



EUROPEAN PARLIAMENT

2009 - 2014

---

*Committee on Industry, Research and Energy*

---

**2011/XXXX(INI)**

10.3.2011

## **DRAFT REPORT**

on an effective raw materials strategy for Europe  
(2011/XXXX(INI))

Committee on Industry, Research and Energy

Rapporteur: Reinhard Bütikofer

Rapporteur for the opinion (\*): Judith A. Merkies, Committee on the  
Environment, Public Health and Food Safety

(\*): Associated committee - Rule 50 of the Rules of Procedure

**CONTENTS**

	<b>Page</b>
MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION .....	3
EXPLANATORY STATEMENT.....	9

## MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

### on an effective raw materials strategy for Europe (2011/XXXX(INI))

*The European Parliament,*

- having regard to the Commission Communication of 2 February 2011 entitled ‘Tackling the challenges in commodity markets and on raw materials’ (COM(2011)0025),
- having regard to the Commission Communication of 4 November 2008 entitled ‘The raw materials initiative - meeting our critical needs for growth and jobs in Europe’ (COM(2008)0699),
- having regard to the report on ‘Critical Raw Materials for the EU’ by the Subgroup of the Raw Material Supply Group of Directorate-General for Enterprise and Industry<sup>1</sup>,
- having regard to the Commission Communication of 3 March 2010 entitled ‘Europe 2020: A strategy for smart, sustainable and inclusive growth’ (COM(2010)2020),
- having regard to the Commission Communication of 26 January 2011 entitled ‘A resource-efficient Europe – Flagship initiative of the Europe 2020 Strategy’ (COM(2011)0021),
- having regard to the Commission Communication of 8 March 2011 entitled ‘A Roadmap for moving to a competitive low carbon economy in 2050’ (COM(2011)112/4),
- having regard to the Commission Communication of 28 October 2010 entitled ‘An Integrated Industrial Policy for the Globalisation Era Putting Competitiveness and Sustainability at Centre Stage’ (COM(2010)0614),
- having regard to the Commission Communication of 06 November 2010 entitled ‘Europe 2020 Flagship Initiative Innovation Union’ (COM(2010)0546),
- having regard to the Commission Communication of 9 November 2010 entitled ‘Trade, Growth and World Affairs - Trade Policy as a core component of the EU’s 2020 strategy’ (COM(2010)0612),
- having regard to its resolution of 9 March 2011 on Industrial Policy for the Globalised Era<sup>2</sup>,
- having regard to its resolution of 3 February 2011 on waste electrical and electronic equipment (WEEE)<sup>3</sup>,

---

<sup>1</sup> [http://ec.europa.eu/enterprise/policies/raw-materials/files/docs/report-b\\_en.pdf](http://ec.europa.eu/enterprise/policies/raw-materials/files/docs/report-b_en.pdf)

<sup>2</sup> Texts adopted, P7\_TA-PROV(2011)0093

<sup>3</sup> Texts adopted, P7\_TA-PROV(2011)0037

- having regard to its resolution of 16 June 2010 on EU 2020<sup>1</sup>,
- having regard to the guidance document on ‘Non-energy mineral extraction and Natura 2000’ by the Directorate-General for the Environment, European Commission<sup>2</sup>,
- having regard to the Staff Working Document accompanying the Commission Communication of 4 November 2008 entitled ‘The raw materials initiative - meeting our critical needs for growth and jobs in Europe’ (COM(2008)699) (SEC(2008)2741),
- having regard to the ‘Raw materials policy 2009 annual report’ by the Directorate-General for Trade, European Commission<sup>3</sup>,
- having regard to the study on ‘The links between the environment and competitiveness’ by the Directorate-General for the Environment, European Commission<sup>4</sup>,
- having regard to the Commission Green Paper of 10 November 2010 entitled ‘EU development policy in support of inclusive growth and sustainable development – increasing the impact of EU development policy’ (COM(2010)0629 final),
- having regard to the Commission Communication of 10 November 2010 entitled ‘on the consolidation of EU Africa relations’ (COM (2010)0634 final),
- having regard to the upcoming Commission Communication on trade and development,
- having regard to the current Doha Round negotiations,
- having regard to the 2007 Africa-EU Joint Strategy and the Tripoli Declaration by the 3<sup>rd</sup> Africa EU Summit on 29/30 November 2010,
- having regard to the current WTO case on nine raw materials by the EU, US and Mexico against China,
- having regard to Rule 48 of its Rules of Procedure,
- having regard to the report of the Committee on Industry, Research and Energy and the opinions of the Committee on Development, the Committee on International Trade and the Committee on the Environment, Public Health and Food Safety(A7-0000/2011),

### **A Raw Materials Strategy**

1. Welcomes the fact that the Commission spearheaded the issue of non-energy, non-agricultural raw materials (RM) with its Raw Materials Initiative (RMI) in 2008;
2. Notes the new Commission Communication and its move beyond the RMI to include

<sup>1</sup> Texts adopted, P7\_TA-PROV(2010)0223.

<sup>2</sup> [http://ec.europa.eu/environment/nature/natura2000/management/docs/neej\\_n2000\\_guidance.pdf](http://ec.europa.eu/environment/nature/natura2000/management/docs/neej_n2000_guidance.pdf)

<sup>3</sup> <http://ec.europa.eu/trade/creating-opportunities/trade-topics/raw-materials/>

<sup>4</sup> Study ‘The links between the environment and competitiveness’, Project ENV.G.1/ETU/2007/0041, [http://ec.europa.eu/environment/enveco/economics\\_policy/pdf/exec\\_summary\\_comp.pdf](http://ec.europa.eu/environment/enveco/economics_policy/pdf/exec_summary_comp.pdf)

commodity markets; calls on the Commission to give adequate focus to commodity markets and the RMI separately;

3. Welcomes the Commission's work on identifying critical raw materials (CRM); calls on the Commission to follow this up by analysing the supply chains depending on CRM, the refining capacity and the interaction between CRM and their associated base metals;
4. Points out that effective governance of RM policy is key to an effective strategy; emphasises the need for close co-ordination within the Commission and between Member States; recommends the establishment of an inter-departmental RM task force, as is the case in France and the United States, to elaborate, monitor and review policies, to ensure strategic coherence and promote the establishment of an early-warning system; calls on the Commission to foster co-ordination between the Member States on the external dimension; believes the upcoming communication on the external dimension of energy could serve as a template;
5. Insists that the European Parliament be regularly informed on the development of the RMI via an annual progress report;

#### **An opportunity for European industry: resource efficiency, recycling and substitution**

6. Notes that the RM challenges are also an opportunity to invigorate the EU's industrial base and increase competitiveness via an ambitious industrial innovation strategy; notes that in the medium to long term increasing efficiencies, recycling and lowering resource use will be key to competitiveness, sustainability and supply security; remarks that social innovation, lifestyle changes and new concepts such as eco-leasing, chemical leasing and sharing should be supported by the Commission;
7. Welcomes the Commission's plan to launch a flagship initiative on resource efficiency; calls on the Commission to incorporate a resource efficiency improvement target of 3% per year net of GDP evolution; calls on the Commission to develop a reliable methodology for measuring resource efficiency;
8. Believes that a tax for mineral resources is not an adequate tool, but calls on the Commission to investigate whether a tax on water and land use could be of benefit;
9. Calls on the Commission to extend the ecodesign instruments to RM, to work with standardisation bodies, to evaluate the feasibility of a top-runner programme for products with regard to resource efficiency, to strengthen advisory services on resource efficiency, particularly for SMEs, and calls on companies to make use of the Eco-Management and Audit Scheme (EMAS); calls on the Commission and the Member States to leverage public procurement in order to enhance resource-efficient products and products utilizing secondary RM; stresses the value of including resource use in product information and eco-labels in order to empower consumers; calls on the European standardisation bodies to streamline the issue of resource efficiency in the setting of standards;
10. Notes the contribution of recycling to reducing greenhouse gases; calls on the Commission to launch an in-depth EU material flow analysis particularly to identify waste streams;

11. Notes the importance of creating industrial synergies on recycling and helping companies discover how their energy, waste and by-products can serve as resources for others; calls on the Commission and Member States to promote approaches such as that taken by the UK with its National Industrial Symbiosis Programme;
12. Calls on the Commission to investigate whether closed landfills could be re-opened to recycle potential scrap material with best available technologies (BAT), to also examine remaining mining waste and metallurgical waste dumps, to complete a EU database on mining waste sites by 2012 and enforce the mining waste directive, to ensure that this waste is treated with the BAT, and to encourage the lifecycle management of buildings to ensure the recyclability of materials used in their construction;
13. Calls on the Commission to support recycling partnerships with developing countries; asks the Commission to support pilot projects like zero waste zones;
14. Requests the Commission to evaluate how the European Investment Bank (EIB) can help reduce financial risks for investments in breakthrough-technology recycling plants;
15. Calls on the Commission to develop economic incentives for recycling currently uneconomical CRM including rare earths (REE), to investigate how markets for recycled materials can be supported by inter alia green certificates for recycled materials, eco-design requirements and fiscal incentives, and to ensure that cohesion policy and budgets are also leveraged to promote resource efficiency and recycling;
16. Emphasises the need to combat the illegal shipment of waste and to establish a global certification scheme for recycling facilities; notes the importance of co-operation between national customs officials; calls on the Commission to examine whether a collective mechanism informing authorities on illegal shipment flows is necessary; asks the Commission to study illegal waste streams; asks the Commission to promote an effective distinction in customs declarations between new and second-hand goods by addressing this in the Implementing Provisions of the Modernised Community Customs Code (MCCC-IP);
17. Calls on the Commission to identify priorities and allocate budgets for research into lifecycle recycling, substitution and resource efficiency using FP7 and FP8 funding, particularly for CRM such as REE; insists on the importance of a European Innovation Partnership on RM; calls on the Commission to launch such a partnership in 2011;
18. Regrets that substitution is not included in the Communication; therefore, calls on the Commission to ramp up its work in this field, particularly for REE, by leveraging research funding;

#### **Sustainable supply in the EU**

19. Welcomes co-operation between national geological surveys and the publication of an annual European RM Yearbook (ERMY); stresses that data on secondary resources and urban mining should be included; asks the Commission to assess whether the creation of an EU Geological Service that pools the work of national surveys and works with international partners is necessary; supports the Commission's work in improving the

EU's geological knowledge base; calls on the Commission to publish a resource map of the Union;

20. Reaffirms that the NATURA 2000 guidelines provide a sound basis under which non-energy extraction activities must take place; notes that codes of practice to achieve technical, social and environmental excellence are important instruments; calls on the Commission to protect environmentally sensitive areas that might hold RM, such as the Arctic, Barents Sea and Greenland;
21. Notes the importance of R&D in sustainable mining to minimise the environmental footprint and adverse social effects;
22. Stresses the importance of skills and training and the role played by geologists and engineers; calls on the Commission to engage in a close dialogue with social partners in this context;

### **International fair and sustainable supply of RM**

23. Welcomes the EU's intention to pursue an RM diplomacy, particularly for CRM; believes that priority actions for REE need to be developed in the very short term;
24. Considers it the responsibility of companies to procure resources; nevertheless, asks the Commission to consider how concepts such as a European RM Holding could be supported non-financially;
25. Calls on the Commission to evaluate the outcome of the WTO case against China and to make future use of WTO mechanisms where appropriate;
26. Notes the importance of Africa-EU relations and the Addis Ababa agreement of June 2010; insists that this partnership be based on mutual interests;
27. Regrets that the Communication fails to name other regions or countries; calls on the Commission to establish other mutually beneficial partnerships with resource-rich countries; believes that the EU should offer 'infrastructure-resource' partnerships; calls on the EU to support resource-rich developing countries in developing their geological knowledge; proposes in this context the establishment of co-operatively financed chairs at geological faculties;
28. Is concerned that a strategy for co-operation with China is not identified; stresses the need for a technology dialogue with China; calls on the Commission to examine how pilot projects on sustainable mining, substitution or recycling of CRM can be established with China;
29. Concurrs that development policy plays a role in helping countries turn their resource wealth into sustainable and inclusive growth, inter alia by enhancing governance and transparency; does not consider development policy an RM diplomacy tool; agrees that trade agreements should provide the necessary flexibility to support developing countries in creating linkages from the extractive industry towards local industry; believes that countries' resource sovereignty must be respected in this context;

30. Calls on the Commission to help developing countries to overcome information asymmetry in negotiating RM and mining contracts through capacity-building;
31. Stresses the role that corporate social responsibility plays by adhering to high environmental and social and labour standards abroad and applying best available technologies; calls on EU companies to develop an appropriate code of conduct for those operating in third countries; calls on the Commission to follow the US Dodd-Frank bill concerning conflict minerals; supports the Extractive Industries Transparency Initiative (EITI); believes that these standards should particularly be applied for projects receiving EU funding, such as from the EIB; calls on the Commission to strengthen the use of 'fingerprinting' technology in this context and to promote pilot projects based on the experiences of the 'coltan fingerprint';
32. Welcomes the work on RM and sustainability in the OECD, G8 and G20; supports the inclusion of non-OECD members in these discussions; calls for the creation of strategic co-operation between the EU, US and Japan on CRM in sharing demand and supply data, common forecasting, exchanging best practice, analysing supply chains, investigating the possibility for joint strategic stocks, and the establishment of joint R&D projects; asks the Commission to investigate the feasibility of an international statistics initiative on CRM based on the example of the Joint Organisations Data Initiative (JODI);

o

o o

33. Instructs its President to forward this resolution to the Council, the Commission and the Member States.



## EXPLANATORY STATEMENT

### Introduction

European industry is facing an increasingly difficult situation with regards to the supply of raw materials. This is particularly the case for the 14 critical raw materials, which the European Commission identified. Increasing global demand coupled with a lack of supplies due to long lead-times in the mining industry and the increased use of export restrictions by resource-rich countries, are not only pushing prices to record heights, as is the case with copper, but are also leading to potential supply shortages. In addition, the EU is highly dependent on exports for many raw materials, particularly critical ones. The rare earth elements are a particular case in point with China currently controlling 97% of global production and curtailing their export.

This is significant since the European Union's industrial future hinges after all to a large extent on such non-energy, non-agricultural raw materials. These resources are particularly important for the transformation to a low-carbon and sustainable economy as they are used in high-tech products such as catalysts, batteries or the construction of renewable energies.

In addition, resource scarcity can aggravate the international political arena possibly culminating in a scramble for resources and widening divisions between resource-rich and resource-poor countries. Neither would benefit from such a scenario. New approaches therefore need to be developed that deal with the issue of non-energy, non-agricultural raw materials, particularly the resources identified as most critical, in an innovative and innovation-promoting manner, in order to ultimately avoid zero-sum games.

In this context, the Raw Materials Initiative is an important first step. The European Union needs to develop a coherent and focused strategy with priority actions, particularly for those raw materials most critical. In order to do this, the European Commission should not only differentiate between giving adequate focus to the RMI and commodity markets but should also establish a working group on raw materials that encompasses all the relevant DGs. Such an inter-departmental working group should develop priority actions for the critical raw materials, particularly the rare earths, and can ensure strategic cohesion. France and the United States have already created such working groups.

### **An industrial innovation strategy to secure raw materials and our competitiveness**

Any strategy on raw materials will ultimately have to focus on increasing innovation in how European industries use raw materials as this will make a significant contribution to our competitiveness, sustainability and the security of supply. The raw materials challenge needs to be turned into an opportunity to invigorate Europe's industrial power by tapping our innovation and R&D potential, which is one of the key aspects of the Commission's Innovation Union Flagship Initiative, the Industrial Policy for Europe, the Resource Efficiency Flagship Initiative and an Innovation Partnership on Raw Materials. If other countries are competing with us in the field of raw materials, we need to focus on our own strengths, which lie particularly in our innovation capacity and our strong tradition in research and development.

Leveraging these in the fields of resource efficiency, cradle-to-cradle recycling, substitution and sustainable mining will be crucial. For example, the German Material Efficiency Agency calculated that around 100 billion EUR a year could be saved through more efficient processes. This would drastically increase competitiveness by lowering costs. This simultaneously cuts CO2 emissions and resource use thereby increasing our resource security by lowering demand. The same holds true for recycling, which positively contributes to tackling climate change. For example, according to industry, the aluminium recovered from recycling is 95% per cent lower as when it is produced from virgin material. For recycling, there are also great amounts of sources for urban mining available. One can also go beyond that by potentially opening up old landfills. According to industry, if only 4 per cent of landfills hold metals and scrap materials this would already equal to millions of tonnes recoverable in Germany alone. Last but not least, the recycling sector is home to a large number of jobs and can create even more. In this context, it is important to support and strengthen this sector, *inter alia*, by ensuring that recycling stands above incineration.

Other countries are already taking ambitious steps. Japan, for example, is putting on the table close to EUR 1 billion to leverage another billion from private industry, to address resource efficiency, recycling and other measures to strengthen its situation with regards to the rare earth elements. In this context, it has put forth a preliminary target of cutting its use of rare earths by one-third in the upcoming years.

The European Union needs to ensure that it is not being surpassed in its competitiveness through increased efficiencies undertaken by others. We have ample policy measures at our disposal to safeguard our future competitiveness including, amongst others, eco-design, FP7 and FP8 funding, recycling policies as well as other creative economic incentives, in order to stimulate the much-needed resource and material innovation.

It is in this context, that the establishment of an Innovation Partnership on Raw Materials gains particular urgency. Substitution is also a crucial aspect that needs to be better embedded in the European Commission's Raw Materials Initiative. The same holds true for lifestyle changes and social innovations such as eco-leasing and sharing. Setting preliminary targets are also important in order to have a vision. The EU should put forth an annual resource efficiency target of 3% and aim to lower its resource use per year per head to 6-10 tonnes by 2050.

Sustainable mining also plays an important role in this context. The European Union naturally also holds reserves of raw materials, for example also rare earths in Sweden, and is continuing to increase its geological knowledge base through such projects as PRO-MINE. This work can also be increased through an improvement in the co-operation between the different national geological surveys, which the Commission is planning to undertake. Simultaneously, the EU has a good basis for the sound extraction of non-energy raw materials through its NATURA 2000 guidance document. Here, too, the EU can advance by continuing to develop better and more sustainable as well as efficient mining technologies. Particularly more environmentally friendly mining technologies will be important especially so as the mining of some resources, like rare earths, can entail radioactivity. Such technologies, coupled with high environmental and social standards, will not only ensure that sustainability and security of supply are balanced but they will also increase the reputation of European companies abroad

if these conditions are continually adhered to and improved. This will ultimately also provide greater business opportunities in resource-rich countries as they will see the benefits of European companies operating in their country under high EU standards as opposed to other non-EU corporations.

### **Raw Materials Diplomacy**

Besides an industrial innovation strategy that aims to lower resource consumption and increase recycling in addition to the sustainable domestic potential that the EU holds, the European Union will, naturally, have to continue to rely on external suppliers for its raw materials. Raw materials diplomacy is therefore of critical importance.

In this context, the European Union needs to establish mutually-beneficial partnerships that provide a win-win for resource-rich countries and the EU itself. Besides an Africa-EU partnership, the EU could also promote partnerships with countries in Eastern Europe, Latin America or Asia. China, particularly comes to mind as it produces the majority of the critical rare earth elements. One will also have to distinguish between the different countries and their economic development. For example, the “infrastructure in exchange for resources” approach is applicable to only a certain number of developing countries. Here European industries could form industrial clusters consisting of extraction and construction companies. For others, particularly resource-rich economies with a higher level of development, such a model is simply of no interest. For these countries the name of the game is ‘resources for technology and know-how’. Such an approach could also be used when it comes to our relations with China. For a given short-term period, for example, we need access to China’s rare earths until new mining operations come on-line in countries such as the United States, Canada and Australia. Likewise, Beijing is very keen on high-technology over that period until it will have increased its own in-house technology development. In this context, one can make deal on the basis of these foundations.

At the same time, the EC could evaluate how to support non-financially a Raw Materials Holding, encompassing numerous European companies for procuring raw materials. Similarly, other companies may wish to undertake a strategy of vertical integration in order to strengthen their raw materials security.

The European Commission should also ensure that EU companies adhere to environmental and social standards in their work abroad so as to further cement good EU relations with resource-rich countries. In this context, the European Union should follow the US lead on the Dodd-Frank bill and require companies to disclose whether they source their resources from conflict regions and require extractive industries to disclose their payments to foreign governments in order to enhance transparency and ensure good governance. Furthermore, in order to make a credible partnership offer to resource-rich countries, the European Union should not misuse the tool of development policy for such purposes. This is particularly the case for the general system of trade preferences or the European Development Fund. Instead it should help resource-rich countries to overcome pertinent issues such as information asymmetry when it comes to negotiating raw material and mining contracts, since many governments lack the expertise to properly evaluate the value of their natural resources and consequently find it difficult to strike favourable deals.

Last but not least, the European Union should pool work with other industrial and emerging countries in order to create synergies. Besides the OECD and G8/G20, the Commission should put forth concrete cooperation with the United States and Japan. This could include the sharing of data or creating joint R&D programmes.

Ultimately, in order to successfully meet the raw materials challenge, the European Union needs a comprehensive and integrated strategy that focuses on short- and long-term measures that can be implemented domestically and internationally, particularly for the critical raw materials such as rare earths. At the heart of this must be an industrial innovation strategy based on resource efficiency and recycling, which are the only measures that adequately tackle the triangle challenge of ensuring future competitiveness, sustainability and security of supply.

## **RECITALS**

Although unorthodox, due to the space constraints in the active part of the report, please find below the recitals that I plan to introduce later as amendments:

- A. whereas the EU requires a strong industrial base and green industry, which are highly dependent upon adequate supplies of raw materials, in order to move towards a low-carbon economy and to persist in competitiveness;
- B. whereas world-wide demand for raw materials has been steadily increasing;
- C. whereas advances in new technologies will continue to raise demand for resources central to the development of these industries;
- D. whereas international supply is partly restricted by export quotas and prices are reaching record heights,
- E. whereas markets benefit from a fair and level playing field;
- F. whereas increased competition over raw materials can aggravate international relations and lead to resource conflicts;
- G. whereas these challenges can be an opportunity for new innovative partnerships of mutually-beneficial co-operation between the EU and third countries;
- H. whereas an industrial innovation strategy focused on increasing efficiencies and recycling promotes sustainability, competitiveness and security of supply;
- I. whereas it is paramount to take timely and decisive steps in implementing an efficient strategy and delivering results on the European Raw Materials Initiative;