WHERE WE ARE NOW

Biodiversity is the foundation of life on earth and a prerequisite for sustainable development. Yet, biodiversity is being lost at an unprecedented rate, seriously eroding the capacity of our planet to sustain life. It is for this reason Member States have adopted a series of strategies and action plans aimed at halting and reversing the loss of biodiversity, including the EU biodiversity strategy to 2020. The members of the Industrial Minerals Association Europe (IMA-Europe), representing more than 750 sites employing directly around 42,500 people, are aware that biodiversity is crucial to the future of humanity and have agreed to work towards its conservation and enhancement actively.

Industrial minerals are indispensable to society in daily manufactured goods as well as green applications. They are increasingly essential to high-tech as well as environmentally friendly products and technologies such as wind turbines and photovoltaic panels. Wind turbine blades are essentially fibreglass which contains almost 100% minerals (alumina, borates, calcium carbonate, kaolin, lime, silica sand, soda ash, wollastonite). Industrial minerals, therefore play a significant role in the transition to a low-carbon economy.

Our industry strives to ensure that industrial minerals continue to be sourced in Europe in terms that are competitive with other parts of the world.

Occupying <0.01% of the EU land area (agriculture 39% of the total EU’s land area) the sector is highly regulated through land planning and permitting procedures, including environment and biodiversity preservation. Efficiency in the sector can be improved even further through a holistic approach.

Although access to land is necessary for raw materials to support economic development, a complication is the uncertainty over where extractable deposits of these minerals are located. Technological advances are opening up opportunities in areas previously found to be technically unfeasible to mine. However, the minerals sector cannot choose where it mines as this depends on geology.

Minerals policies are particularly important for securing access to mineral deposits. Therefore decisions on “Go or No-Go” (i.e. to allow mineral extraction within certain categories of protected areas or not) must be based on a scientific consideration of irreversible impacts and should reflect the choices made in national mineral and land-use plans. “No-go” commitments should only be made if practical issues on definitions, process and management of protected areas are sufficiently scientific and transparent, and if issues around the use of protected area boundaries in informing land-use decisions are adequately resolved through an open, transparent, multi-stakeholder process.
As part of the Natura 2000 network, the members of the IMA-Europe are actively seeking greater clarity, transparency, consistency in the processes by which areas of land are managed. EU’s ambition for the post-2020 global biodiversity framework and the Raw Materials Initiative should be used to underline the need to promote increased investment in the EU’s existing natural assets, with a stronger focus on quality than quantity of ecosystem services.

The sector takes great care to minimise the environmental and visible impact of its open-cast mine and quarry operations. Moreover, in terms of protecting nature, open surface mining often provides perfect conditions for unique habitat creation especially for rare pioneer species, which thrive on the bare rocks and gravel of open-pit mines. Long term studies show that the biodiversity in open pit mining sites is even greater than in the surrounding area.

Industrial minerals companies have a full restoration plan at the very early permitting phase. This aim is to preserve and improve the ecosystem and fauna on-site during and after extraction.

Our industry undertakes to integrate the identification, evaluation and management of biodiversity into our business decision making processes and attempt to understand the diversity of species and the richness of ecosystems at future mining sites before embarking on any new mining projects. European Industrial Minerals Association preserves or promotes biodiversity throughout the operation’s lifetime at all our sites as far as possible.

Our sector needs to work in partnership with government, communities, NGO’s and other stakeholders on biodiversity. The industrial minerals sector has a track record of fruitful partnerships with people living near to extraction sites. Operators want to encourage dialogue to foster a mutual understanding of the communities’ expectations and of the environmental and economic benefits that mining and quarrying projects can bring to local communities.
1) MINING INTEGRATION

Preventing and mitigating possible negative impacts during mining, while benefiting of biodiversity enhancement.

Sand martins (rhiparia rhiparia) nesting on a cliff face in a bentonite Bavarian mine (Germany). Mining is interrupted during the breeding period.

A Bank Swallow’s colony settled in a pile of crushed limestone in Frasnes (Belgium). Following an ornithologist NGO advice, the company built another pile outside the extraction area where the colony successfully extended with up to 260 couples. Their natural breeding sites are vertical loose riverbanks increasingly scarce.

In Belgium the mining sites are the habitat of 90% of the sand martins.

Many amphibians and insects also depend on open-cast mining for their habitat.
2) COMPENSATION

Creating biotopes before and during mining e.g. converting agricultural grounds to grasslands, hay, spontaneous forestation.

Around silica sand extraction, BE
From (island) agricultural grounds to grasslands, hay, spontaneous forestation

Creating “swamps” and pools

Creating sand plates for wet hay vegetation development

The Opgrimbie Quarry became part of the National Park “Hoge Kempen” in Maasmechelen
For this project the company was granted the prestigious Anders Wall Foundation Award
3) RESTORATION

Creating new biotopes and habitats when extraction ceases. Land is almost all (99%) returned to nature at the end of the activities.

Trachilas/Milos perlite mine, EL

- Research programmes 1997-2010 with academia to identify native plant species most being reproduced in the nursery plant
- Optimisation of hydro seeding techniques increased plants survival and eliminated irradiation
- Selection of seeds based on origin and time collection
- Reintroducing endemic plant species (e.g. the Aegean Lily) and rare plants species (e.g. Milos Juniper, Milean gillyflower, Sea fennel).

2002 – Active mine

Today

2007 – reclamion completed

Current mining activity visible next to reclaimed part of the mine

Juniperus macrocarpa

Dianthus fruticosus

Crithmum maritimum
OUR KEY MESSAGES

1. Industrial minerals play a significant role in the transition to a low-carbon economy.

2. The extractive activities and the products have a potential impact on biodiversity, at operational sites and within each local community. The sector aims to mitigate these impacts in close cooperation with stakeholders.

3. Biodiversity must be taken into account before, during and after extraction, and its successful management can potentially lead to the creation of new natural areas and habitats. Reconciling Nature and Extraction is possible. Open surface mining often provides perfect conditions for unique habitat creation.

4. Occupying < 0.01% of the EU land area, the sector is highly regulated through land planning and permitting procedures, including environment and biodiversity preservation. Efficiency in the sector can be improved even further through a holistic approach.

5. New procedures and legislation require transparency, certainty, timeline.

6. Criteria defining mineral deposits of local, regional, national or European importance are needed to clarify competing land uses and ensure a level playing field assessment for the mining operations.

7. EU’s ambition for the ‘2030 Biodiversity Strategy’ should be used to underline the need to promote increased investment in the EU’s existing natural assets, with a stronger focus on quality than quantity of ecosystem services.

8. No-go” commitments should only be made if practical issues on definitions, process and management of protected areas are sufficiently scientific and transparent, moreover if issues around the use of protected area boundaries in informing land-use decisions are adequately resolved through an open, transparent, multi-stakeholder process.

9. Natural reserves are essential to offer ecosystems to fauna and flora, but we will need to reconcile these protected areas with other economic and industrial activities. The protected areas shall not be sanctuaries. The industrial minerals industry has proven its capacity to operate in natural reserves with a net benefit for the biodiversity.