



EUROPEAN COMMISSION

Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs

Industrial Transformation and Advanced Value Chains
Resource Efficiency and Raw Materials

Raw Materials Week 2018

14 November 2018, Le Plaza Hotel, Boulevard Adolphe Max 118-126, 1000 Brussels

6th annual High Level Conference of the EIP on Raw Materials

“Raw Materials for the low carbon and circular economy” and “A decade of the Raw Materials Initiative”

1. Nature of the meeting

The 6th annual High Level Conference is the main event of the European Innovation Partnership on Raw Materials (EIP-RM)'s Raw Materials Week. Representatives from academia, business, NGOs and governments, presented and discussed raw materials for the low carbon and circular economy, with a focus on the battery value chain, cascading of woody biomass and raw materials for energy-intensive industries. The event also marks a decade of the EU Raw Materials Initiative.

2. Points discussed

Welcome and objectives of the meeting

The context for the activities of the EU Raw Materials Initiative has evolved in the ten years since its inception. Today, for example, we have a broader recognition of the need for a whole value chain approach to raw material supply and security for supporting European industry, jobs and growth. The EC called for greater collaboration with and between Member States, to further support the implementation of the EU's policies towards the increased security of raw material supply, which are indispensable for a functioning EU economy and especially the transformation to low carbon technologies and towards Industry 4.0.

High Level Panel: What can we do to secure raw materials for strong industrial value chains in Europe?

The panel session focused on non-energy raw materials as the key enablers of all value industrial chains in the EU and globally. Both domestic, imported and secondary sources of raw materials were discussed. The EU will face strong competition from fast-growing economies on the global raw materials market. Sustainable, responsible production and sourcing of raw materials for downstream industries will play a bigger role at the global level. The transition to a low carbon economy means that a sustainable and secure supply of non-energy raw materials will become more critical as the relative importance of fossil fuels declines. The EU's strengthened response to restrictive trade barriers and anti-competitive behaviour was welcomed. The panel also discussed different barriers preventing access to domestic raw materials, including land-use competition, permitting, and difficulty with gaining public trust for raw material extraction projects. .

The panel recommended to improve education and awareness building towards better appreciation of sustainability and strategic benefits of domestic raw material production. As was the need to ensure that workers and employees have the right skills and information to be

able to realise the economic and social benefits of opportunities associated with greater raw material production in the EU. Caution was also called for when, as some Member States are doing, considering environmental taxes on primary material production. The carbon and wider environmental footprint of different secondary and primary material production technologies and operations varies significantly, and a blanket approach could be counter-productive.

Actions to overcome the barriers identified were also suggested by the panel, including:

1. To increase domestic primary supply: Member States should consider raw material extraction to optimise the value of the land use.
2. To increase domestic secondary supply: Improve quality through sorting (e.g. the metals from end of life vehicles) and design (as is being considered for batteries).
3. To increase imported supply: Strengthen the WTO, and in some cases attempt to speed up their mechanisms for improving the fairness of raw material trade.

Session I: Raw materials for battery value chain

This session presented the EU Battery Alliance, along with its Action Plan towards a robust, innovative and sustainable full batteries ecosystem in Europe. Progress in this voluntary scheme's first year has meant that the European battery sector is now estimated to be 3 years behind competitors in the Far East, compared to 5 years behind, as it was a year ago. The investment and political will behind the success so far was attributed to the clear, simple messaging achieved by the EU Battery Alliance about the jobs, competitiveness and wider social agenda of their activity.

Due to their applications in both energy storage and mobility, batteries are a key technology for supporting the European economy's switch to electrification. The vision for the European battery sector is for it to embody the high social and environmental standards expected and demanded by EU citizens, from extraction to end of life processing.

Barriers to the EU Battery Initiative's objectives were identified as: incoherence, and slowness, of the policy framework; gaps in the statistical knowledge base and land-use planning policy; and insufficient communication towards generating the market demand for the European-produced batteries. To tackle these issues, the EC presented the following recommendations resulting from the survey of Member States and discussions in the combined Raw Materials Supply Group and EIP Sherpa Group on 9th October 2018:

1. Acquire first class knowledge on raw materials:

Continue the dialogue with MS, data providers and relevant stakeholders on battery raw materials; Better data is needed on mineral production, including by-products and co-products, mineral processing and refining, recycling, materials flows, etc.....; Improve official statistics at Member State and EU level (PRODCOM) and, Extend the dialogue to EU neighbouring countries with good potential for battery raw materials.

2. Build raw materials refining capacity in the EU:

Promote processing and refining capacity for battery raw materials and in particular for battery-grade lithium compounds and, Facilitate in close collaboration with the European Investment Bank access to appropriate financial support.

3. Develop attractive European framework conditions for exploration, extraction and recycling of battery raw materials:

Build on policy support measures to better understand diverse regulatory conditions across the EU; Support access to known deposits, efficient permitting process and access to finance as key enablers of the supply of domestic raw materials; Improve policy coherence between i.e. raw materials, chemicals, waste and trade; Improve access to risk finance for exploration and

mining and finally, Promote a European framework that incentivises raw materials exploration - to stimulate production of battery raw materials.

Improve public awareness via better communication and closer contact with citizens was also highlighted.

Ongoing learning and actions towards overcoming some of these barriers and achieving the vision of a more competitive, sustainable battery sector in Europe presented included:

- Cross-sectoral collaboration - such as between the automotive and electronics sector - to improve harmonisation, standardisation and efficiencies in supply chains.
- Investigating vertical integration within the battery sector, building on core competencies - such as those developed in regional battery industry clusters.
- Exploring new business models - such as car sharing - to reduce demand for batteries and their constituent raw materials.
- Setting standards for batteries, including on the recovery of raw materials at end of life and the ethical sourcing of the input materials.
- Working towards a greater coherence between chemical, waste, trade, land-use and circular economy policy.

Session II: Wood cascade

The objective of this session was to disseminate the EC's guidance on cascading with demonstrations from the woody biomass sector of how it can contribute to a low-carbon and circular bio-economy while simultaneously offering a competitive edge to European industries, generating jobs and growth in Europe.

Examples of cascading were presented from the construction and packaging sector, where innovation in design and fabrication were key to the success of cascading and thus maximising the use of the wood-based resources in society. A Member State perspective was presented by a representative from Portugal who see improving the material productivity of their woody biomass as a cross-cutting theme in their circular economy strategy. A practical example of activity is their development of new markets for the by-products of cork production.

The panellist identified the following priorities to further increase the potential benefits from cascading in the woody biomass sector:

1. Achieving wider recognition of sustainability achievements and other benefits of the wood-based products through targeted communication. Already underway, the translation of the guidance document will contribute to this.
2. Creating an enabling policy environment for cascading, and to facilitate local regions, communities and small companies in cascading through practical demonstrations and pilots.

Session III: Raw materials for clean energy intensive industries of the future

This session was focused on the role of energy-intensive industries in enabling the EU to meet the 2050 climate and energy objectives while maintaining competitiveness and quality European jobs. The panel was made up of representatives from the chemical sector, the wind energy sector, a producer of both primary and secondary metals, and a multi-stakeholder organisation focused on realising energy efficiency savings.

Though the energy-intensive industries had different priorities in some respects (e.g. the need for solutions for the recycling of end of life wind turbines, and how to extract more value from complex metallic waste streams), there was agreement on some high-level measures that would

support their energy efficiency and decarbonisation aspirations. These included a call for an effective, coherent approach to the supply of raw materials, including an open and fair trade policy. Acknowledging that one of Europe's competitive strengths is collaboration, the energy-intensive industries must continue to work together as well as cross-sectorally (e.g. with the waste sector), towards better competitiveness on the global stage.

3. Closing remarks

The session closed with the following observations:

- The EC's 2050 strategy is purposefully broad to create the space for the political trade-offs. There will be a year of consultation on the detail before the final version is produced.
- Trade and competition policy will be part of the wider enabling framework.
- The Commission is supportive of the efforts of the energy-intensive industries' steps towards integrating their respective roadmaps.
- The strategy for energy-intensives needs to be linked with that of the energy and raw material sectors, as well as the waste and secondary resources sectors.
- There is a need to develop clear use-case for the energy-intensives in the EU economy.
- Energy-intensive industries need to involve more of the downstream users, automotive and electronics sectors in the development of their long-term strategies.