



## **Sustainable Consumption and Production – Working group defines list of critical raw materials for the EU**

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**Summary:** An Expert Working Group convened under the auspices of the EU's Raw Materials Initiative has produced a report identifying resources that are critical to the EU. The report includes a methodology and list of 14 critical materials which is strongly influenced by geo-political factors, difficulty in substituting materials and the economic importance of each material. The suggested response to the problem of EU access to raw materials focuses to a great extent on removing barriers to resource availability in third countries, and appears to somewhat neglect environmental impacts, the environmental objectives of other EU strategies, and the promotion of more effective resource management within the EU.

### ***Background***

In 2008 the European Commission published its 'Raw Materials Initiative'<sup>1</sup>, which represents an attempt to ensure European industry's access to resources from within and outside the EU and to address the EU's vulnerability related to reliance on imports of raw materials. This vulnerability was identified as stemming from increasing demand for materials, particularly from emerging economies; the inherent scarcity and uneven concentration of certain materials; and concern over measures designed by countries to protect their reserves of resources (see IEEP Analysis Briefing: 4 December 2009).

Specifically the initiative highlighted the EU's dependence on importing 'high-tech' metals which play a critical role in high value manufacturing, including energy efficient and innovative green technologies such as Lithium-ion batteries, photovoltaics, fuel cells and catalysts and seawater desalination equipment.

The Initiative's approach to dealing with these challenges was based on three pillars:

- Better and undistorted access to raw materials in third countries;
- Improving conditions for extracting raw materials within the EU; and
- Increasing resource efficiency and recycling.

### ***Analysis of initiative***

Much of the criticism of the Initiative was levelled at plans to improve EU access to raw materials in third countries, specifically the suggestion that the Commission should consider opportunities provided by development co-operation, which could be interpreted as encouraging the EU to link development funding to improved access to raw materials. This was widely criticised, not only as an attack on developing countries resources<sup>2</sup>, but also as a demonstration of policy incoherence by focusing on production rather than addressing issues

related to demand and recycling as proposed by other EU strategies, notably the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan and the Thematic Strategy on the sustainable use of natural resources<sup>3,4</sup> (see IEEP Analysis Briefing: 12 June 2009).

To enable focused implementation of the Initiative an Expert Working Group was set up to produce a list of ‘critical raw materials’ and a methodology to assess the criticality of metals that could be used to assess critical resources over time. The Working Group has this month published a report entitled ‘Critical raw materials for the EU’, which presents the Group’s work and includes recommendations for follow-up to the report and policy-oriented recommendations to secure access to and material efficiency of critical raw materials.<sup>5</sup>

### ***Report content and results***

The report largely represents a continuation of the Initiative’s strategy. The major development is the finalised methodology and determination of a list of 14 critical raw materials:

Antimony	Indium
Beryllium	Magnesium
Cobalt	Niobium
Fluorspar	PGMs (Platinum Group Metals)
Gallium	Rare earths
Germanium	Tantalum
Graphite	Tungsten

The methodology is based on a relative concept of criticality. This means that raw materials are labelled ‘critical’ when the ‘risks’ for supply shortage and their impacts on the economy are higher compared to most other raw materials. Two types of risks are considered:

- ‘supply risk’, taking into account the political-economic stability of the producing countries, the concentration of production, the potential for substitution and the recycling rate; and
- ‘environmental country risk’, which assesses the risks from ‘measures ... taken by countries with the intention of protecting the environment and by doing so endangering the supply of raw materials to the European Union’.<sup>5</sup>

### ***Analysis of the report***

Though environmental protection has previously been used to support protectionist policy, the wording on ‘environmental country risk’ is symptomatic of the report’s apparent perception that economic aspects are detached from environmental impacts. The report does make some recommendations related to making recycling of raw materials or raw material-containing products more efficient, and improvement of the overall material efficiency of critical raw materials. Overall, however, little consideration is given to the environmental and social implications of resource extraction, use and disposal both within third countries and the EU; the arguments made are predominantly economic.

The chosen definition of criticality demonstrates the report’s focus on attempting to manage third countries’ actions rather than considering the EU’s own action. For example the report describes how EU environmental policies have increased scrap recovery but that much of this scrap metal is exported. No attention is given to the causes of this, such as the lack of internal market and capacity for secondary materials within the EU. As this issue is a key focus of other EU resources strategies<sup>6</sup> this may represent a missed opportunity to align policy.

The report's recommendations are wide ranging and broad in scope. The recommendation for more research into Life Cycle Assessments is to be welcomed, but the recommendations relating to land-use which aim to 'promote exploration' should be closely observed as the initial Communication<sup>1</sup> suggested that Natura 2000 sites could be subject to increased extraction.

Generally this report appears to demonstrate a disconnection from much of the broader sustainability and resource agenda across the EU, and as such could be considered another example of policy incoherence.

### *Next steps*

The Expert Group's report is now subject to open consultation until 15 September 2010. More details should be made available soon on the website of DG Enterprise and Industry.<sup>7</sup>

### *References*

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