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**REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE  
COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE  
COMMITTEE OF THE REGIONS**

**On the implementation of the Raw Materials Initiative**

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**1. BACKGROUND**

In the Commission Communication of 4 November 2008 "The raw materials initiative – meeting our critical needs for growth and jobs in Europe" (COM(2008)0699) and in the Communication of 2 February 2011 "Tackling the challenges in commodity markets and on raw materials" (COM (2011)0025, hereinafter the 2011 Communication) the Commission recognized that securing reliable and undistorted access to raw materials is an important factor for the EU's competitiveness. The Communications launched and respectively reinforced the Raw Materials Initiative (RMI), an integrated strategy aimed at responding to different challenges related to access to non-energy and non-agricultural raw materials. The Raw Materials Initiative is based on three pillars: (1) ensuring a level-playing field in access to resources in third countries; (2) fostering a sustainable supply of raw materials from European sources; and (3) boosting resource efficiency and recycling.

The Council endorsed the reinforced Raw Materials Initiative in its Conclusions on tackling the challenges on raw materials and in commodity markets of 10 March 2011.

The European Parliament also endorsed the strategy in its Resolution of 13 September 2011. In the Report on an effective raw materials strategy for Europe (2011/2056(INI) the European Parliament asked to be regularly informed on the development of non-energy raw materials in the framework of the RMI and on the fulfilment of the latter's objectives via an annual progress report, also focusing on policy coherence with regard to trade, development and environmental policies and social impacts, as well as data on Critical Raw Materials (CRM).

The Commission adopted its Common Position on this Resolution on 7 December 2011.

In line with the above, the aim of this report is to present the current state of play with respect to the implementation of the Raw Materials Initiative and provide an overview of the ongoing initiatives while highlighting the joint interest for the EU and third countries rich in raw materials to work in partnership.

**2. CRITICAL RAW MATERIALS**

In June 2010 the Commission published an expert report, which established a methodology for the identification of raw materials deemed critical to the EU. The assessment was based on a quantitative methodology using the criteria of economic importance, supply risk and environmental country risk. Supply risk included components such as political and economic stability, level of production concentration, potential for substitution and recycling rate. Forty-one materials were evaluated based on this methodology. The report put forward a list of fourteen critical raw materials: antimony, beryllium, cobalt, fluorspar, gallium, germanium,

graphite, indium, magnesium, niobium, platinum group metals, rare earth elements, tantalum and tungsten.

The critical raw materials list has proven successful in serving as a tool to raise attention of policy-makers, promote co-ordination of national policies regarding mineral supply and critical materials, challenge trade distortive measures regarding critical raw materials, analyse the functioning of the markets, promote research (exploration, substitution, recycling) as well as promote access to deposits in the EU, address problems of illegal exports end-of-life products containing critical materials and undertaking measures for specific materials.

In its 2011 Communication the Commission formally adopted this list and proposed that it will monitor the issues of critical raw materials to identify priority actions, examine them with Member States and stakeholders and regularly update the list of critical raw materials at least every 3 years.

In order to revise the list of critical raw materials by the first half of 2014, and to take into account inputs and recommendations from the public consultation and EP Report, the Commission services has contracted a study. The study will aim at collecting data on the above-mentioned materials needed to calculate criticality; gathering data and analysing the supply chain (interaction and associated risks) and identifying potential bottlenecks with special attention paid to the specific situation of by-products; developing supply and demand scenarios; examining the potential of refining the well-functioning methodology without "altering" it and gathering related data; examining the application of the methodology to wood and natural rubber; as well as calculating and determining the critical raw materials list and formulating recommendations.

The following raw materials are to be examined within this review: the current list of 14 critical raw materials; selected "nearly critical raw materials", such as rhenium and tellurium notably identified during the initial exercise; selected additional materials, such as hafnium, selenium and tin (as in line with new sources, such as the 2011 JRC Report<sup>1</sup> on "Critical Metals in strategic energy technologies"), wood and natural rubber that was added in the scope of the RMI by the Commission's 2011 Communication.

The process will be accompanied by an ad hoc steering group on critical raw materials selected for the first assessment of critical raw materials in 2010 from within the Commission's Raw Materials Supply Group.

The Commission plans to issue a report to the European Parliament and the Council on the review of the critical raw materials list by the end of 2013.

### **3. STOCKPILING**

In the Commission's 2011 Communication the Commission announced that it was "ready to examine with Member States and industry the added value and feasibility of a possible stockpiling programme of raw materials".

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<sup>1</sup> Critical Metals in Strategic Energy Technologies: Assessing Rare Metals as Supply-Chain Bottlenecks in Low-Carbon Energy Technologies, R.L.Moss, E.Tzimas, H.Kara, P.Willis and J.Kooroshy, European Commission, Joint Research Center, Institute for Energy and Transport, 2011.

In order to explore the option of stockpiling, the Commission services contracted a study to carry out a preliminary assessment which analysed different stockpiling policies and practices, including the EU stockpiling programme for oil, examined the current raw material stockpiling schemes employed worldwide and examined the potential costs and benefits of a stockpiling programme of critical raw materials. The independent study considered as a valid option the possibility to organise a voluntary stockpiling scheme by the industry with public financial support. It also recognises that stockpiling can only solve short-term problems whereas long-term shortage of raw materials requires structural solutions with regards to supply (substitution, recycling, domestic extraction). Stockpiling is also an instrument lacking flexibility as volumes cannot be adjusted quickly and the cost of its implementation is substantial. Moreover, stockpiling would require a perfect knowledge of value chains and the uses of each raw material as well as processing facilities (if these facilities are not themselves guaranteed there is not much point in stockpiling). Stakeholders' opinion on stockpiling is also much divided. The results of the study were discussed with the Commission's Raw Materials Supply Group in November 2012 and the reactions on the potential stockpiling programme were negative. No Member State would support a stockpiling scheme as a policy option.

The Commission will continue to monitor this issue.

#### **4. EUROPEAN INNOVATION PARTNERSHIP ON RAW MATERIALS**

Innovation in raw materials can be a key driver for progress within each of the three pillars of the Raw Materials Strategy and should be applied across the entire value chain. Within the Europe 2020 Flagship on Innovation Union, the Commission is launching different partnerships covering various challenges of relevance for our societies. In the 2011 Communication the Commission announced its intention to assess whether to launch an Innovation Partnership on raw materials within the Europe 2020 Flagship on Innovation Union. The European Parliament called upon the Commission to launch the European Innovation Partnership (EIP) on raw materials in its resolution of 13 September 2011.

On 29 February 2012 the Commission therefore adopted a Communication proposing the EIP on raw materials<sup>2</sup> (hereinafter the EIP Communication).

The Competitiveness Council endorsed this proposal on 11 October 2012 in its Conclusions and invited the Commission to launch the Raw Materials EIP and to develop and finalise the Strategic Implementation Plan by the end of 2013.

The EIP will aim to provide Europe with enough flexibility and alternatives in the supply of important raw materials, whilst taking into account the importance of mitigating the negative environmental impacts of some materials during their life cycle. The EIP will address all stages of the value chain, from exploration, extraction, via processing, to recovery and recycling as well as innovations in the area of substitution. One of its concrete targets is actually to support up to ten innovative pilot actions / demonstration plants in the various sectors of the value chain. The EIP is not a funding instrument, but it will bring the different actors

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<sup>2</sup> Communication from the Commission to the European Parliament, the Council, the European Social and Economic Committee and the Committee of Regions "Making raw materials available for Europe's future well-being. Proposal for a European Innovation Partnership on Raw materials" (COM(2012) 82 final).

together to come up with appropriate technical and non-technical solutions to bring innovation to the market. Its objective will be to push Europe to the forefront in exploration, extraction, processing, recycling and substitution by 2020. This EIP will bring together Member States and other stakeholders. The Commission has foreseen five work packages, which will cover technological but also non-technological working areas (e.g. framework conditions, standardisation, knowledge and skills, public procurement) and a work package on international co-operation.

A number of concrete targets should be achieved by the EIP by 2020:

- Setting up to 10 innovative pilot actions, e.g. demonstration pilot plants on exploration, mining, processing, collecting and recycling
- Finding substitutes for at least three applications of critical raw materials
- Setting up a network of Research, Education and Training Centres on sustainable raw materials management
- Using EU standardised instruments for the survey of resources/reserves and 3-D geological map
- Ensuring dynamic modelling of trends: link demand and supply with reserves and complete life cycle assessment
- Ensuring a pro-active European strategy at bilateral and multilateral level

With regards to the governance structure, the High Level Steering Group is assisted by its Sherpa group, and with the technical support of operational groups, will start developing the Partnership's Strategic Implementation Plan (SIP). The objective will be to develop the SIP by July 2013 so as to start its implementation as soon as possible. The SIP will be followed by a Commission Communication in September 2013 which inter-alia will put forward the Commission support to the EIP, e.g. in terms of research and innovation funding priorities, regulatory and policy framework.

## **5. FAIR AND SUSTAINABLE SUPPLY OF RAW MATERIALS FROM GLOBAL MARKETS (PILLAR 1)**

### **5.1. EU Trade Strategy for Raw Materials**

In the 2011 Communication the Commission committed to reinforcing its Raw Materials Trade Strategy in line with development and good governance objectives. The Commission considered it should:

- continue to develop bilateral thematic raw materials dialogues with all relevant partners, and strengthen ongoing debates in pluri- and multi-lateral forums (including e.g. G20, UNCTAD, WTO, OECD); carry out further studies to provide a better understanding of the impact of export restrictions on raw materials markets, and foster a dialogue about their use as a policy tool.
- further embed raw materials issues, such as export restrictions and investment aspects, in ongoing and future EU trade negotiations in bilateral, pluri-lateral and multilateral frameworks.
- pursue the establishment of a monitoring mechanism for export restrictions that hamper the sustainable supply of raw materials, and will continue to tackle barriers distorting the raw materials or downstream markets with dialogue as the preferred approach, but using dispute settlement where justified.

- encourage within the OECD, activities the inclusion of relevant non-OECD members in the work on raw materials, and explore further multilateral and pluri-lateral disciplines including consideration of best practice.
- use competition policy instruments to ensure that the supply of raw materials is not distorted by anti-competitive agreements, mergers or unilateral actions by the companies involved.
- take forward the above-mentioned actions, and further analyse priorities for raw materials in relation to third countries through autonomous measures, bilateral and multilateral frameworks and dialogue; and continue to pursue a consistent EU trade policy on these priorities.
- the trade-related raw material policy commitments of the RMI have been implemented through inclusion of rules in agreements to achieve sustainable supply of raw materials at multilateral and bilateral level, including WTO accession negotiations and Free Trade Agreements (FTAs). Other important actions were focusing on WTO enforcement activities notably in relation to the successful activities as pursued under the WTO dispute settlement case on export restrictions against China's measures on raw materials.
- effective action has been taken resulting in provisions in a large number of agreements. The Commission concluded or agreed on the text of disciplines on export duties in FTAs with Colombia, Peru, and Ukraine and in an Association Agreement with Central America. In these agreements, the EU managed to obtain a horizontal ban of both existing and future export duties while allowing for certain transition periods or limited exceptions. Bilateral negotiations are on-going with a number of trade partners including Canada, India, Malaysia, Mercosur and Singapore. In some negotiations, provisions on investment protection are tabled, which are in particular relevant to the extractive industry.

Moreover, raw materials were addressed through trade provisions in the negotiations of Partnership and Co-operation Agreements, which were concluded with Mongolia in 2010 and launched with Australia, Kazakhstan and Russia.

In line with the Cotonou Agreement's objective to support deeper regional integration, modernise our economic relationship and use trade to boost economic growth, as recalled in the recently adopted Communication "Trade, growth and development – tailoring trade and investment policy for those countries most in need"<sup>3</sup>, the EU started negotiations with African, Caribbean and Pacific countries in 2002 to conclude Economic Partnership Agreements. Negotiations, including on raw materials provisions, continue with all regions duly taking into account the objectives of the development partners.

As regards negotiations in the WTO in the context of Russia's WTO accession negotiations (completed at the end of 2011), the Commission in addition to commitments undertaken on existing export duties as part of the accession protocol, secured an additional agreement not to resort to export duties on a large number of raw materials. WTO accession negotiations are on-going with Kazakhstan.

There was the successful launch and conclusion of a WTO dispute settlement case against export restrictive measures applied by China on nine raw materials in violation of WTO

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<sup>3</sup> Communication from the Commission to the European Parliament, the Council and the European and Social Committee and the Committee of Regions "Trade, growth and development. Tailoring trade and investment policy for those countries most in need", COM(2012) 22 final.

commitments. The Appellate Body confirmed the ruling of the panel in January 2012, giving a clear and final interpretation of China's commitments under the WTO. On 13 March 2012, the EU launched a second challenge of China's export restrictions on raw materials including 17 rare earths, tungsten and molybdenum.

A number of outreach activities were pursued in international forums such as G20 and the OECD aiming at fostering a global dialogue on how to achieve a framework to ensure a sustainable supply of raw materials.

The second activity report<sup>4</sup> on EU Trade Policy for Raw Materials of April 2012 provided detailed information about the implementation of the Raw Materials Initiative in the area of trade policy.

The Commission will continue to monitor ongoing and future negotiations of FTAs and other bilateral frameworks to ensure that the issue of raw materials is considered and integrated, where appropriate.

## **5.2. Raw materials dialogues and diplomacy**

In the 2011 Communication, the Commission stated that the EU will actively pursue a "Raw Materials Diplomacy" with a view to securing access to raw materials, in particular the critical ones, through strategic partnerships and policy dialogues.

The Raw Materials Diplomacy aims to engage with partners through strategic partnerships and policy dialogues to exchange information and work together to address the challenges on raw materials' markets. This path has been pursued with the United States, Japan, Russia, Argentina, Brazil, Colombia, Mexico, Uruguay, Greenland, China and countries of the Union for the Mediterranean while further dialogues are in preparation.

### *5.2.1. United States*

On 29 November 2011, the Transatlantic Economic Council (TEC) agreed to a Raw Materials Work Plan, which includes preparation of a joint inventory of mineral raw materials data and analysis maintained by both sides. As part of this effort, the two sides were instructed to consider the results of ongoing European Commission and United States Government studies of raw materials resource availability, trade flows, and criticality and of other supply and demand analyses, such as the 2010 European Commission report by an ad-hoc expert group<sup>5</sup> on critical raw materials and the strategy of the U.S. Department of Energy on critical materials. The TEC Innovation Action Plan<sup>6</sup> has been launched in the area of raw materials, covering different policy aspects including trade and substitution.

An EU-US Expert Workshop on mineral raw material flows and data was held in Brussels on September 2012. The workshop compared information available to both jurisdictions in terms of primary and secondary raw materials, compared methodologies for review of the critical raw material list and discussed areas where material flow information is insufficient. The European Union and the United States will further explore steps to create a joint raw materials data inventory and other means to share raw materials data in the context of current policies on both sides to enable reliable and diverse raw materials supplies.

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<sup>4</sup> "EU Trade Policy for Raw Materials, Second Activity Report", European Commission, Directorate-General for Trade, May 2012.

<sup>5</sup> "Critical raw materials for the EU", Report of the Ad-hoc Working Group on defining critical raw materials, July 2010.

<sup>6</sup> Transatlantic Innovation Action Partnership Work Plan, Transatlantic Economic Council, October 27, 2009.

The European Union and the United States are looking to define areas in which the recycling of used electronics can be improved, particularly when that recycling can address resource scarcity of critical materials and lessen the impact on the environment throughout the life cycle of the electronics. In October 2012 a conference on “Best Practices in Management and Stewardship of Used Electronics” in Washington brought together the representatives of the U.S. Government and the European Commission as well as European and American companies and trade associations to explore new paths for transatlantic co-operation in the area of electronic waste management.

#### *5.2.2. Japan*

Two workshops took place in Washington in October 2011 and in Tokyo in March 2012 with a focus on research in the area of raw materials, particularly substitution. The next trilateral meeting between the EU, US and Japan with government representatives, the European Commission and industry delegations will take place on 29-30 May 2013 in Brussels. The focus this year will be on the development and implementation of new models in efficient management of critical materials.

#### *5.2.3. Russia*

The meeting of the industrial policy dialogue sub-group between the Russian government and the European Commission with industry delegations took place in October 2012 in St Petersburg. The Commission gave an overview of the latest developments in raw materials policy as well as an update on industrial policy.

#### *5.2.4. Latin America*

In 2011 Vice-President Tajani signed Letters of Intent to launch bilateral co-operation on raw materials with Chile and Uruguay and issued a joint press release with Argentina. Letters of Intent were also signed with Columbia and Mexico in May 2012.

The implementation of the Memorandum of Understanding with Uruguay was further discussed in September 2012. Local contact points were appointed. Both sides agreed to exchange best practice and develop a roadmap for concrete actions to strengthen mutual co-operation in particular in the areas of geological knowledge, green economy and energy efficiency, recycling, transparency, training, sustainability, innovation, etc. Uruguay was offered to participate as observer in the European Innovation Partnership.

#### *5.2.5. Euro-Mediterranean countries*

Memoranda of Understanding between the Commission and Morocco and Tunisia were signed in November 2012. A workshop on raw materials in the context of the Euro-Mediterranean industrial co-operation took place in October 2012 with the countries of the Union for the Mediterranean.

#### *5.2.6. China*

The Commission is engaged in two dialogues related to raw materials with China - with the NDRC (National Development and Reform Commission), a Metals Working Group and with the Ministry of Industry and Information Technology (MIIT). The latter dialogue takes place within a Working Group on Raw Materials established in 2010.

The last meeting took place in March 2012 in Beijing, and the following is to take place in the second half of 2013 in Brussels. A workshop on recycling and a study visit for Chinese experts in Europe should also take place in the second half of 2013.



### 5.2.7. *Greenland*

Greenland, as Europe's closest resource-rich neighbour, possesses significant reserves of rare earths. In June 2012, the Commission signed a Letter of Intent on co-operation on raw materials with the Greenlandic Government. Both Greenland and the European Union agreed to work together to establish a formal cooperation on raw materials thereby extending the current good cooperation in the framework of the EU – Greenland Agreement.

The letter of intent proposes for areas of co-operation: geological knowledge; analysis of infrastructure and investment needs related to the exploitation of mineral resources; competence building; environmental issues related to mining and social impacts of mining.

The letter also recognizes the importance of fair competition conditions and market access in order for the co – operation to be mutually beneficial.

To follow-up on the dialogue established by this Letter, a workshop with European industry, both the mining industry and end-user, took place in September 2012 to discuss the potential of co-operation with Greenland. A workshop between the Commission and the government of Greenland took place on the same day to discuss the future of this dialogue and agree on concrete projects.

## **6. DEVELOPMENT POLICY**

Sustainable mining can and should contribute to sustainable development. The EU's development policy also has an important role to play in Raw Materials Diplomacy, building win-win situations for developing countries and the EU in the area of raw materials.

### **6.1. Joint Africa-EU Strategy and ACP framework**

In the context of the Strategic Partnership between Africa and the EU, both sides agreed to intensify their co-operation in the area of raw materials. The College to College meeting between the African Union Commission (AUC) and the European Commission (EC) in June 2010 identified the basic principles for joint work which were endorsed by the III. EU-Africa Summit in November 2010 and integrated in the Action Plan 2011-2013.

The bilateral co-operation between the AUC and the EC on raw materials and development issues is based on the EU Raw Materials Initiative and the African Union policy on mining and minerals, the 2009 'African Mining Vision'<sup>7</sup>. The co-operation focuses on three areas: governance, investment and infrastructure and geological knowledge and skills. The Commission and Member States work jointly on these issues. The EU remains open to requests from African countries within the framework of development policy programs. At this stage, no specific requests have been received under regional or national programming. Furthermore, the Commission intends to promote EU-Africa cooperation in this critical area through the new Pan-African Program under the DCI as proposed within the new Multi-annual Financial Framework 2014-2020.

The Commission recognises the crucial role of good governance for the sustainable use of natural resources as an engine of growth for Africa and in this vein delivered a capacity building workshop at technical level on mining taxation in Addis Ababa in December 2011. The conclusions of the Workshop were presented during the African Union Mining Ministerial in December 2011. In agreement with the African Union, the Commission plans to organize a second edition of the Mining Taxation Workshop in 2013 subject to availability of

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<sup>7</sup> Africa Mining Vision, African Union, February 2009.

funds within the African Union budget. The joint conference also identified a need for a capacity building project on contract negotiations.

At political level, a High-Level Conference on the EU-Africa Partnership on Raw Materials - Translating Mineral Resource Wealth into Real Development for Africa took place in January 2012 in Brussels. The conference created the political momentum for the implementation of the Joint Strategy's Action Plan 2011-2013 on raw materials and engaged all stakeholders in this process. It delivered recommendations for implementation in all three areas of co-operation.

The Commission committed in its RMI to continue to assess – with African countries – the feasibility of assisting further co-operation between both continents' geological surveys and to promote co-operation in this area in multilateral forums such as UNESCO's Geosciences Programme. Following the conference recommendation in this area to strengthen the co-operation between the African and European geological surveys, a scoping study on this subject is foreseen to commence in 2013. Its aim is to establish joint projects to improve knowledge about African deposits, set up a network for delivery of trainings to the African surveys as well as for exchange and digitalisation of data. The European geological surveys have a crucial role to play in this process.

The European Investment Bank is actively present in the mining sector in the framework of the ACP Investment Facility. However, due to the recent downturn in the mining cycle for some minerals and the pressure from the NGOs, the Bank has been more selective in its choice of projects to be financed, carefully assessing the merits of each one identified with due regard given to environmental and social aspects<sup>8</sup>.

## **6.2. Promoting financial transparency**

In the 2011 Communication the Commission made a commitment to "promote more disclosure of financial information for the extractive industry, including the possible adoption of a country-by-country reporting requirement"<sup>9</sup>. On 25 October 2011 the Commission adopted a legislative proposal requiring the disclosure of payments to governments (e.g. corporate income taxes, royalties, fees, production entitlements, bonuses and other material benefits) on a country and project basis by listed and large unlisted companies with activities in the extractive (oil, gas and mining) and logging of primary forest sectors. Following discussions within both the Parliament and Council, and a number of trilogues among the latter and the Commission, a political agreement has been reached now for the adoption of the corresponding legislation.

The Commission also proposed in 2010 Tax and Development Communication and its 2011 Communication to enhance European financial and political support for the Extractive Industries Transparency Initiative (EITI), and help developing countries implement it.

The EITI is a global standard that promotes revenue transparency in resource-rich countries, requesting companies to publish payments to governments and governments to publish the

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<sup>8</sup> 566 million EUR under first financial protocol of the Cotonou Agreement (2003-2008) went to the mining sector which represented 15% of the initial endowment of the ACP Investment Facility and EIB Own Resources.

<sup>9</sup> The US adopted in July 2010 a disclosure requirement (section 1504 of the US Dodd Frank Act) that requires all extractive companies (e.g. oil, natural gas or minerals) listed on US stock-exchanges to publish payments made to governments (e.g. royalties, fees, production entitlements, bonuses, and other material benefits) on a per country-and-project basis. In order to enforce this legislation, final implementing rules were adopted on 22 August 2012 by the US Securities Exchange Commission (SEC).

revenues effectively received from companies, thus enhancing transparency and aiming to reduce tax avoidance and corruption in extractive activities. This is particularly important as developing countries often finance an important share of their budget from these activities and as the potential for future revenues remains high in times of globally increasing scarcity.

The EITI brings together country stakeholders from government, civil society, oil, gas and mining companies and investors into a national Multi-Stakeholder Group. This unique set-up is an excellent example of how to pursue better governance<sup>10</sup>.

The EU supports the EITI, both politically and financially. The Commission is a member of the EITI board and encourages countries rich in natural resources to join the initiative. Financially, the EU has funded directly some EITI capacity building activities, such as the bi-annual EITI National Co-ordinators Meetings, which allows for peer to peer reviews and capacity building of the National Co-ordinators. Furthermore, the EU contributes to the World Bank-administered EITI Multi-Donors Trust Fund which fulfils two important aims: (i) it assists countries to accede to the EITI or to maintain their status as compliant countries; (ii) it helps civil society organisations to contribute more effectively to this transparency effort and how to put to good use the information obtained through the disclosure of tax payments.

### **6.3. Promoting supply chain transparency**

In the 2011 Communication, the Commission recognises that many of the raw materials which the EU imports are produced in a few countries, some of which are subject to low political and economic stability<sup>11</sup>.

In the same 2011 Communication, the Commission also proposed to "examine ways to improve transparency throughout the supply chain and tackle, in coordination with key trade partners, situations where revenues from extractive industries are used to fund wars or internal conflicts".

The Commission is closely involved in international efforts to address the issue of conflict minerals and strongly supports the OECD's Due Diligence Guidance on Responsible Supply Chains of Minerals from Conflict-affected and High Risk Areas. The Commission also participates in the meetings of the ICGLR (International Conference on Great Lakes Region)-OECD-UN Group of Experts on Due Diligence for Responsible Sourcing the 3Ts (tin, tungsten and tantalum) and Gold Supply Chains and also encourages the industry to implement the guidance.

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<sup>10</sup> With its focus on the transparency of payments (corporate taxes, royalties, etc.) by multinational companies to their host countries, the EITI is doing much in fostering the development agenda. It is setting the ground for Parliaments and for civil society in countries rich in natural resources to enquire about, to understand, to assess whether their own countries receive the payments which they are due.

Currently the EITI is seeking to strengthen its reporting requirements to further improve the governance in candidate and compliant EITI countries. This will include among other areas a description of how extractive industry revenues are allocated (inside and outside the budget), the disclosure of subnational transfers, contract transparency (public accessibility) and the introduction of project-by-project reporting.

With these changes in the requirements, the EITI increases its role as an important instrument to attain EU development policy objectives by promoting transparency, domestic accountability and thus enhancing public and corporate governance in resource-rich developing countries.

<sup>11</sup> For one of these increased-risk countries – the Democratic Republic of Congo – the OECD considers that trade in certain minerals, namely in tantalum, tungsten, tin and gold, has a potential to exacerbate regional conflict in specific eastern Congolese regions.

The International Taskforce on illegal exploitation and trade of natural resources in the Great Lakes Region was reactivated in May 2012. The Taskforce provides the international community and the OECD Secretariat with a platform for discussion.

As regards traceability of minerals, the Commission is exploring ways of improving transparency throughout the supply chain, including aspects of due diligence, thereby building on the experience of the well-established Kimberley Process, the EITI, the Forest Law Enforcement, Governance and Trade (FLEGT) Action plan and the Timber Regulation. The Commission is also exploring ways to provide political and financial support to the "Regional Initiative on Illegal exploitation of Natural Resources" of the International Conference for the Great Lakes Region which includes the set-up of a mechanism aiming at certifying conflict free minerals sourced in the region. This process is part of a broader comprehensive response to contribute to curb the link between the financing of armed groups and the exploitation of natural resources in the Great Lakes region which also includes EU support to the use of the OECD due diligence guidance for responsible supply chains management. An exploratory workshop to address due diligence and explore possible EU action took place in December 2012. Moreover, the Commission launched a public stakeholder consultation in March 2013 to get interested parties' views on a potential EU initiative for responsible sourcing of minerals coming from conflict-affected and high-risk areas – for example, war zones, post-war zones, and areas vulnerable to political instability or civil unrest. The Commission will use the results of the public consultation to decide whether to complement and/or support in a reasonable and effective manner on-going due diligence initiatives on responsible sourcing of minerals. Any EU action in this field must also take into account the administrative cost burden for the industry to avoid withdrawal of operations from those countries.

## **7. FOSTERING SUSTAINABLE SUPPLY WITHIN THE EU (PILLAR 2)**

### **7.1. Facilitating Exchange of Best Practices**

The Commission acts mainly as a facilitator for the exchange of best practice as many of the areas related to extractive industries fall within the competence of the Member States.

In the 2011 Communication the Commission considered that the following practices are particularly important in promoting investment in extractive industries:

- defining a National Minerals Policy, to ensure that mineral resources are exploited in an economically viable way, harmonised with other national policies, based on sustainable development principles and including a commitment to provide an appropriate legal and information framework;
- setting up a land use planning policy for minerals that comprises a digital geological knowledge base, a transparent methodology for identifying mineral resources, long term estimates for regional and local demand and identifying and safeguarding mineral resources (taking into account other land uses) including their protection from the effects of natural disasters;
- putting in place a process to authorise minerals exploration and extraction which is clear, understandable, provides certainty and helps to streamline the administrative process (e.g. the introduction of lead times, permit applications in parallel, and one-stop-shop when the Member States' system allows for it).

Following the launch of the Commission's Raw Materials Initiative in 2008, an increasing number of Member States (such as France, Germany, Finland, Greece, the Netherlands and recently Portugal) have been developing national strategies, which can be considered as complimentary to the EU raw materials strategy.

In 2010 the Commission also provided guidance on how extraction and the protection of sensitive ecosystems can take place by issuing the Guidelines on Non-Energy Extractive Industry (NEEI) and Natura 2000<sup>12</sup>. Regarding monitoring of the progress of NEEI and Natura 2000 guidelines, appropriate indicators were included in a proposed set of indicators.

The Working Group on the exchange of best practices in land use planning, permits and geological knowledge sharing was set up in 2009 in order to encourage improvements of the current framework relating to the activities of extractive industries. The Working Group produced a report on the exchange of best practice in minerals policy, land use planning, permits and geological networking in June 2010.

The Commission proposed to "assess with the Member States, in full respect of the subsidiarity principle, the feasibility of establishing a mechanism to monitor actions by Member States in the above area, including the development of indicators".

The indicators proposed by the Commission cover the following areas:

- National Minerals Policy indicators (legal framework indicators and information framework indicators)
- Land Use Planning indicators
- Authorisation and Permits indicators including the application of the Guidance on NEEI and Natura 2000.

The indicators shall enable the Commission and Member States to assess the current situation and identify areas where improvement will be appropriate on a voluntary basis. On the basis of the responses received from the Member States to the proposed indicators the Commission will proceed to propose a set of indicators to be regularly monitored. The questionnaires with indicators were sent to Member States, and preliminary results of replies were discussed at the RMSG meeting in November 2012. The majority of Member States have responded, as well as other countries, regions and industry. In-depth analysis and evaluation is taking place. The results will be presented in mid-2013 and will provide input to the EIP.

## **7.2. Enhancing EU knowledge base**

The Commission proposed to assess with the Member States the scope for increased synergies between national geological surveys that would allow for economies of scale, reduced costs and increased potential to engage in joint projects (e.g. harmonised minerals database, European Raw Materials Yearbook). In the medium term, any synergies should contribute to an improved European raw materials knowledge base in a co-ordinated way, in particular taking into account the official road map and progress in implementing the European Spatial Data Infrastructure (as defined by the Directive 2007/2/EC – INSPIRE) by all EU Member States as well as future opportunities within the Copernicus programme.

Fulfilling its commitment to "further enhance the knowledge base necessary for an efficient raw materials strategy" the Commission launched several studies and research projects.

### *7.2.1. Availability of data on resources and reserves*

Since data on mineral resources is included in the data scope of the INSPIRE directive access, availability as well as comparability of data/information related to mineral reserves, resources and endowments in the EU Member States should be improved by 2020.

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<sup>12</sup> EC Guidance on undertaking new non-energy extractive activities in accordance with Natura 2000 requirements, European Commission, July 2010

Meanwhile due to the unavailability of the data on resources and reserves of primary raw materials within the remit of EUROSTAT and the need to collect this data directly by the Member States' national geological surveys the Commission launched a study on structured statistical information on the quality and quantity of the EU raw materials deposits. The study will identify the gaps and steps to be taken to reach an agreement between the national authorities to achieve interoperable coherent and consistent data. The synergy between the results of the study and with benefits of relevant parts of INSPIRE will be sought in order to improve the availability of information on key raw materials to policy makers and decision makers at Member States and EU level to the benefit of the competitiveness of EU extractive industries. The study will provide also data to be published in the frame of the Natural Resources Data Centre, operated by Eurostat.

### *7.2.2. Innovative Technologies and Possible Pilot Plants*

The EIP Communication foresees amongst its medium term (2014-2020) goals to enable up to 10 innovative pilot plants for raw materials extraction, processing, product design and recycling. The study “Raw Materials: Study on Innovative Technologies and Possible Pilot Plants” (RAMINTECH) will map the potential for relevant pilots in the EU which have the potential for significantly-improving sustainability and supply of raw materials along the entire value chain and analyse gaps where the EU needs to build up a competence.

This long-list will be collected through an intensive search among stakeholders from the relevant areas in the so-called collection phase. The project will ensure that the potential of developments in basic research, which will most likely reach the pre-feasibility status by 2015, is considered. A forecast of solutions of the future (time horizon of 2030) will be indicated.

The project will develop a set of criteria, indicators and methodologies to allow a matrix analysis of the long-list of proposed pilot plants that ensures a fair and transparent selection procedure. These criteria include methods to estimate the impact of pilot actions on access, acceptance, sustainability and safety and will form the basis for the (web-based) questionnaire that has been distributed among stakeholders in order to enable them to suggest innovative technologies and pilot plants.

In-depth analyses of (approximately) 10 selected pilot areas/types with illustrative examples will be provided. Analyses will include at least three technologies for each of the key areas as identified for further analysis in detail as case-studies (analysis of the steps needed to commercialize the outcome of a selected pilot plant and the benefits to society (including benefits to SMEs).

### *7.2.3. European Rare-Earth Competency Network*

Rare earth elements (REE) are vital inputs for the EU economy, and are particularly crucial for the development and production of modern high-tech and environmentally-friendly goods such as electric cars, photovoltaics or energy efficient light bulbs. Since global demand is growing and rare earths are difficult to substitute or to recycle, Europe is facing multiple challenges to ensure its security of supply. Starting from 2013, import data on the most critical raw materials for wind energy (magnets in the turbines), neodymium and dysprosium, are collected for the purpose of official statistics by means of new special statistical codes in the customs tariff.

On the request of the European Parliament the Commission launched a call for seeking professional support to establish the European Rare-Earth Competency Network (ERECON), a network that should bring together experts from Europe's universities, research institutes, policy-makers, think tanks, industry and experts from outside the EU in order to advance

exchange of best-practice on REE, increase the understanding of the special properties of REE, make recommendations on research and promote the sustainable mining, recyclability and substitution of REE.

The main purpose of ERECON should therefore be to provide a framework that would enable participants to effectively contribute with their knowledge and expertise to discussions on rare earths in the above fields. ERECON should aim to ensure in depth understanding of the recycling and substitution of rare earth materials, but also covering aspects of their value chain, including exploration, extraction, processing, and refining, which are relevant to the sustainable supply of the EU.

The ERECON project is expected to facilitate open and wide-ranging discussion among experts by establishing the appropriate organisational structures and meeting opportunities, to create a network of excellence, synergies and cross-disciplinary exchange in order to enhance knowledge on the most efficient use of rare earth elements as well as REE mining and refining.

The Commission will launch an ERECON network of excellence and interdisciplinary alliance in the first half of 2013. The Network should be active for roughly two years, during which four expert working groups will meet at different workshops to discuss REE mining, REE as process enablers and REE in key applications.

#### *7.2.4. Research projects*

Research and development in the area of raw materials is supported by the EU's 7th Framework Programme with nearly €200 million both from the Industrial Technologies and the Environment Programme as well as the Socio-economic Sciences and Humanities Programme. Over €60 million are already running projects.

The ProMine research project has improved the geological knowledge base and has provided some additional information on Europe's primary raw materials potential.

The EuroGeoSource research project provides harmonised spatial geological and geographical data sets fully utilising (testing) the draft of the INSPIRE legally binding data specifications on Mineral and Energy resources as well as the INSPIRE web based, distributed infrastructure.

Both initiatives provide information of importance for land use planning and strategic planning for long term decisions – such as investments in mining and the efforts needed to complete the permit process – rely on the quality and availability of data.

ProMine and I2MINE projects are operational in the area of mining, extraction and handling of raw materials. The EURARE project concerns rare earths exploration and exploitation and a cluster of projects related to rare earths recycling for high tech waste streams are under negotiation (projects RECLAIM, REMANENCE, RECYVAL NANO).

The main focus in the materials related projects is on the reduction and substitution of rare earth elements (DRREAM, ROMEO, NANOPYME, and REFREPERMAG) and platinum group metals (FREECATS and NEXT-GEN-CAT).

In 2013 the following projects will become operational: “Mineral Extraction and Processing in Extreme Environments (Deep sea/ Arctic Regions)”, and the “European Intelligence Network on the Supply of Raw Materials”. Currently three materials research projects on the substitution of critical materials involving coordinated activities with Japanese teams are under negotiation.

The Commission carries out dedicated studies to support the development of the EU raw material strategy through the work programme of its Joint Research Centre (JRC) focusing in particular on security-of-supply issues in product supply chain and end-of-life management options, including through eco-design and in 2012, a workshop focused on methodological aspects for supply chain sustainability assessment.<sup>13</sup> Furthermore in 2011, a report was published<sup>14</sup> that assessed the raw materials needs of the energy sector for the implementation of the European Strategic Energy Technology Plan, which identified the critical metallic elements, the supply of which if disrupted could limit the exploitation of renewable energy sources. A follow-up study with a broader scope will be published by the JRC in Summer 2013.

The Commission also facilitates the interaction between stakeholders within five European Technology Platforms: Sustainable Mineral Resources (ETP-SMR), Manufuture (Manufacturing), EuMaT (Advanced Materials), SusChem (Sustainable Chemistry) and Forest-Based Industries (FTP) Construction (ECTP).

The ERA-MIN network on raw materials is operational since November 2011 with the aim of improving involvement of Member States authorities and also national stakeholders. CRM\_Innonet (a FP7 funded coordination action) was launched on 1 November 2012. This network is a dynamic, open networking initiative to facilitate dialogue and exchange of ideas and to promote synergies in the field of substitution of critical raw materials.

### **7.3. Promoting Research and Skills**

Recognising the pivotal role of research and skills in addressing Europe's raw materials challenges the Commission committed to "continue to support the creation of sectoral skills' councils at European level when an initiative comes from stakeholders such as social partners or the relevant observatories and promote research and development in the raw materials value-chain including extraction, processing, recycling and substitution".

In the context of Horizon 2020, it is expected that raw materials will be reflected as a societal challenge, with a dedicated budget.

In the framework of the European Institute of Innovation and Technology (EIT), the Commission included raw materials on the future Strategic Innovation Agenda of the EIT for 2014-2020 and as a topic of one of the future Knowledge and Innovation Communities (KICs), to be launched in 2014.

Co-operation with key technology driving economies is supported under the TEC Innovation Action Partnership with the US. Moreover, two trilateral EU-US-Japan workshops have taken place: one in Washington in October 2011 and one in Tokyo in March 2012, with the purpose of exploring opportunities for common approaches in the area of research on raw materials, with a particular focus on substitution.. The Third EU-US-Japan Trilateral Conference on Critical Materials will take place on 29-30 May 2013 in Brussels. It will focus on the development and implementation of new models in efficient management of critical materials.

The EIP Communication includes research and skills objectives.

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<sup>13</sup> <http://lct.jrc.ec.europa.eu/assessment/ResourceSecurity-SecuritySupply>

<sup>14</sup> [http://ec.europa.eu/dgs/jrc/index.cfm?id=1410&obj\\_id=14150&dt\\_code=NWS&lang=en?](http://ec.europa.eu/dgs/jrc/index.cfm?id=1410&obj_id=14150&dt_code=NWS&lang=en?)



## **8. BOOSTING RESOURCE EFFICIENCY AND PROMOTING RECYCLING (PILLAR 3)**

### **8.1. Better Implementation and Enforcement of Existing EU Waste Legislation to Promote Recycling & Resource-efficiency**

In the 2011 Communication, the Commission proposed to:

- review the Thematic Strategy on waste prevention and recycling to develop best practice in collection and treatment of key waste streams, in particular those which contain raw materials with a negative impact on the environment. When necessary, the availability of recycling statistics will be improved;
- support research and pilot actions on resource efficiency and economic incentives for recycling or refund systems;
- carry out an ex-post evaluation of the EU waste acquis, including an assessment of areas where legislation in the various waste streams could be aligned to improve coherence. This would include the effectiveness of deterrents and penalties for breaches of EU waste rules;
- review the action plan on sustainable consumption and production to identify what additional initiatives are necessary in this area;
- analyse the feasibility of developing eco-design instruments (i) to foster more efficient use of raw materials, (ii) ensure the recyclability and durability of products and (iii) promote the use of secondary raw materials in products, notably in the context of the Ecodesign Directive<sup>15</sup>; and
- develop new initiatives to improve competitiveness of EU recycling industries notably by introducing new market based instruments favouring secondary raw materials.

The Commission also included sustainability issues – including waste – in the new integrated industrial policy<sup>16</sup>.

The Commission launched in 2012 a 'fitness check' of five waste stream directives and waste management targets.

The methodology for the preparation of Ecodesign Regulations for energy-related products (MEErP) is being currently reviewed in order to strengthen resource efficiency aspects. The Ecodesign Directive allows setting product requirements for those environmental impacts which are found to be significant. To support this analysis, the Commission's JRC recently developed and applied multi-criteria methods for the assessment of resource efficiency, focusing on reusability, recyclability, recoverability, recycled content, use of priority resources and durability.<sup>17</sup>

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<sup>15</sup> Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products.

<sup>16</sup> Communication from the Commission to the European Parliament, the Council, the European Economic

and Social Committee and the Committee of Regions, "A Stronger European Industry for Growth and Economic Recovery - Industrial Policy Communication Update", COM(2012) 582 final.

<sup>17</sup> *Refined methods and Guidance documents for the calculation of indices concerning Reusability/Recyclability/Recoverability, Recycled content, Use of Priority Resources, Use of Hazardous substances, Durability.* Ardente F., Mathieux, F. European Commission, Joint Research Center, Institute for Environment and Sustainability, 2012 (<http://lct.jrc.ec.europa.eu/pdf-directory/Report%20-%20Refined%20methods%20and%20guidance%20documents-final.pdf>)

## 8.2. Strengthen the Enforcement of the Waste Shipment Regulation

The problem of environmental dumping of waste products also occurs in case of illegal shipments of waste to third countries. During a co-ordinated inspection campaign throughout 2008-2011 involving 22 European countries, the European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) found that 19% of inspected shipments were in violation of the EU Waste Shipments Regulation. Of those, 37% were illegal shipments<sup>18</sup>. The inspections were targeted, so this number is not necessarily representative for all shipments.

To address shortcomings in the implementation and enforcement of the Waste Shipment Regulation, in the 2011 Communication, the Commission proposed to:

- ensure precise and workable inspection standards for waste across the EU. This will allow for further efforts to facilitate the control of shipments by customs authorities;
- consider using FP7 research funding to help improve technologies for detection, identification, tracking and location of illegal shipments;
- examine the feasibility of applying a global certification scheme for recycling facilities to the export of waste streams, building on environmentally-sound management criteria;
- build on IMPEL, work with Member States to assess the feasibility of a formal EU-level mechanism for the enforcement of the EU acquis.

As such, in 2011 the Commission consulted stakeholders and the public on possible EU legislative criteria and requirements for waste shipment inspections. The Commission is currently assessing the impacts of possible future legislative and non-legislative measures to curb illegal shipments of waste.

In order to assess the feasibility of applying a global certification scheme the Commission launched a study, which has recently been finalised. Waste exports are subject to the Waste Shipment Regulation, which defines the obligations and enforcement measures that need to be taken by Member States and waste exporters so that waste is exported, transported and treated in an environmentally sound manner. However, there is currently no mechanism in place for authorities and/or exporters to be able to demonstrate that the waste exported for recovery will be treated in line with the Waste Shipment Regulation. The purpose of this study was, therefore, to provide a detailed description of existing EU, third country and world standards applying to waste recycling plants and/or to other similar plants, to evaluate what measures would be necessary to ensure that waste exported from the EU to third countries is treated in an environmentally-sound manner and to propose a series of options of how to demonstrate and verify compliance with Environmentally Sound Management of Waste (ESM), outlining advantages and disadvantages for all stakeholders and authorities directly and indirectly affected.

The Commission will now assess the best way forward in close co-operation with relevant stakeholders.

Within the context of international co-operation with the US under the TEC, one of the five areas for potential co-operation was co-operation on waste shipment and recycling. A workshop under TABD (Trans-Atlantic Business Dialogue)/TEC took place in Washington in October 2012 on "Best Practices in Management and Stewardship of Used Electronics".

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<sup>18</sup> EEA report, "Movements of waste across the EU's internal and external borders", No 7/2012.

The Commission plans to organise a workshop on "Best practices to stop illegal shipments of waste-a role model exercise between three main harbours (Antwerp, Rotterdam, Hamburg)".

Research funding from the 7<sup>th</sup> Framework Programme to help improve technologies for detection, identification, tracking and location of illegal shipments has been used to commission a study which will include both technical and non-technical research to detect and locate illegal shipments.

## **9. THEMATIC ANNUAL EVENT AND COORDINATION**

The Commission committed to hold regular public discussion through an annual thematic event that would promote the awareness of the challenges ahead and take stock of the progress made<sup>19</sup>.

In 2011 the annual thematic event was devoted to development policy aspects of the Raw Materials Initiative. The High Level Africa-EU Conference on Raw Materials took place on 26 January 2012.

The thematic annual event in 2013 will be devoted to the European Innovation Partnership.

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<sup>19</sup> The Commission established an Inter-Service Taskforce on Raw Materials, with the aim to guide further implementation of the EU Raw Materials Strategy. This also corresponds to a call made by the European Parliament in its Resolution of 13 October 2011. The first meeting of the group took place on 26 April 2012.