

**Aurubis replies to the  
Public Consultation on the preparation of a new  
Communication on Raw Materials**

**POLICY AREA: DEFINING CRITICAL RAW MATERIALS**

**Q1 - COMMENTS ON THE METHODOLOGICAL APPROACH**

- The chosen methodology does not allow the type of material to elect itself as potentially critical when, in fact, this could be relevant e.g. in the case of scrap material.

As regards non-ferrous metals, scrap and access to scrap play a major and ever growing role in the shaping of the EU non-ferrous metals industry and the metal user sectors as well. "Secondary" raw materials have indeed an intrinsic "sustainability" value because they enable to save energy and natural resources as well as to avoid polluting disposal. In addition, any policies aimed to address the sustainable and efficient use of resources ultimately enhance the value of scrap as a raw material.

However, it is a fact that the scrap markets for many materials (be it non-ferrous metals, paper, wood, etc) are generally and increasingly affected by operating distortions which are destroying level playing-field to access these materials at EU and international level.

Thus, scrap in itself is a critical raw material.

- The methodology combines a quantitative and a qualitative approach. However, the list of critical materials is exclusively based on the results of the quantitative approach. Even though the materials profiles allow to highlight one or the other aspect which cannot be taken into consideration in the quantitative assessment of the criticality of a material, these aspects have not been analysed with a view to eventually adjusting the criticality list. As a matter of illustration of this methodology, Aurubis considers that the effective and recognised contribution of a material to the EU objectives of a greener and cleaner economy should have been taken into consideration to determine the criticality list of materials.

**Q2 – OTHER RAW MATERIALS TO BE INCLUDED IN THE LIST**

- cf. above comments on scrap and on the impact that the qualitative assessment should have on the selection of "critical" materials.
- Actual development of emerging technologies, industrial development in emerging economies and operating conditions of the raw materials global markets are all having a direct impact on future demand for raw materials as well as on the terms and conditions under which this demand can be satisfied. It is therefore essential neither to freeze the list of critical materials nor to consider this list as the exclusive target for policy initiatives. Problems of supply or trade distortions affect the access to certain raw materials that are currently not on the

list. These problems must be addressed equally diligently in order to ensure a level playing field with non EU industry and to allow EU economy to reach its objectives in terms of a smart, sustainable and inclusive growth.

For the reasons above highlighted, Aurubis is of the opinion that the unique contribution from copper to the EU economy and its growth should require a specific attention from the EU Commission when launching its policy initiatives.

### **Q3 – COMMENTS ON THE RECOMMENDATIONS OF THE REPORT**

- The recommendations presented in the report generally concur with the EU non-ferrous metals industry expectations about EU policy lines and objectives that could help to secure access to raw materials on a level playing-field.
- However, as regards recommendations for substitution, it should be stressed that substitution is not “per se” the solution to criticality in access to raw materials, all the more so in that, for most of the materials identified as “critical”, substitution possibilities have been identified already as very limited or non-existent. Normally a raw material has a wide range of industrial applications and the wider the variety of applications the lower the feasibility to achieve a complete substitution. As many materials are mined together, there is an interdependency of certain critical materials with materials which are not on the criticality list. This interdependency will also affect concrete possibilities of substitution.

### **Q4 – NATIONAL INITIATIVES AIMED TO ASSESS THE CRITICALITY OF RAW MATERIALS**

- In France, a permanent high level Committee dedicated to strategic non energy raw materials and gathering public administration and industries' representatives, was set up in 2009 and drew a list of non energy raw materials considered as strategic.

Following a communication of the French Government in April 2010, an action plan has been set in the field of strategic raw materials (<http://www.gouvernement.fr/gouvernement/les-metaux-strategiques>):

- better knowledge and understanding of the strategic raw materials and the French economy's dependency with regard to them,
- further geological knowledge by launching exploration/research mission,
- Research and Development in the fields of exploration and first stage processing equipments,
- appointment of a High Representative for strategic raw materials,
- strategic raw materials recycling: ADEME (French Environment and Energy Management Agency) conducted in 2010 a study on the recycling potential of 35 selected metals (report to be published very soon). The first phase of the study consisted in a general description of the 35 items (stocks, stakes, description of the industrial actors involved from the extraction to the end of life of their main applications, recycling processes and practices), an estimate of the French secondary raw materials/recyclable “deposits”, and an estimate of these metals recycling room for improvement. This phase ended up on the selection

of 10 applications which recycling potentials have been studied in-depth and on which public action may eventually focus, e.g. rechargeable batteries, magnets, electronic cards, condensers ....

- In the UK, the Dept of Environment and Rural Affairs has commissioned a study on risks to business from hinderances in the market place using metals and minerals. The study is due to be issued in September 2010.

#### **Q5 – FUNCTIONING OF RAW MATERIALS MARKETS**

- Industry is the most effective and accurate source of information about the functioning of its raw materials markets, meaning that the monitoring and the assessment of market problems by the institutions should rely on the expertise of the industries concerned and their representative bodies. Experience shows that analytical work commissioned to external consultants is generally unsatisfactory and goes together with a lack of focus on, and knowledge of, the actual problems as well as a considerable loss of time for industry experts called for peer review.
- The functioning of raw materials markets (primary and secondary materials) are deeply affected by a lot of trade distortions and illegal practices on a very large scale. The severity and the impact of these practices on the effective functioning of the raw materials markets should be energetically addressed by the EU Commission by all means in line with WTO rules and EU legislation. Clear commitment and action from EU institutions are expected from EU non-ferrous industry.
- The attention is also drawn on the existence of non consisting rules and practices among the various EU members (in the recycling area). Such situation also generates trade distortions.
- The Commission can play a very useful role, however, to increase and improve the level of information on market distortions by mobilizing the Delegations and the national embassies on any regulatory developments that affect trade in raw materials in particular. The Commission and the Member States can play a very useful role also by creating awareness of the problems and calling for transparency on their systemic causes at international level (e.g. the project of an inventory of trade restrictions on raw materials at OECD level). All this is already done in DG Trade-Market Access and should be reinforced. Within the Union, the Commission can certainly promote transparency by means of better statistics on trade flows of sensitive materials such as scrap.

#### **Q6 – STOCKPILING**

- Stockpiling is not an effective option, particularly in today's context of global economy. Resulting market disruptions, notably price impacts, and loss of market transparency are likely to give rise to additional distortions in the free play of market forces as well as biased business decisions and policy initiatives.

Nevertheless some non-EU countries are using stockpiling mechanism with public money.

- In addition, stockpiling would mobilize considerable financial resources and would require delicate arbitrages whose costs will ultimately fall on the industrial community at large.

## **POLICY AREA: TRADE**

### **Q7 – IMPORTANCE OF TRADE IN THE RMI**

- Only a marginal share of the EU non-ferrous metals industry's total feed supplies is secured through upstream integration (i.e. captive supply of raw materials). The market, and therefore trade, plays a key role in securing raw materials for the sector. It is consequently of vital importance to ensure undistorted operation of the EU and international markets for raw materials, to promptly challenge the causes of trade distortions, to prevent the arising of such causes as much as possible and to promptly remedy their injurious impact.
- These objectives are properly taken up by DG Trade strategy in respect of access to raw materials. This strategy must be pursued and reinforced. In view of the extent, importance and increasing complexity of the challenges, more resources should be dedicated to it, in fact.

### **Q8 – ACTIVITY FOCUS AND PRIORITIES**

- The weakness of the regulatory framework within which trade action must be carried out in this field is a hindering factor. Indeed, the causes behind competitive distortions in access to raw materials are increasingly sophisticated and complex. They are not pertaining anymore to trade policies only, even though the impacts are ultimately perceived in terms of lack of level playing field in trade.
- In spite of this, industry needs the Commission to deliver in terms of
  - effective rules setting at bilateral and multilateral level (including development and endorsement at WTO level of new disciplines on export restrictions),
  - effective enforcement of rules,
  - effective coherence of policies (e.g. in the GSP, in the implementation of trade defence at EU and WTO level, in external relations, etc).
- More results should be delivered in particular in case of lack of enforcement of their commitments by trade partners. Industry must be given the means to exert its rights of defence with unrestrained political support. This would mean, among others,
  - a more offensive recourse to dispute settlement,

- the review of the Trade Barrier Regulation in order to make it more operational, and
  - the rehabilitation of the Regulation on Common Rules for Exports as an effective temporary safeguard instrument against massive export flows of raw materials.
- In view of the above mentioned complexity of the causes of trade distortions in access to raw materials, the pursuit of DG Trade strategy in this domain would certainly benefit from enhanced synergies with DG TAXUD and DG Environment. More deliverables should be identified in this enlarged frame of action in respect of, notably,
    - customs control on illegal trade of secondary raw materials and
    - customs control on compliance with the WSR provisions,
    - and the review of the thematic strategies on resources and recycling which should thoroughly integrate a market and trade dimension as well as consider market and trade impacts of policy options taken.

#### **Q9 – TRADE DISTORTIVE MEASURES IN THE RAW MATERIALS MARKETS**

- EU enterprises are confronted on the international and EU markets for raw materials with competitors which derive a significant purchasing edge on raw materials which they need to import from the fact that their domestic market is closed and protected by various trade and industrial policy measures that provide them with an actual subsidy on imported raw material or enable them to secure domestically a higher revenue from their production.
- EU enterprises are also confronted with the predatory policies of certain countries rich in natural resources which have imposed themselves as major or eventually dominant world supplier of certain raw materials. These are now restricting their supplies in order to gradually move up their market dominance to the next products in the value chain. As a result, they are not only imposing dual prices and scarcity of inputs on their competitors but they are also confronting the latter with exports at dumping prices of value added products.
- Above mentioned situations are arising from the operation of a variety of policy measures, eventually combined in a sophisticated manner. This includes export restrictions (taxes, quotas, bans, licensing systems, limited number of clearance points, etc), differentiated import and export incentives (e.g. VAT rebates on export), domestic preferential tax treatments, State interference in local commodity exchanges, etc.
- Over the years, the mechanisms which are distorting competition in access to raw materials have become not only increasingly complex but also increasingly pervasive in terms of materials concerned and countries taking advantage of them. In the meantime however, international trade rules, designed to address unfair selling practices, are remaining totally helpless to address unfair purchasing practices and the World Trade Organization has not acknowledged yet the fact that disciplines are urgently needed to ensure free and fair trade in raw materials.

**Q10 – NATIONAL INITIATIVES IN RESPECT OF RAW MATERIALS DIPLOMACY AND FOREIGN DIRECT INVESTMENT IN RESOURCE RICH COUNTRIES**

**POLICY AREA: DEVELOPMENT**

**Q13: CONCERNING THE RECENT AGREEMENT BETWEEN THE EUROPEAN COMMISSION AND THE AFRICAN UNION COMMISSION, IN YOUR VIEW, WHAT CONCRETE OBJECTIVES, TARGETS AND DELIVERABLES SHOULD BE INCLUDED IN SUCH A PARTNERSHIP?**

The partnership should include among others a project to ensure sound collection and recycling operations of materials/products reaching the end of life in Africa. We are aware of the large volumes of post-consumer materials are shipped to non-OECD countries as second-hand products, rather than waste. However these countries have no or not enough infrastructure to recycle these products – as well as the new products - when they reach the end of their life. Recycling takes place at a very local level with virtually no control in accordance with informal and non-ethical practices. The regrettable consequences are a loss of valuable material – the total gold recovery can be as low as 25% while it reaches 95% in modern refining plants – deterioration of the local environment and of local health conditions. The fast growing waste flows in developing countries needs to be addressed and a win-win solution can be developed. In addition and until these abovementioned actions provide results, EU countries should increase the export controls to prohibit or to limit the flow of used products in the countries where no recycling infrastructure exists.

The main objective is to encourage international co-operations between European recycling companies and SMEs in developing regions like Africa to achieve a better supply of secondary raw materials for Europe and the global economy as well as better protection of health and environment and a fair share of the value added chain in developing countries.

The project would consist in converting those engaged in inappropriate or illegal collection and backyard recycling activities in developing countries into collectors, improving both their economic circumstances and their health and local environment. This model has been successfully employed by the lead industry in Senegal for example (where scrap batteries are exported to France) and similar projects are being supported by UNEP or in partnership between EMPA, Umicore and other companies in India.

Implementation should build on ongoing experiences such as the EU-funded project “e-waste in Africa: from Waste to Resource Efficiency”<sup>1</sup>. A necessary pre-condition would be development funding from EU institutions (e.g. European Investment Bank) to help establish such schemes in various developing countries, to improve access to

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<sup>1</sup> The project is implemented by the Basel Convention Coordinating Centre based in Nigeria and the Basel Convention, Regional Centre based in Senegal in co-operation with partners including Swiss EMPA, Öko-Institut, IMPEL, UNESCO and the Partnership for Action on Computing Equipment (PACE).

global raw materials, and enhance health and environmental conditions in developing countries, along with the image and sustainability of EU industry. Development funding initiatives by the EU are crucial to minimising the particular risks and burdens for European companies, which have already been encountered in developing countries especially in the initialising phase of business co-operations.

Besides, the EU-African Union Commission should provide a platform to address issues such as "conflict minerals". The EU should formally engage in consultations on this matter to support the African countries in securing good governance in the exploitation of their resources and to enable fair competition in the trading of, and access to, these resources.

### **POLICY AREA: PROMOTING SKILLS AND RESEARCH, DEVELOPMENT AND INNOVATION**

**Q 24: WHAT IS YOUR IDEA OF A MAJOR RESEARCH AND INNOVATION ACTION THAT WOULD HAVE THE HIGHEST POSITIVE IMPACT ON THE SECURITY OF RAW MATERIALS SUPPLY FOR THE EU INDUSTRIES?**

Non-ferrous metals play a major role for numerous modern high tech and clean tech applications such as dentistry, magnets, photovoltaic, batteries, fuel cells, catalysts, low emissions vehicles, zero emissions buildings, and different kinds of electronic devices as well as opto-electrics. Therefore the demand for many precious and specialty metals (gallium, indium, ruthenium, platinum, tantalum, rare earths, tungsten, molybdenum, etc.) as well as many base metals (nickel, copper, aluminium etc.) has boomed in the recent decades. For Europe this increasing metals stock in the technosphere is an opportunity to secure valuable resources via an extended and profitable circular economy in the future.

The position of the European non-ferrous metals industry as a technological leader in the field of the recycling of non-ferrous metals should be further strengthened by well-directed research programs and projects funded by the EU Commission. The research activities should focus on:

- interdisciplinary research regarding end-of-life product collection, pre-treatment processes and optimisation of the interfaces between several steps and stakeholders involved along the recycling chain,
- optimised treatment of process slags, effluents, etc. (both from primary and from secondary processes), enhanced recovery of by-products,
- in-depth data collection concerning selected relevant products (e.g. sales numbers, composition, product lifetimes, stock data etc.) and transparency of end-of-life material flows,
- innovative new recycling technologies to address non-ferrous metals like rare earth metals, tantalum with "thermodynamical and chemical constraints",
- recycling of critical metals under economic constraints,
- investigations on the likelihood and feasibility of systematic waste deposits as sorted, intermediate stocks for EoL products that cannot be recycled economically today but might become interesting in future.

## **POLICY AREA: RESOURCE EFFICIENCY & RECYCLING**

**Q27: IN YOUR VIEW, AND BEYOND MEASURES ALREADY TAKEN (E.G. THE RECAST OF THE WEEE DIRECTIVE), WHAT PRACTICAL MEASURES CAN BE TAKEN BY THE EU AND BY MEMBER STATES TO PREVENT ILLEGAL SHIPMENT OF OBSOLETE END-OF-LIFE VEHICLES AND ELECTRONIC EQUIPMENT?**

Harmonised implementation and enforcement of existing legislation is essential to guarantee their effectiveness in ensuring that actors operate according to the same rules. Unfortunately, the requirements of the Waste Shipment Regulation (WSR), including the export of wastes only to sites able to treat them in an environmentally sound manner, have not been successfully implemented over the past 15 years. This jeopardises the level playing field principle with regard to access to secondary raw materials - a principle that is key to the competitiveness of EU industry, that is one of the objectives of the RMI and that jeopardises human health and environmental protection in some countries.

Some of the actions that would help a better enforcement of the WSR include

- Strengthen and expand IMPEL network and activities against illegal shipment of waste.
- Encourage (national) efforts to conduct road or ship spot checks by police or customs raid. A minimum number of special inspections for exports to non-OECD countries are required as well.
- Boost cooperation between national customs/enforcers, including an extensive and systematic exchange of information on illegal shipments and setting-up a collective mechanism to inform authorities on illegal shipment flows.
- Make the correspondents' guidelines for WEEE legally binding (as envisaged in the Annex IC of the current Council proposal of the WEEE Directive) and provide for effective enforcement.
- Speed up the finalisation of the correspondents' guideline on ELV, make it legally binding in the next revision or by a separate regulation such as new Annex of the ELV-Directive. Provide for effective enforcement.
- Introduce a similar requirement to Art 6 (5) WEEE Directive in the ELV Directive<sup>2</sup>, unless this requirement is already dealt with in other sectoral legislation.
- Support the "Solving the E-Waste Problem (StEP) Initiative"<sup>3</sup>.
- Enhance awareness (at national level and public level) of illegal streams / channels of (waste) materials which have a potential of environmental harm or loss of valuable material, to avoid illegal shipment.

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<sup>2</sup> According to Art. 6 (5) of the WEEE Directive, green listed WEEE waste exported out of the EU shall only count for the fulfilment of the recovery targets if the exporter can prove that the recycling operation took place under conditions that are equivalent to the requirements of this Directive. Export authorities currently have no instrument at hand to implement Art. 6 (5) effectively. For providing evidence for the equivalent requirements, please refer to our Proposal on "Certification".

<sup>3</sup> <http://www.step-initiative.org/index.php>

- Make intra-EU shipment less burdensome (having waste treated within EU is as difficult as shipping waste to non-OECD countries) e.g. by using a "certification number", which identifies the certified treatment facility involved, in combination with periodic declarations.
- Ensure greater harmonisation of pre-/post-notification systems (notification via flexible electronic systems 24 h before arrival in an EU port and forwarding of information to Customs Authorities).
- Make the existing regulation on pre-authorized facilities a prerequisite condition to all willing to get involved in refining and conversion of scrap metals.

Aurubis believes that action needs to be taken as soon as possible to address the side effects of the lack of enforcement and level playing field. Aurubis proposes to develop a scheme for the certification of pre-processors, refiners and recyclers of waste and secondary raw materials aimed at ensuring level playing field conditions. The certification scheme would contribute to an effective enforcement of the ESM provision of the Waste Shipment regulation. The certification scheme would include simple and possibly graded requirements covering

- environmental aspects,
- process efficiency,
- operational excellence standards and (non-energy) resource efficiency.

The obligation for certification of pre-processors and refiners would apply to all shipments of waste and secondary raw materials between EU-Member States and exported from the EU to third countries. Exports may only be authorised if such final processor is duly identified and certified - thus providing an effective tool for export authorities to enforce the WSR.

**Q28: IN WHAT WAYS SHOULD STATISTICS ON TRADE IN, AND RECYCLING OF, PRODUCTS CONTAINING SECONDARY RAW MATERIALS BE IMPROVED?**

Detailed knowledge of the material streams entering the use phase, the amount of metals existing in society as stock as well as the amount of metals bearing waste leaving the "society stock" at the end-of life stage help to identify trends, enabling industry to tailor its processes to future qualities, and to adjust its capacities to quantities expected in the future.

However, there is a lack of information on important phases of metal flows throughout the life cycle. The missing information has to be replaced by models or best assumptions which involve a high level of uncertainty.

Industry therefore suggests that the EU ensures collection of the following statistical data:

- General Information on scrap flows: Official statistical data bases in combination with the data collection of the International Metal Study Groups provide an overview of metals production, their flows (imports and exports) as well as of some raw materials for primary metals production. However, structured information collection is lacking on secondary raw materials such as scraps.
- Information related to materials in stock: Massive amounts of metals are in use in society (stock). Reliable data on the amounts of these metals are, however, not available. They are important since they define, on the one hand, the new

raw materials qualities that will arrive after their use in the recycling installations. On the other hand the information on both quality and quantity of materials hoarded will be a crucial information basis for the amount and qualities of materials – and when these materials can be expected to enter a recycling scheme.

- Information related to waste disposal: A number of metals and metal bearing articles leaving the use phase do not reach the recovery processes. They are either disposed of in landfills or escape from EU recovery processes through export. Data on these material streams which are lost would allow an assessment of the economic viability of i) extracting metals from historic mining ii) extracting metals from waste destined for landfill, indicate where metals bearing materials can be collected iii) or how their disposal in the future can be prevented and instead be forwarded to a collection scheme.

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