The Industrial Minerals industry position on a Resource Efficiency Lead indicator

Lead indicators in the form of GDP/DMC or GDP/RMC are not appropriate.

The reasons are the following:

• DMC and RMC are weight-based indicators\(^1\), they only reflect materials density;
• At equal weight, different materials occupy different volumes while they don’t deliver the same performances or exhibit the same functionality nor the same toxicity or, more generally, the same environmental footprint;
• GDP/DMC does not account for the materials encapsulated in imported and/or exported goods;
• GDP/RMC does attempt to account imports, however it is an illusion to believe that accurate data on the materials content in imported goods will be provided by the importers, and in addition RMC is not more informative than DMC on the materials environmental impacts;
• Both indicators don’t reflect the raw materials’ environmental impacts, nor their value for the economy and society in terms of functionality and performance of materials, especially in the case of commodities with a low price volatility, as it the case for many ponderous materials such as industrial minerals;
• A decrease in GDP/DMC or GDP/RMC could reflect a slowdown in consumption due to an economic or a financial crisis, and may not necessarily reflect a change in the management and use of resources.

Decoupling objectives need to be considered with respect to actual comparative LCA of materials, the potential for exploration and sustainable management of existing resources and the criticality that endanger the sustainable supply of a raw material.

Even in a 100% ideal recycling scenario, decoupling objectives have also to take into account both the limits of the waste stocks (e.g. available construction demolishing waste would feed in <20% of the demand) and the technical limits of any recycling loop (i.e. maximum around 7 cycles) which force to use primary resources.

As noted in the Bio IS 2012 study, this is the case of one of the applications of industrial minerals – the construction sector: “Construction minerals (even excluding sand and gravel) constitute the greatest share of non-metallic mineral DMC. At present it seems difficult to set very ambitious targets to reduce DMC as the majority of construction materials are needed to maintain the existing building stock and infrastructure [...]. Even when applying the full (theoretical) potential of construction and demolition waste recycling, only 25% of

current construction minerals DMC would be reduced. Given the known technologies and level of (economic) activity, further reductions of DMC might not be cost effective”².

Although access to raw materials may be constrained, most of our geological resources are not scarce and the potential to develop exploration and extraction exist, including in the EU: “Given that only a few percent of the Earth’s surface and subsurface have been explored in detail, the potential for discovering new mineral deposits is vast and the geological availability is indefinite. In such a context, the main issue concerns exploration and technological developments that will allow for a sustainable exploitation of resources, rather than geological scarcity”³.

The Circular economy being an integral part of the EU 2020 strategy, it should therefore integrate the needs for eradicating poverty, guaranteeing a healthy-ageing to the EU citizens, developing a low carbon economy, while finding alternatives sources of carbon for energy (renewables) and achieving the industrial renaissance, while remaining compatible with the European Innovation Partnership on Raw Materials threefold objectives.

To that end, in case such an indicator is developed, it should not be used as a lead indicator, but as a macro-economic indication of trends at EU and/or country level. It would, however, be imperative to assess it against economic indicators (e.g. industrial productivity/performance) in order to avoid wrong conclusions.

Resource productivity indicators do not favour the right use of resources, but only tend to promote an absolute decrease of their use. Should the focus be on the right use of the resources, the efficiency of their primary extraction will also be enhanced. The right use of resources is not a short time objective, but an inherent part of the resource use.

Dr Michelle Wyart-Remy
Secretary-General
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² BIO IS study, Executive summary, p. 8