



POLICY BRIEF

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Sustainable raw materials management in the Iberian Peninsula: the role of industry and consumers in driving circular economy

Summary

- *Sustainable raw materials management and circular economy*
- *Stakeholders perspective on sustainable raw materials management*
- *Conclusion*

1. Sustainable raw materials management and circular economy

Raw materials are traded globally and prices in commodity markets are strongly volatile. This instability particularly impacts EU supplies.

Europe is currently facing several challenges, both in raw materials¹ supply and commodity markets. Raw materials are traded globally, with a major difference between base metals (e.g. copper), traded on stock exchanges, and critical raw materials (e.g. cobalt, rare earths), traded in very small quantities in a less transparent market. In recent years, prices in commodity markets have displayed strong volatility due to changes in global supply and demand patterns as well as short term shocks in key commodity and raw material markets. This instability particularly impacts on supply of critical raw materials to the EU, cornerstone for technological innovation in key economic sectors, such as automotive, aerospace or chemicals, as

¹ Raw materials include metallic minerals, industrial minerals, construction materials, wood, natural rubber (COM(2012) 82 final)



the resources are mainly sourced outside of the EU (e.g. China accounts for approx. 97% of world extraction). At the same time, no recycling or substitution processes for some of these raw materials (e.g. rare earths) are currently commercially viable².

The EC is taking several initiatives on sustainable raw materials management contributing to the Europe 2020 strategy

The European Commission has taken a number of initiatives to tackle these complex challenges, e.g. the Raw Materials Initiative (RMI)³, and [the European Innovation Partnership \(EIP\) on Raw Materials](#). Overall, these initiatives aim to contribute to sustainable supply and use of raw materials and, consequently, ensure smart, sustainable and inclusive growth in a resource efficient Europe ([Europe 2020 strategy](#)).

The Iberian Peninsula is heading towards a future boom in the mining sector

The Europe 2020 strategy underlines the need to promote technologies that increase investment in the EU's natural assets in accordance with the second pillar of the RMI *Fostering sustainable supply within the EU*. From a regional perspective, the Iberian Peninsula is heading towards a future boom in the mining sector, reinforced with the presentation of several proposals in the recent EIP on Raw Materials call for commitments: Spain is the country leading a larger number of extraction sector proposals, and collaborates with Portugal in many of them. The major part of these commitments is in line with the technology-focussed pillar of the EIP's Strategic Implementation Plan. This development mirrors the Spanish and Portuguese governments' uplift of Iberian countries' economies and employment rates in a context of sustainable raw materials management.

Setting up an enabling policy framework is key to achieve higher recycling targets as a driver of transition to a Circular Economy model in the EU

Consistent with the third pillar of the RMI *Boosting resource efficiency and promoting recycling*, the EC has recently presented a Communication to achieve higher recycling targets driving the transition to a Circular Economy in the EU, **Towards a circular economy: A zero waste programme for Europe**⁴. Developing a circular economy is key for achieving the overall objective of resource efficiency – i.e. ensuring that our economy can grow, while becoming less dependent on resource use and contributing to a better environment, with lower impacts and reduced GHG emissions. Keeping resources longer in productive use, using them again through recycling, cutting waste, and reducing dependence on uncertain supplies is a direct route to improving competitiveness.⁵ Achieving the new waste targets would create

² European Commission, 2013. European Innovation Partnership on Raw Materials. ISBN 978-92-79-27882-2

³ COM(2008) 699 final

⁴ COM(2014) 398 final

⁵ http://europa.eu/rapid/press-release_MEMO-14-450_en.htm



580.000 new jobs in Europe compared to today's figures, while making Europe more **competitive** and **reducing demand** for costly scarce resources. Portugal and Spain, as EU Member States, are already taking actions forward in this context. For instance, Spain is supporting new business models and entrepreneurial initiatives that foster circular economy as well as reviewing the regulatory framework on waste so as to achieve EU waste reduction objectives.

2. The 1st COBALT Regional Dialogue and stakeholder perspectives on sustainable raw materials management

The 1st COBALT Regional Civil Society-Industry Dialogue, which took place on 12 June 2014 in Madrid, Spain, brought together a group of high-level participants to explore avenues of mutual collaboration on the topic of “Sustainable raw materials management and circular economy in the Iberian Peninsula: the role of industry and consumers in optimizing the raw materials value chain”.

The presentations and discussions during this Dialogue pointed to certain key issues – or ‘wicked issues’ – which should be considered further and on which additional action should be taken via increased stakeholder cooperation.

Wicked issue 1: the role of the mining sector in a circular economy

What is the exact role of the mining sector in a circular economy, that preserves the value added in products for as long as possible and retains the resources within the economy when a product has reached the end of its life and virtually eliminates waste,?

Various Dialogue presentations underlined the need of extraction to ensure a secure supply of raw materials under the right framework conditions (i.e. extraction needs to be environmentally sound and safe). From a regional perspective, urban mining is still a debated issue, and, moreover, the recovery of certain raw materials at products' end of life is not yet efficient in economic and environmental terms.

Considering the need for sustainable extraction, the presentations showed that mining industries' application of innovative new technologies can enable more efficient processes to obtain raw materials and by-products. Besides, in context of the economic crisis, mining activity contributes to local economic development by offering employment opportunities and, as is the case on the Iberian Peninsula, relatively high average salaries. Representatives from the Portuguese Administration as well as from Spanish industry, argued that some initiatives and policies are already being put into place to foster sustainability in mining, e.g. fiscal incentives for exploitation royalties when increasing social and environmental local performance; or the implementation of standardisation and certification tools to set sustainable mining benchmarks and foster disclosure and transparency.

However, the discussions demonstrated the lack of an existing dialogue

Wicked issue:
In the transition to a circular economy there is a need of sustainable extraction for a secure supply of raw materials



amongst mining and recycling sector representatives, and the need for combined effort and collaboration in the context of a circular economy. Thus, there is some room for further improvement and initiatives to be developed by the various stakeholder groups.

Wicked issue 2: Urban mining as a regionally debated issue

The Dialogue showed, from a range of different viewpoints, that currently, increased efforts are undertaken to improve recovery and recycling rates so as to accomplish EU objectives.

The barriers which prevent recycling, however, need to be further addressed. The European Commission considers that these barriers fall into three broad categories: 'leakage' of waste to sub-standard treatment inside or outside the EU; obstacles to the development of the recycling industry; and inadequate innovation in recycling⁶.

EU Member State governments are already taking actions to foster better implementation and enforcement of EU waste legislation, e.g. the Spanish government approved the Waste Prevention Programme (2014-2020) and is currently reviewing the National Plan on Waste (2008-2015). Particularly regarding WEEE, both Portugal and Spain are implementing actions targeting recycling plants infrastructure and awareness raising for recycling among the citizens. However, low collection rates of WEEE represent a major challenge due to little incentives to recycle critical materials in small amounts.

On behalf of Spanish consumers, the Users and Consumers Organisation (OCU) claims that waste has no value in current management (i.e. functionality of WEEE devices is not checked at collection points; lack of information on special collection systems for re-use; low quality standards in collection processes; etc.). They also argue that there is a strong consumer demand for more product information related to sustainability (e.g. product lifespan, environmental impact in production processes, recyclability), whereas only 53% of interviewed consumers take care of WEEE. OCU outlined the need of trustworthy institutions that provide accurate and actual information in a language clearly understandable for consumers.

Furthermore, the Dialogue participants highlighted that stronger efforts are needed for preventing WEEE (e.g. fostering repair and reuse). Once products get in the recycling loop, increasing incentives to recycle critical materials should be implemented together with a better traceability of WEEE. Such efforts can also be boosted by better communication and exchange of best practices, as well as collaboration with other stakeholders and more effective awareness raising mechanisms.

Wicked issue 3: Civil Society Organisations lack representation in the decision making fora

Civil society organisations can serve as key multipliers to consumers and the general public, and can give a voice to consumers' opinions, preferences and needs. In that sense, CSOs can provide valuable feedback to the different processes involved and driving sustainability in the whole raw materials value chain. Besides, CSO initiatives are essential in the

Wicked issue:
The barriers which prevent recycling need to be further addressed, e.g.: little incentives to recycle critical materials, insufficient public awareness, etc.

Wicked issue:
Further efforts should be taken to enhance communication channels and inclusion of CSOs in decision taking fora

⁶ European Commission, 2013. European Innovation Partnership on Raw Materials. ISBN 978-92-79-27882-2



successful development of new business models that can be further replicated, e.g.: social economy models that drive a sustainable use of resources and waste, and effectively integrate people at risk of social exclusion; or initiatives that aim at waste prevention, such as teaching consumers to repair electronics, or providing them with an active role in extending product lifetimes.

Despite the key role CSOs can play in optimizing the raw materials value chain, they are still neither sufficiently represented in EU decision making fora (e.g. EIP Advisory Groups, European Resource Efficiency Platform), nor in more specific actions such as multi-stakeholder project proposals.

The Dialogue highlighted the interest and inclusive attitude of both institutions and EIP Raw Material Commitment leaders to welcome CSOs in their working groups' structures (e.g. Stand4Mines EIP commitment). The preparation of a CSO stakeholder map with an interest on raw materials at any phase of the value chain would be needed to take further steps towards their inclusion, collaboration and participation in decision making fora. In this sense, the COBALT project will further strengthen its efforts towards developing such a CSO stakeholder map on sustainable raw materials management.

3. Conclusion

One of the key conclusions from the 1st Regional Dialogue is the recognition that **collaboration between all key stakeholders is essential to drive more sustainable raw materials management along the whole value chain.**

Each key stakeholder has a key role to play in sustainable raw materials management, and **core competencies** to bring to the table: The mining industry can improve process efficiency, ensuring provision of raw materials to society in a sustainable way and providing in-depth knowledge of local/regional economies, communities and environment. The recycling industry can foster the application of WEEE in an environmentally safe recycling circle, guaranteeing traceability and transparency and using Best Available Technologies. Civil society organisations can drive sustainable development by means of raising awareness and lobbying. Researchers can inform and advise other stakeholders, as trustworthy independent institutions with technological competences on processes (mining, recycling, re-use, Life Cycle Analysis, etc.) and their environmental impact and as a linkage between different stakeholders. Finally, policy makers can steer the multi-stakeholder dialogue by creating a regulatory and administrative framework for a better business environment (common playing-field) and communicating with citizens.

While the transition to a circular economy is already underway, there is still a need to **improve communication and collaboration** between stakeholders along the different phases in the whole value chain, to **strengthen** new business models and to



address remaining questions and barriers. Some steps have already been taken forward with pilot experiences on Product Panels^{7 8}, which address products' environmental impacts in an integrated way with the participation of the different stakeholders as a cornerstone to practically implement Life Cycle Analysis into Life Cycle Management.

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⁷ Watson *et al.*, 2011. Developing Effective Product Panel Methodology Through Practice. A Case Study of the Catalan Toy Industry. *Journal of Industrial Ecology*. DOI: 10.1111/j.1530-9290.2011.00352.x

⁸ Solé *et al.*, 2012. Proposal of a new model to improve the collection of small WEEE: a pilot project for the recovery and recycling of toys. *Waste Management and Research*. DOI: 10.1177/0734242X11434563