



CRMs in the Circular Economy



About Us

Mission - To advocate the importance of CRMs for the European economy and to promote a strong European CRM policy.

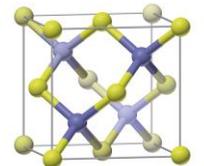


Tertiary Minerals plc

TIC

BeST

Beryllium Science & Technology Association



IMAT
Innovative
Semiconductor
Materials



Origin of CE & CRMs

EU - Critical Raw Materials

Raw Materials Initiative (2009)

- Fair and sustainable supply of raw materials from global markets
- Sustainable supply of raw materials within the EU
- Resource efficiency and supply of “secondary raw materials” through recycling

EU – Circular Economy

Green Economy as new economic model (2010)

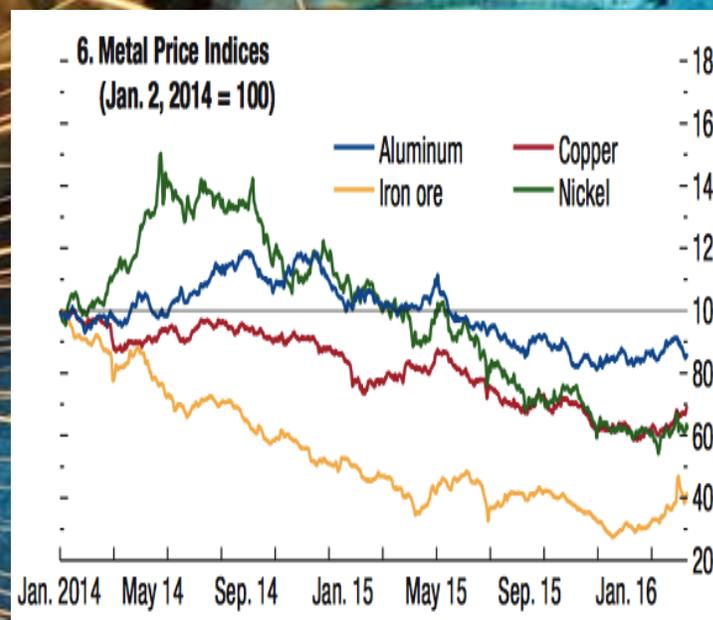
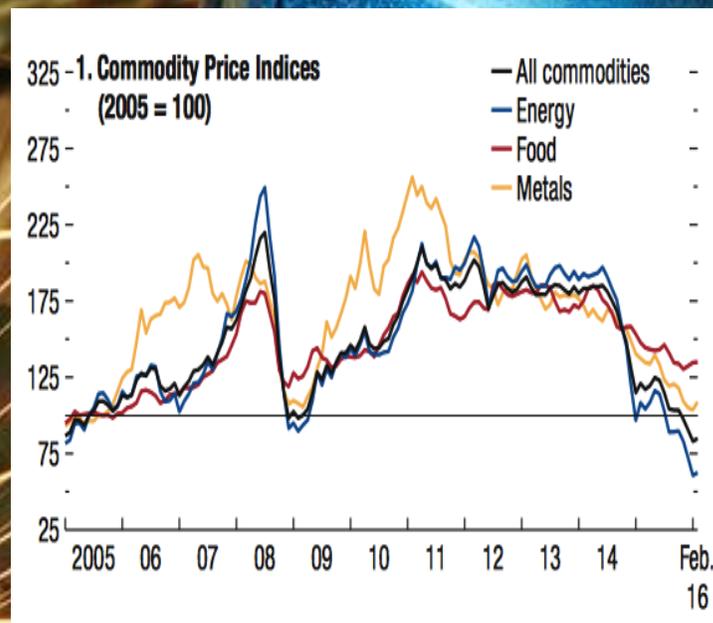
- Concerns about resource scarcity particularly for strategic resources (such as Rare Earth elements)
- Negative impacts of unsustainable production and consumption
- Volatility of (and rising) of commodity pricing

The fundamentals for CRM in a CE

EU policy has been a response to **high commodity prices** and **resource scarcity**:

- “Metal prices have declined 9% since August 2015. Prices have been gradually declining because of a slowdown and a shift away from commodity-intensive investment in China, which consumes roughly half of global metals.” (IMF 5/2016)
- “Due to the scale of problems faced, China’s economy needs restructuring, not rebalancing”. (EU Chamber of Commerce 2/2016*)
- Stimulating the economy through investments in industries characterized by overcapacity is misaligned with the goal of ensuring quality and sustainable growth.

*To ensure the continued supply of CRM, a specific critical raw materials policy is needed which underlines the importance and dependence of the European economy on them. This policy needs to be directed away from substitution



Action Plan on CRMs & Circular Economy

Identified Issues:

- Low rate of recycling of (some) CRMs & absence of recycling standards
- Lack of data for economic operators on potential for recycling these materials
- Challenges relating to collection, dismantling and recycling products that contain CRMs
- Insufficient information exchange between manufacturers and recyclers of electronic products
- Need for high-quality recycling for sufficient recovery

Proposed Commission Actions:

- Encourage recovery of critical raw materials, and prepare a report including best practices and options for further action.
- Encourage action by Member States on this topic in its revised proposals on waste
- R&D programmes, data and information exchange and promotion of best practices



The fit of CRM Alliance position within CE

- CRM policies should look for enhanced raw material supply and use rather than substitution of the CRM
- Industrial Sector Policies should incorporate and highlight the economic and strategic importance of Critical Raw Materials (CRMs) and their value to future innovation
- Waste legislation should not include disincentives for usage of CRMs
- Legislation affecting CRMs should require a special socio-economic analysis of potentially harmful impacts to the supply of CRMs
- Trade policy should incorporate principles of both free and fair trade for CRMs

(CRM Alliance position)



- Industrial symbiosis
- Material resource efficiency
- Res & energy efficiency
- Biological products
- Product life cycles extension
- Performance economy
- Sharing economy
- Platform economy
- *(CCEPS, 2016)*

Factor Raw Material Consumption

EU policymaking should stimulate sustainable primary production and secure fair trade practices

Raw material consumption (RMC) is not always transparent and needs to be addressed

Questions for policymaking:

- Is the share of *recycled* materials in material input increasing?
- Are the *raw* materials used in Europe sustainable sourced?



Central Government Action to Curb Overcapacity (2006-2015)

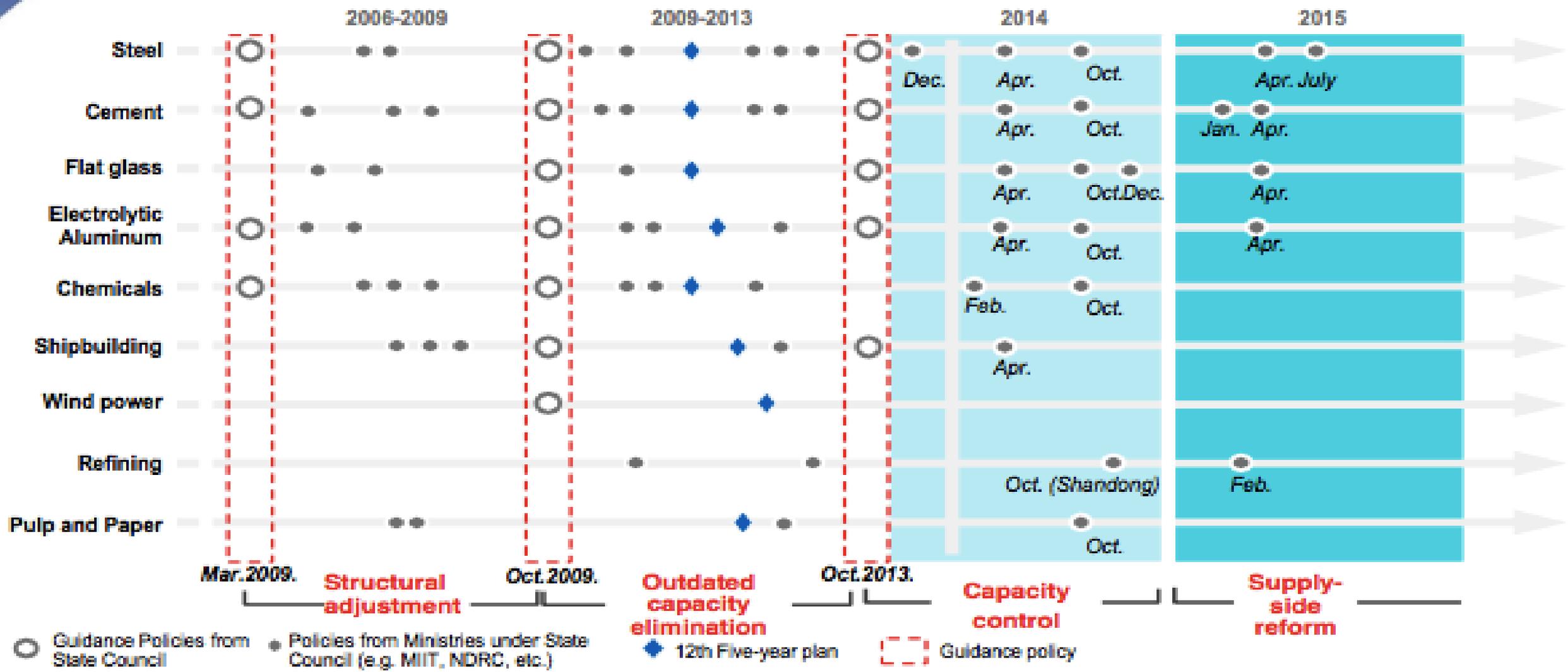




Figure 3.2 The cumulative loss of aluminium from the hard packaging cycle in Flanders over time

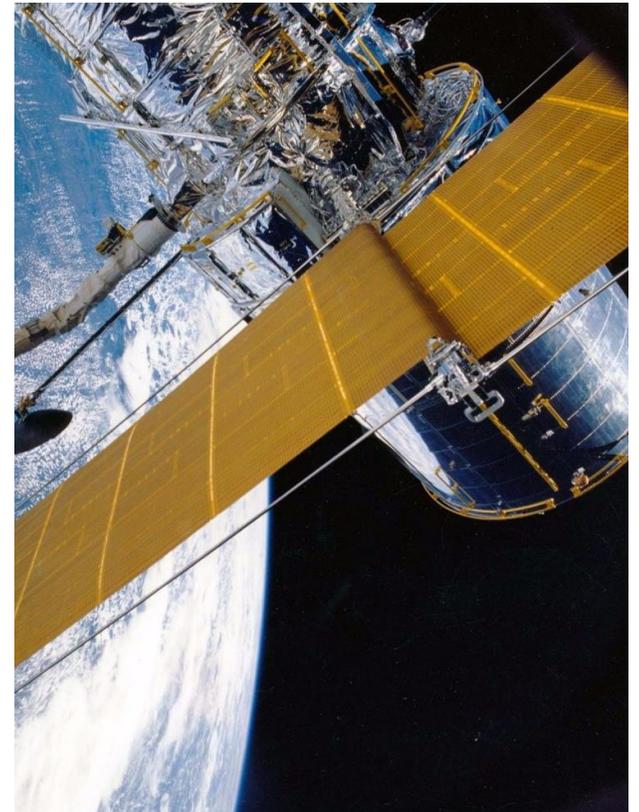
Aluminium put on the market in 2014 (%)



Source: Modelled by VITO, based on data from OVAM (forthcoming).

Summary

- Increased recovery of CRMs and improving resource efficiency is a welcomed step.
- However, increased recycling and a secondary raw material market will never replace the need for primary production of CRMs.
- In fact, as the EU continues its transition to a more green and high-tech economy, the demand for CRMs will only increase: due to their unique properties and essential use in green technology and high-tech applications.





www.criticalrawmaterials.org



Thank you for your attention!