Opinion of the European Economic and Social Committee on the 'Non-energy mining industry in Europe'

(2009/C 27/19)

On 17 January 2008, the European Economic and Social Committee, acting under Article 29(2) of its Rules of Procedure, decided to draw up an own-initiative opinion on

Non-energy mining industry in Europe.

The Consultative Commission on Industrial Change, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 24 June 2008. The rapporteur was Mr Fornea and the co-rapporteur was Mr Pop.

At its 446th plenary session, held on 9 and 10 July 2008 (meeting of 9 July), the European Economic and Social Committee adopted the following opinion by 135 votes to one with 10 abstentions.

1. Conclusions and Recommendations

1.1 The main pillars for the future security of raw materials supply in Europe are: **domestic supply, international supply, capacity building and resource efficiency.**

— The policy in raw materials **domestic supply** should take into account industry, environment policy and land-use planning as an integrated approach. The best practice in the field should be extended to new potential areas. Access to domestic resources within the Member States should be encouraged by providing the necessary balance between the environment and industrial development policies, as well as harmonised incentives for development and protection in extending existing sites and opening new ones where these are, on the one hand, economically and socially viable and desirable and, on the other, environmentally sustainable.

— The globalisation impact on **the international supply** of minerals should be properly assessed by the EU and Member States whenever the import of raw materials from outside prevails. European environmental and social standards should be observed when considering investment policy and industrial relocation. Access to raw material should be guaranteed for European Users and the strategic dependence of the EU should be reduced.

— **Capacity building** in European non-energy extractive industries bears upon a wide range of challenges, such as administrative barriers, the need to improve the sector's image, the need for qualified manpower, management techniques, education and training.

— **Improved efficiency** of resource extraction processes depends on progress made in other sectors active in both mineral extraction and other areas and calls for cooperation between the European Commission and Member States.

1.2 The European Economic and Social Committee urges the Commission and the Member States to work on the following recommendations (see paragraph 3.2 for detailed recommendations):

— **Better regulation** through improved legal framework and permitting system; exchange of best practice in planning policies; cutting-down excessive administrative burden in the issuing of permits; facilitating exploration activities; promoting sustainable development in expanding extraction sites, and securing mineral deposits ([1]).

— **Strengthening the compatibility** of extraction and environmental protection by: extending best practice in and around Natura 2000; advocating the proximity principle in transport procedures in order to reduce pollution and costs, and improving access to resources ([2]).

— **Reinforcing the mineral intelligence** at the EU level by establishing a European geological capacity and a European Mineral Resources Information System, to be built on the basis of the capacities of the Member States' National Geological Surveys.

2. Overview of the Sector

2.1 Minerals are essential for development and therefore for our quality of life and the creation of sustainable communities. Non-energy minerals ([3]) are basic materials for our daily life: a house contains up to **150 tons of minerals** incorporated in: cement, clay, gypsum, calcium carbonate, composite materials, glass, paint, ceramics, tiles and tons of metals; a car contains up to **150 kilograms of minerals** in rubber, plastics, glass and more than **one ton of metals**; **50 %** of paints and paper are made from minerals; glass and ceramics also contain up to

([1]) See paragraph 3.2.1 for detailed recommendations.
([2]) See paragraph 3.2.2 for detailed recommendations.
([3]) According to SEC(2007) 771, non-energy minerals are classified as: metallic minerals (copper, iron, silver, etc.); industrial minerals (salt, feldspar, kaolin etc.) and construction minerals. According to IP — 07 — 767, in the case of metallic minerals, Europe's capacity to provide its own supply through domestic extraction is very limited. As an illustration, 177 million tons of metallic minerals were imported into the EU in 2004 with a total value of EUR 10.4 billion, compared to the EU's production of some 30 million tons.

100 % minerals ([4]). Mineral planning ensures that societal and economic needs as well as the extraction and processing impact on people and environment are managed in an integrated way by considering the whole life cycle of the mine/quarry from the very beginning of the extraction process, and to include closure and after-closure care in the planning process. In the light of globalisation and intensified competition on the raw materials' markets, the strategic value of the mining sector is constantly increasing. As far as extraction technology is concerned, Europe has become a world leader, but this should be consolidated with a view to for future developments.

2.2 Today, 70 % of the European manufacturing industry depends on extracted substances, while the EU 27 is currently facing a large-scale restructuring of the mining industry and the price of metals on the global market is rising steadily. In order to tackle this trend, European industrial policies have to take into consideration the fact that security of supply and demand for raw materials should prevail in the context of free market forces.

2.3 The European Non-Energy Extractive Industries provide jobs for **295 000 employees** in about **18 300 companies**, with a turnover of EUR **45.9 billion**, and include many SMEs ([5]). The sector promotes environmental responsibility and sustainable development through its member organisations and is committed to corporate social responsibility.

2.4 Many Europeans do not recognise the importance of mining, but in future, the sustainable growth of Europe will depend heavily on locally extracted substances, while the high demand for minerals coming from countries such as China and India will have a real potential to affect security of supply for the EU ([6]). In the context of a global approach, these regions tend to capture the lion's share of raw materials and financial resources, and the result of this is industrial restructuring and investment relocations on an international scale.

2.5 In order to deal with globalisation and climate change, the EU's Energy Policy for Europe and Integrated Mining Policy are vital strategic elements. This was acknowledged from the very beginning of European construction ([7]). As the Member States are committed to supporting the EU's efforts to promote renewable sources of energy and the efficient use of energy, it is important to understand that this can only be achieved if European industries have safe access to non-energy minerals, primarily base and high technology metals and minerals which are vital to 'green economies'. Changing patterns of behaviour, energy efficiency and renewable sources of energy have resulted in more technologies and more R&D activities. It is a recognised fact that technological equipment incorporates large quantities of metals, a large proportion of which is made up of rare and precious metals, which, as we must realise, are almost unavailable in Europe ([8]).

2.6 The European Economic and Social Committee welcomes the proposal from the European Commission to publish a Communication in 2008 on improving sustainable access to raw materials. The Communication should recommend feasible, realistic and helpful actions through which the industries may gain improved sustainable access to resources. This is of particular importance as the industries are facing important supply challenges:

— reduced availability of accessible deposits suitable for mineral extraction as a result of insufficient or short term land-use planning or due to the insufficient integration of geological knowledge;

— high administrative burden and cost of obtaining extraction permits due to additional regulations and time consuming preliminary studies;

— difficulties in obtaining extraction permits, both for new quarries and mining operations and for the extension of existing ones.

2.7 The European Economic and Social Committee appreciates the contributions of the Commission's specialists in the Commission staff working document 'Analysis of the competitiveness of the non-energy extractive industry in the EU' ([9]) and emphasises that Europe's capacity to provide its own supply of metallic minerals through domestic extraction is still limited, in spite of the EU's enlargement.

2.7.1 It is possible to improve the security of supply of European industries by further substantial investments in the mining sector of the new Member States with geological potential, using and improving the existing EU assistance mechanisms.

2.7.2 Major mineral resources are available in the Eastern European countries where the geological structure has always allowed for the development of mining activities. However, in these new EU countries, the sector was underfunded by the state, so the situation today does not show the real potential of the non-energy mining industry. From this perspective, it is essential to have private capital invested in these mining companies in order to supply the financial resources which up to now were provided mostly by the state.

([4]) Euromines.
([5]) Eurostat.
([6]) *China's commodity hunger. Implications for Africa and Latin America* — Deutsche Bank Research.
([7]) Treaty establishing the European Coal and Steel Community, signed in 1951.
([8]) This approach can be found in the Fourth Report of the High Level Group on Competitiveness, Energy and Environment, 27 November 2007 and G8 Summit Heiligendamm 6-8 June 2007. The High Level Group on Competitiveness, Energy and Environment provides a platform to galvanise the political commitment required to launch a coherent strategy to facilitate access to raw materials.
([9]) SEC(2007) 771.

2.7.3 In order to secure the supply of raw materials for European industry and to strengthen its competitiveness, it is crucial to address the challenges of an uneven playing field in terms of sustainable supply and access to mineral resources. These challenges need to be addressed at a high level in a comprehensive approach incorporating a wide range of policy areas, such as trade, development, energy, infrastructure and transport, enterprise and consumer policies.

2.7.4 The extractive industry interacts with a series of other industries such as technology and machinery providers, research, consulting, financial and environmental services, etc. ([10]) This is why an extractive operation usually provides, on average, four times as many indirect jobs as the direct jobs in the region where it is located. The regional growth potential is considerable, particularly in areas where other economic development is difficult.

2.7.5 The European Economic and Social Committee urges the Commission to review the best practices and model operations that exist at Member State level, in order to develop and promote them at EU level by taking into consideration not only the technical issues related to technology, but also Member States' experience in organising geological surveys and mine and quarry management for minerals ([11]).

Internationally, a Resource Endowment Project ([12]) has been developed which provides guidance and case studies on how the best mineral resources can be used for economic development. Such a case study might also be developed in the EU.

3. **Main pillars and recommendations for the future supply of raw materials**

3.1 *Domestic supply*

3.1.1 The limited access to resources, the high administrative burden and the increasing costs for permit application processes result in reduced investment in the EU non-energy industry sector — even in high demand areas. A European raw materials supply policy has to take into account industry and environment policy as well as land-use planning in order to ensure better coordination between national planning competences and the European policy levels.

3.1.2 Some national initiatives on mineral planning for communities and local government can provide good examples of how to manage, in an integrated way, the need of society and the economy for minerals, together with the impact of extraction and processing on people and the environment.

3.2 The European Economic and Social Committee urges the Commission to recommend the following in its proposed Communication:

3.2.1 Improving the legal framework and permitting system (better regulation) through:

— the improvement of mineral planning policies through the exchange of good practice in the EC Raw Materials Supply Group ([13]); in particular, on the one hand, with regard to the involvement of geological surveys and their expertise and knowledge about deposits and, on the other hand, with regard to the consultations with operators already present in the areas concerned by infrastructure and nature protection planning;

— the development of a one-stop-shop system (a single contact point for all the parties participating in issuing the permits and that is in a position to assess economic, social and environmental issues), in order to improve the land-use planning and permitting processes. The development of such a system is within the competence of each of the EU Member States;

— facilitating exploration by encouraging exploration activities in Europe through better national regulations, by:

  — providing incentives to exploration companies for the exploration work carried out,

  — improving security of tenure for exploration properties to raise investors' confidence,

  — cutting down exploration property acquisition time,

  — running promotional campaigns to encourage setting up of exploration companies and to attract outside companies to explore within the EU ([14]);

— facilitating exploration and extraction by reviewing existing legislation and ensuring better implementation through more efficient processes and time limits;

— ensuring consistent implementation as regards the compatibility of nature protection goals with mineral resources extraction;

([10]) For example, in modern mining, financial services are very important for the evolution of a mine. Financial products differ depending on the stage: exploration, feasibility stage, mine development, operations, mine closure.

([11]) To be seen in existing case studies in Finland, Sweden, the UK and other European countries.

([12]) Initiative launched in 2004 by the International Council on Mining and Metals. It seeks to identify good policy practice for mining and metals investments at national/regional and corporate levels within developing countries.

([13]) Raw Materials Supply Group is a stakeholder group comprising industry, environmental NGO's, trade unions, Members States and the Commission.

([14]) According to Metals Economic Group's eighteenth annual edition of Corporate Exploration Strategies, the high commodity prices have increased the worldwide nonferrous exploration total to US $ 10.5 billion in 2007. The top ten countries with mining exploration budgets are: Canada 19 %, Australia 12 %, US 7 %, Russia 6 %, Mexico 6 %, Peru 5 %, Chile 4 %, South Africa 4 %, China 3 %, Brazil 3 %.

— assessing the sustainability aspects in expanding an existing raw material extraction site rather than opening a new one in a different location in order to meet the demand, and also economic, social and environmental protection goals;

— simplifying existing legislation and eliminating unnecessary administrative burdens, such as multiple reporting;

— securing mineral deposits by giving higher priority to mineral resources in EU policies (competitiveness, development, environment, research, industry, regional development), so that proven resources are not needlessly sterilised by non-mineral development. This could be achieved by:

  — ensuring that each EU Member State has a national supply policy, published regularly and in full in English,

  — identifying the EU's current and future mineral potential and regularly updating such information and making it easily accessible,

  — identifying EU strategic minerals and coordinating national policies for their supply.

3.2.2 Strengthening the compatibility of extraction and environmental protection by:

— developing a GIS ([15])-based information system on the location, nature, resource and reserves of on-shore and off-shore EU mineral resources to facilitate integration of mineral potential in land-use planning, inter alia for the selection and definition of protected areas;

— providing case studies of best practice for the implementation of Article 6 of the 'Natura 2000' directive;

— improving the effectiveness and efficiency of Environmental and Social Impact Assessments by developing better and clearer implementation guidelines for Member States in order to:

  — ensure a harmonised approach across the EU,

  — shorten time spans for the delivery of these assessments as well as the response time of the authorities and thus provide more legal stability and predictability for investors;

— promoting the use of best extraction practice to halt the decline in biodiversity;

— advocating the proximity principle in mineral supply within the EU where feasible in order to reduce transport and related emissions and noise;

([15]) Geographic Information System.

— providing access to remote areas by including access to mineral deposits in European Commission and Member States' infrastructure planning while providing, where appropriate, more ecological transport for large bulk materials, e.g. rail, barge and sea transport;

— marine aggregates;

— reducing the not-in-my-back-yard effect through a research programme on the reduction of nuisance related issues and thus improving the acceptability by communities.

3.2.3 Reinforcing the mineral intelligence at EU level by:

— providing policy makers with access to more comprehensive data on resources: production, employees, revenue generated, land used for mineral extraction and land returned for other uses to ensure that decisions can be made using the best available data;

— giving more attention at both European and national level to the growing importance of European metals, industrial minerals and aggregates at the political and legislative level;

— ensuring that geological information is taken into consideration in land-use planning and as a matter of priority providing information on mineral deposits for land-use data bases and seriously considering the creation of a European Geological Capacity based on the existing national and regional Geological Surveys and their capabilities. Its remit could include:

  — the identification of strategic resources and recommending them to Member States as key priorities in land use planning;

  — integrating into the European Spatial Development Perspective ([16]) (policy framework which has been dormant since 1999) the EU perspective on access to mineral resources and relaying that to the EU Member States mineral planning policies;

  — analysing the impact of climate change policies on mineral supply and self-sufficiency aspects;

  — improving the knowledge of distribution and quality of mineral resources in the EU and their strategic importance and evaluating potential under Global Monitoring for Environment and Security (GMES);

([16]) The aim of the spatial development policies, as was defined by The Informal Council of EU Ministers responsible for Spatial Planning held in Potsdam on 10-11 May 1999, is to work towards a balanced and sustainable development of the territory of the European Union in order to achieve economic and social cohesion, conservation and management of natural resources and the cultural heritage, more balanced competitiveness of the EU.

— developing a pan-European geological database, built on the INSPIRE ([17]) principle and on the assessment of the potential for concealed metallic and mineral deposits, in the main metallogenic/mineral reach areas;

— using information and services derived from earth observation, such as GMES, which is a Community initiative launched at the Gothenburg Summit 2001 together with the European Sustainability Strategy. The GMES 'Land Monitoring Core Service (LMCS)' as one of these will provide from 2008 onwards digital vector maps of the actual land-use/land-cover all over Europe (38 countries including Turkey) seamlessly and with a gradually increasing accuracy (1 ha minimum mapping unit, departing from the current Corine Land-cover with 25 ha). Another part of LMCS selects cities and other 'hot spots' with an even higher accuracy (0.25 ha) and a content adapted to the management of areas subject to intensive use and change.

Also, gaining greater knowledge of the mineral potential of deeper parts of Europe's main metallogenic provinces: while geological information and knowledge is very good over most of Europe with respect to the first 100 metres below the surface, knowledge and spatial information on the deeper part of those provinces remains limited, although they are likely to host the mineral deposits that Europe will need to meet its future needs. The exploitation of deep-seated deposits has a number of advantages: very little surface footprint, hence greater social acceptability, and limited environmental impacts;

— a global component aiming at supporting the EU external policies is also under development. Such information will make it possible to:

— collect enough mining data, spatially representative and predictable,

— identify and quantify areas of open pit mining and/or mining infrastructures,

— identify potential conflict areas (e.g. protected natural sites) or compensation areas,

— monitor impacts on household water and effects of pollution,

— monitor re-naturalisation process after site-closure,

— take urgent action in case of accidents.

([17]) Directive 2007/2/EC of the European Parliament and of the Council establishing an Infrastructure for Spatial Information in the European Community.

4. International Supply

4.1 The full impact of globalisation on the demand and supply of mineral resources has not been assessed by the EU or its Member States ([18]). The European Economic and Social Committee recognises that there are many reasons to import raw materials from outside the EU. However, the fact that imported products may not have complied with European environmental and social standards during the production process could result not only in a loss of competitiveness for the EU economy, but also in the relocation of environmental and social problems.

4.2 The European Economic and Social Committee urges the Commission to recommend the following in its proposed Communication:

— identifying strategic resources and recommending them to Member States as key priorities in land-use planning;

— creating conditions which stimulate the competitiveness of the European extractive industry by making the most of research and innovation achievements and promoting investments;

— identifying and documenting raw material import and export flows and assessing long term political and economic reliability;

— creating new programmes through European funds for improved sustainability of extraction, transport and use of minerals in the regions with good resources potential;

— ensuring, through the European Commission, the OECD and the UNEP Sustainable Raw Materials Forum, that imported materials are produced in a sustainable manner;

— encouraging EU investments in non-EU countries, with special focus on Latin America, Africa, Russia and Central Asia countries ([19]);

— fostering implementation of European standards in countries of origin through cooperation programmes;

— improving access and the long term stability of supply flows must be on the agenda when shaping EU foreign policies and should be addressed by EU officials at high ranking bilateral meetings and summits.

5. Capacity building

5.1 European Non-Energy Extractive Industries face a variety of challenges with regard to capacity building, which involves developing existing capacities and establishing new ones. One important component of this is the improvement of the sector's image. However, it is not the only measure that must be taken to attract new and young people, maintain the existing European workforce in this sector and improve their ability to cope with the modernisation of the sector.

([18]) At global level, United Nations Conference on Trade and Development has made an assessment on this issue in Part Two of its World Investment Report 2007.

([19]) According to Raw Materials Data, Stockholm, January 2008, the total investment in the global mining industry at the end of 2007 was US $ 308 billion. That was up 50 % from 2006, which was in turn up 20 % from 2005.

5.2 The European Economic and Social Committee urges the Commission to encourage the following in its Communication:

— development of an EU or nationally supported skill enhancement programme for an existing trained workforce that requires further training and education, and an effective policy for life-long learning;

— initiation of special EU programmes for making the most at European level of existing qualified manpower for prospective job offers and investment in the potential global mining areas as one of the main factors (technology, know-how, mining intelligence) in providing access to important mineral deposits worldwide;

— investment in universities and educational programmes to increase overall capacity in the area by reviewing current national support for the mining and mineral processing as well as geology related departments in order to draw in increased numbers of students in this area as well as research activities in these disciplines;

— encouragement from decision-makers for the development of clusters and technology parks within mining areas, since the extractive industry interacts a great deal with other industrial and service providers and we know that a job created in mining provides four further jobs;

— awareness-raising with regard to the role of minerals and the sustainability of industries through educational courses, workshops, debates, conferences — an interdisciplinary approach: for example, promoting in schools and universities concepts such as eco-mining, economic geology, responsible use of mineral resources etc.;

— promotion of and research into health & safety issues as an indispensable necessity for the sustainability of the mineral resources sector;

— special emphasis on the prevention of occupational hazards and on preventive medical measures.

6. **Resource efficiency**

6.1 The involvement of other sectors active in the process of mineral extraction is vital for resource efficiency. It is stressed that an active extractive industry in Europe is also a driver for the development of world class European technology and service providers.

6.2 The European Economic and Social Committee urges the Commission to recommend the following in its proposed Communication:

— encouraging the Commission to lend its full support to the European Technology Platform on Sustainable Mineral Resources ([20]) as it has just recently been officially recognised;

— promote industry participation in EU and national R&D programmes run in cooperation with the European Commission for increasingly sustainable extraction and a programme for the use of raw materials through technological improvement;

— involving machinery manufacturers in such a programme to further reduce

  — noise and at the same increase safety;

  — dust, in cooperation with filter makers;

  — CO_2 levels and energy consumption, also in cooperation with energy companies;

  — vibration at the workplace;

  — water usage throughout the industry;

— improving stewardship and operational acceptability through:

  — recycling;

  — processing of minerals to improve efficiency (i.e. doing more with less);

  — using minerals to save precious and rare resources;

  — using alternative raw materials including secondary raw materials and waste materials where appropriate;

  — promoting the Life Cycle Contribution of industries;

— promoting environmental synergies, e.g. produce locally to avoid transport problems;

— encouraging, through the Commissions' Directorates, an assessment of the current situation of freight cost structures (rail, barge and ship) and their competitiveness in an international context, as happens in the energy sector;

— encouraging studies on biodiversity in the mining and quarrying environment;

— fostering the use of secondary materials in line with sustainable development.

Brussels, 9 July 2008.

The President

of the European Economic and Social Committee

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([20]) ETP SMR, web: http://www.etpsmr.org/.