



FÉDÉRATION EUROPÉENNE DES GÉOLOGUES  
EUROPEAN FEDERATION OF GEOLOGISTS  
FEDERACIÓN EUROPEA DE GEÓLOGOS

## **European Federation of Geologists (EFG) Panel of Experts, Minerals**

**The EFG wishes to comments on the discussion paper “Raw materials for a Modern Society”. Ref. Ares(2010)965067 – 17/12/2010**

### **INTRODUCTION**

The European Federation of Geologists (EFG) is a federation of more than 25 European geological societies and associations which exists to:

- Represent the geological profession in Europe;
- Safeguard and promote the interests of the geological profession in Europe (and elsewhere in the World);
- Promote best technical, scientific and ethical practice in the application of geology generally (EurGeol); and
- Promote responsible use of the Earth’s resources and sustainable use of land.

The EFG maintains a number of Panels of Experts (PE) to fulfil the EFG mission. They provide contributions to the development of European Policies that are relevant to geologists and to which the professional practice of geology is relevant. This consultation response has been written by the EFG Panel of Experts on Resources and Reserves – Minerals and Their Sustainable Use (“Minerals PE”).

### **COMMENTS ON THE DISCUSSION PAPER**

The EFG Minerals PE agrees with the first bullet point in the discussion paper. Europe needs to ensure a secure supply of non-energy materials.

However, from then on the paper appears to ignore the very methods that may alleviate that situation – exploration for, and discovery of, new sources of non-energy materials.

Industrial minerals and aggregates are mainly exploited through open pits or quarries and as a consequence can and should form part of spatial planning, which must be underpinned by sound regional and national geological maps and databases. Metallic minerals, including Rare Earth Elements will, however, commonly be found deep underground and will only be identified through systematic exploration, using modern geochemical and geophysical methods in conjunction with geological models. Their location can only be predicted within very broad geological terrains.

If Europe wishes to be less vulnerable to commodity shortages, it must become partly self-sufficient by supplying some of its strategic raw materials from indigenous resource development. For instance, Europe consumes approximately 20-25% of global copper and zinc production but only 2.5% of global metallic mineral exploration expenditure is spent in Europe – clearly a strategic imbalance. Ireland, Sweden, Finland, Portugal and Spain are presently the target for most of the exploration expenditure financed by local and international exploration and mining companies. Exploration within these countries over the past 50 years has been

successful, which clearly demonstrates that modern exploration methods provide an effective tool to locate new mineral deposits. But exploration within a large number of European countries is at a minimum mainly because of inadequate internal mining and exploration policies.

So, what needs to be done? In our opinion, the following are priority matters:

- Recognise the fact that mineral resources can only be worked where they exist and can only be exploited if they are discovered through exploration ('resources are where you find them'). Europe must decide if it wants security of supply or not and whether that security is going to be achieved through development of indigenous resources. It then needs to state this as a policy and take the necessary consequential actions to stimulate exploration and exploitation.
- Recognise the fact that the objective of exploration is to gain legal title to an economic resource. If an exploration company cannot be assured of getting legal title it will spend its money elsewhere. Thus exploration permitting with a presumed right to mine, if a discovery is made, is an essential prerequisite. Enact that legislation. The EFG is aware that presently the EU does not have competence over resource development. However, issues of raw material supply are an EU matter. Therefore, a clear statement of what is required of member states should be forthcoming from the EU.
- Decide where the EU is going to permit exploration and make a distinction between Industrial Minerals/Construction Materials and Metallic Minerals. The definition of where companies can or cannot explore is not difficult, and can be achieved on a regional basis through spatial planning informed by strategic environmental assessment and clear policies relating to safeguarding minerals and meeting national targets developed with security of supply in mind. On a site specific basis, the essential balance between environmental protection and commercial and practical considerations can be achieved in the context of excellence in mine and quarry design tested rigorously through established environmental assessment methodologies. All this needs to be backed up by regulatory regimes for monitoring and compliance that recognise the need for minerals (of all types) and the political and community engagement that seeks to re-establish an understanding, throughout society, of the importance of minerals to the sustainability of European economies.
- Recognise that the location of resource developments cannot be predicted prior to discovery and that it involves the temporary use of land. Therefore, in areas open for exploration, mineral resource development should normally be given priority over other sectors.
- If it is agreed that development of the EU's own resources is a potentially favourable way to add the supply of additional raw materials, the

establishment of the legal/fiscal framework to encourage exploration is needed. Irish, Spanish, Portuguese, Swedish or Finish mining/exploration laws could be used as models. Exploration itself does not require public funding but it does require an enabling political and regulatory context. Mining and exploration companies are continuously re-investing in exploration and the EU need only create the right conditions.

- The EFG Minerals PE recognises that the suggestions in the discussion paper regarding recycling and increasing efficiencies etc are laudable, and should be encouraged, but they do not solve the basic problem; there will continue to be a need for primary production, however successful recycling and increased efficiency.

To continue dialogue on this matter with the EFG Minerals PE, please contact Andy Bowden, [andybowden@allthatglisters.ie](mailto:andybowden@allthatglisters.ie).

EFG Panel of Experts on Resources and Reserves –  
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