field.
- Enhancing the value of resources and prolonging their utility in the most efficient way needs to be assessed holistically across the entire value chain. Cefic supports a holistic approach with increased co-ordination of different EU policies, instead of attempts to separately optimise the regulation of functions which are, in reality, interrelated.
- Improving the quality, performance & availability of recovered raw materials is key to enabling them to compete effectively with materials from other sources. Unnecessary restrictions on the use of chemicals already managed safely in accordance with existing community legislation should be avoided.

General introduction:

- The European chemical industry supports the concept of a circular economy. It is good business practice to use resources efficiently, by minimising waste over the full life cycle or by re-using it as a resource – or in a broader sense – to look for renewable and alternative feedstocks, in order to reduce costs and to improve competitiveness.
- As the chemical sector supplies goods to almost all manufacturing sectors, its innovations and solutions have a remarkable impact on the whole industrial sector in Europe. The perspective when developing the circular economy should therefore be broad and cross-sectorial.
- The economy will gradually become more circular as and when circular value chains become more competitive. To support this process, the policy focus should be on innovations that reduce the cost of reusing, recycling and recovering raw materials, and which improve the longevity, durability and performance of products. It will be an evolutionary process, involving all players, in which practical solutions will survive if they bring benefits for consumers and are viable and profitable for businesses as well as being more sustainable.
- The Circular Economy comes with new challenges. The European chemical industry accepts these challenges because of a long history of investment and innovation to improve resource and energy efficiency along the whole value chain. Our sector has many practical examples of industrial symbiosis and vertical integration into clusters, towards zero waste initiatives and closed loop processes and of the development of innovative products and processes. It is a continuous process of investment and innovation that aims to deliver improved economic performance.

We still have a highly skilled workforce endeavouring to find solutions that not only improve resource efficiency but also enhance performance, productivity and competitiveness.

- These solutions are sustainable precisely because they enhance competitiveness. It is a simple economic truth that the private sector will/can only invest in activities that generate a reasonable return on that investment. Therefore the best way to stimulate investment in the circular economy will be to provide a policy framework that facilitates development of new markets. In this way, all industry sectors would be encouraged to contribute to circularity and sustainability.
- In order to mainstream industrial competitiveness, policymakers should seek to promote the circular economy by means which enhance competitiveness and avoid policies that would impose disproportionate regulatory or bureaucratic costs, or which would distort the market, thereby depressing demand and undermining competitiveness

The Questionnaire:

- Cefic has chosen not to answer the multiple choice questionnaire provided for this consultation. In practice, all and any of the measures envisaged could play a part in the development of a circular economy. However, they will have to be considered on their merits, on a case-by-case basis.
- That case-by-case analysis will need to identify the barriers to greater circularity and to see how they might be removed. This paper sets out our ideas as to how this should be approached.

Production phase:

(Questions 3.1 to 3.6)

- The EU chemical industry favours a market-based strategy to foster innovations and to steer resources to their most efficient use. Subsidies and public funding should therefore be limited to the pre-competitive phase and aim to promote innovation, research and development. Moreover, new businesses and business models must be able to survive independently in the long run.
- EU producers and products are competing in global markets. Measures to promote the circular economy should therefore seek to enhance the competitiveness of EU industry by adding value, reducing costs and promoting improved quality and performance.
- In this latter regard, legislative ‘minimum requirements’ and voluntary ‘standards’ (Question 3.1) could play a part in promoting a resource efficient and circular economy. As a general principle, these standards should focus on features that “add value” to consumers (e.g. durability, energy efficiency or affordability) and should aim to minimise the social and environmental impacts across the entire life cycle. The evaluation should not be limited to a specific phase of its life and/or limited set of criteria. In fact, it should fully consider resource savings resulting from the use of the product (e.g. use of plastic films to protect and prolong the freshness of foods).
- In the transition to a circular economy, companies are experimenting with new business models such as chemical leasing. This is a B2B model, in which a company no longer buys a substance but pays for the use of it. The substance is then returned to the producer to be prepared (e.g. cleaned, regenerated) for reuse. These business models will not work in every case, but in controlled supply chains, they may offer benefits for both the supplier and the customer in terms of efficiency and reduced costs. While they may remain ‘niche’ markets initially, policymakers need to consider how the current regulatory framework should be applied to best enable implementation of these models.

Consumption phase:

(Questions 4.1 to 4.3)

- Consumers will be central to the development of the circular economy. They ultimately determine which products are purchased, and regulators should not interfere with consumer preferences beyond the measures that are necessary for their protection. In the final analysis, regardless of how well designed a product is for resource efficiency and circularity, it will not contribute to any deployment of a circular economy if people don't buy it.
- The main considerations in any consumer purchase tend to be price and quality/performance. In certain circumstances consumers may factor other 'values' (e.g. the image value of a brand) into their purchasing decisions and be willing to pay more for a product that delivers on those values. However, in reality, there is little evidence so far to suggest that the mass of consumers, place significant 'value' on recyclability alone, or that they would be willing to pay more for a more recyclable product or a product with a higher recyclable content.
- Moreover, judging products in an end-of-life assessment only by their recyclability sets the wrong benchmark. Performance and durability of a product during its use phase will often outweigh the apparent resource efficiency gains of an alternative, inferior product even if the latter is more recyclable.
- Whilst more and better consumer information may help in this regard, the best way to promote the circular economy including reusable or recyclable products is to make them cost competitive and better at meeting consumer needs. In those circumstances, the market will deliver the desired outcome.

Waste & recycling phase:

- The Commission issued a public consultation upon its original Circular Economy proposal (since withdrawn) that concentrated extensively on the waste phase of product life (consumer waste). Now that the Circular Economy is being reconsidered, in a more holistic way, it is important to revisit and review how measures concerning the waste phase are best integrated into overall policy development.
- Waste can occur at any point along the value chain; and a key element of the circular economy programme will be to ensure that everyone in the chain has ready access to information upon how best to prevent waste. The value of a waste stream or material to recyclers, and others in the 'upstream' leg of the cycle will depend inter alia on its purity and the ease with which it can be converted into a saleable product. To that end Cefic calls for the setting up of systems for separating and segregating waste more effectively.
- Where substances and products move into and out of classification as waste this can make it harder to continue to extract value from the material in the most effective way. To improve resource efficiency, the definition of waste, particularly the interpretation of 'discard' should be re-visited to apply to "actual, intentional" cases of discarded material, rather than a very broad theoretical reading of the concept of "waste". Similarly, a rationalisation and clarification of other key concepts, e.g. 'by-product' and 'end-of-waste' would help companies by clarifying legal uncertainties that hinder the efficient use of resources.

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- Further, we believe that there should be an EU internal market for waste or materials and the rules for the cross-border shipments of waste need to be simplified. In this regard, Cefic supports a holistic approach with increased co-ordination of different EU policies, instead of attempts to separately optimise the regulation of functions which are, in reality, interrelated.
 - Retaining the maximum utility of materials in the value chain in the most efficient way, taking into account the entire life cycle of the product and the resources required to keep the material in circulation, has implications for the application of the waste hierarchy and cascading use. In cases where energy recovery or refining into transport fuels represents the best option for a waste stream, taking into account environmental and economic considerations, this should be encouraged as a valuable contribution to the community's energy strategy further diversifying the portfolio of energy sources.
 - Whatever shape the economy takes, linear or circular, we stay committed to ensuring that chemicals can be used safely along the whole value chain.
 - The EU has an extensive regulatory framework to ensure safe use of chemicals. The procedures under REACH and the CLP Regulation (and other Regulations like RoHS and WEEE) can accommodate the safe introduction of a circular economy within their remit to ensure a high level of protection. The circular economy does not require us to relax these standards, nor should it be used as an excuse to impose unnecessary restrictions on the safe use of chemicals. As a general rule, if the Regulations permit the use of a substance because it has been shown that it can be used safely, then there is no reason why it should not be recycled and could not be used again safely¹.
 - This issue is particularly relevant when considering substances whose marketing and/or use is restricted under a Regulation (REACH, RoHS, etc.) or with regard to substances of very high concern (SVHCs) under REACH. These substances can be used safely, but care is required to ensure that they are managed safely to the benefit of society. The industry already provides information to downstream users regarding the presence of SVHCs to enable people to use them safely². We acknowledge that recyclers, when seeking to meet their obligations under REACH, may not have easy access to this information. A pragmatic solution needs to be found in order to make this information available in a cost effective manner while protecting confidential business information (CBI).
 - A particular issue, in this regard, concerns legacy chemicals, i.e. substances or uses of substances that are banned, requiring an authorisation or subject to specific conditions but which might be present in recycled materials. The question is, whether to allow the continued presence of these substances in recycled materials, or alternatively, to exclude these materials from recycling and send them to waste. This question can only be answered on a case by case basis applying the 'safety first' principle. If it is shown that the recycled material can be reused safely, then a continued use may be appropriate. If the continued presence of the substance in the cycle risks harm to people or the environment, then exclusion of these materials from the cycle may be required.
 - Attention should be paid also to the potential 'legacy' implications for replacement parts (i.e. needed to extend life and ease reparability of products).
 - If legacy materials are excluded from recycling then they should be disposed of safely, and every option for disposal, including incineration, should be available as appropriate.

¹ Note, in particular, Art. 2 paragraph 7(d) of the REACH regulation.

² Via safety data sheets for substances and mixtures and for SVHC in articles, information is communicated according to Art. 33 of the REACH regulation.

- The main determinant of the marketability of secondary raw materials will be their quality and performance relative to primary raw materials, as well as their price. In the end, if the quality or performance does not permit certain uses then the materials may have a lesser financial value, but it may still be economic to produce it and use it for certain purposes.

Markets for secondary raw materials:

(Questions 5.1 to 5.4)

- If secondary raw materials are of lower quality or deliver a lower performance and are more expensive than primary raw materials, they will struggle to find a market. Equally, if they are similar or better quality, deliver similar or better performance, and are similar or less expensive they will “fly off the shelves”.
- Whilst regulatory or other barriers that prevent people from purchasing secondary raw materials should be addressed, policymakers should avoid measures that would have the effect of promoting inferior, more expensive products or obliging the purchase of one alternative over another.

Sectorial Measures:

(Questions 6.1 to 6.2)

- The underlying principle of retaining the value of materials in the economy for as long as possible is not sector specific. All sectors will have an interest in maximising their efficiency and enhancing their competitiveness. Moreover, moving towards a circular economy will require cross-sectorial collaboration.
- That having been said, any prioritisation should be made on the basis that (a) the priority sector stands to make a substantial ‘value saving’ as a result of the proposed measures and (b) measures have been identified that would enable the sector to realise that value without a loss of competitiveness.
- So far as the Chemical Industry is concerned, there is a significant opportunity to develop the production of chemicals from renewable raw materials (e.g. sugar, starch and bio-ethanol). However, high import duties on bio-raw materials, and policies that divert the available raw materials to particular uses, mean that EU manufacturers cannot compete on World markets and investment in the bio-economy is going elsewhere. The EU chemical industry needs free access to these materials at globally competitive prices if this aspect of the circular economy is to be developed within the EU.

Enabling factors:

- If the market based approach is followed, then the enabling factors described in the consultation will make the greatest contribution to the circular economy. A competitive circular economy will require innovative solutions that have yet to be developed or taken up, e.g. PPPs. Equally, it will require investment in technology and infrastructure, a skilled workforce, supporting logistics, and a mind change of consumers. However, the investment is only likely to be forthcoming, if investors can see a reasonable prospect of a return on that investment.

- The chemical industry can contribute to the development of a sustainable circular economy in many ways. Particular examples are:
 - Measures to increase the efficiency of production processes so as to maximise the use of resources, including primary and secondary raw materials, water and energy. These measures include improved reaction and process design, closed loop recycling on production sites, and industrial symbiosis in clusters, where the residual materials from one process become the raw material of the next.
 - Improved design of materials enabling more sustainable products considering the full life-cycle and enabling enhanced recovery opportunities.
- In addition, the utilisation of alternative and renewable feedstock (raw materials), such as biomass, or CO₂, which can be captured and used to produce materials, chemicals and fuels, is another way to optimize resources.
- In the light of the essential contributions of our sectors to long-term sustainability, we are committed to pursue and invest in such activities. We would welcome supportive measures that would help ensure their long-term financial viability, be it through the simplification and streamlining of the existing legislative framework or through targeted research and innovation programmes such as Horizon 2020.

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About Cefic

Cefic, the European Chemical Industry Council, founded in 1972, is the voice of 29,000 large, medium and small chemical companies in Europe, which provide 1.2 million jobs and account for 17% of world chemicals production.