

February 2017

**Euromines Position with regards to  
the allocation rules for Phase 4 of the EU Emission Trading System (ETS)  
- free allocation for specific process emissions-**

**Policy request:**

**The allocation rules for Phase 4 of the EU Emission Trading System (ETS) should clearly state that specific process emissions are granted 100% free allocation.**

**The European magnesia sector is fully committed to comply with the EU energy policy**

Euromines welcomes the European Union commitment to reduce greenhouse gas emissions and is prepared to take all necessary measures to reach this objective. Nevertheless, the whole design of the EU ETS should not undermine the competitiveness of industry.

Currently the future of the global energy policies remains unpredictable and current efforts to put a price on GHG emissions around the world remain fragmented. Both the coverage and carbon price vary significantly between jurisdictions. In such an asymmetric world, the EU mining sector, competing at local, national and international levels, mainly on costs is legitimately concerned that its climate action may undermine the international competitiveness of the industry. This will result in losing market share and profit margins to competitors who do not face similar carbon costs abroad.

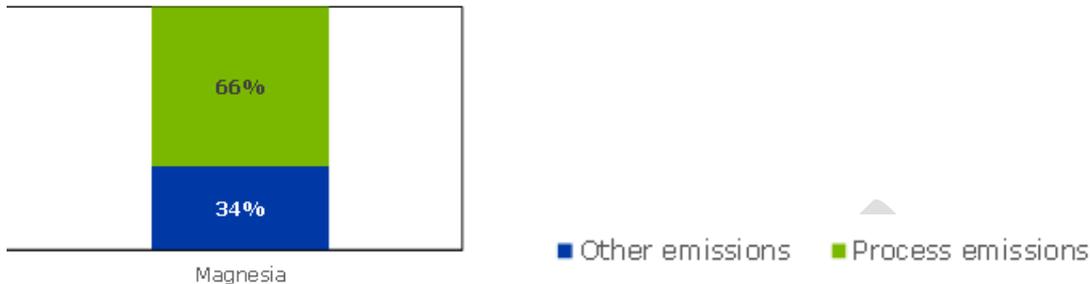
As far as the European magnesia is concerned, it is strategic to the development of the European industry as it provides significant input to the steel and agricultural sectors and is still more efficient than the similar sectors outside Europe.

**Process emissions of geogenic origin cannot be abated without a proportional decrease in the production level**

"Process emissions are generated through chemical reactions among the raw materials used in the production process including their thermal decomposition. These emissions, strictly correlated to the production level by a multiplication factor, the so called stoichiometric factor (deriving from the CO<sub>2</sub> content of the used raw materials - **geogenic emissions**) are unavoidable. The magnesia production processes deal directly with this particular type "**geogenic process emission**" which are unavoidable and impossible to reduce without reducing the production level.

The European Commission has already acknowledged the difficulty in reducing process emissions (Phase 3 of ETS): where the fall-back approach for process emissions is used, the number of free allowances provided is equivalent to 97% of the process emissions.

The share of **geogenic process** emissions in the total direct emissions for production of magnesia products are displayed below. The figure clearly shows that they account for over 50% of direct emissions, result indicating that it will be difficult for these sectors in particular to improve their emissions intensity to match the rate of decline of free allowances anticipated in phase 4 of the EU ETS, leading to exposure to a greater risk of carbon leakage.



Source: Ecofys 2015: Towards competitive carbon and graphite and mining sectors in Europe - Final Project Report

In Europe magnesia is produced by the following two processes:

1. Natural Magnesia (magnesium carbonate ores):  $\text{MgCO}_3 \xrightarrow{\text{Heating}} \text{MgO} + \text{CO}_2$

In this process the naturally occurring magnesium carbonate is used to produce magnesia and the **unavoidable stoichiometric geogenic process emissions equal to 1,09 kg CO<sub>2</sub>/kg MgO**.

2. Synthetic Magnesia (using MgCl<sub>2</sub> from sea water or brines, together with dolomite or lime):

$\text{MgCa}(\text{CO}_3)_2 \xrightarrow{\text{Heating}} \text{MgOCaO} + 2\text{CO}_2$

**The unavoidable stoichiometric geogenic process emissions related to producing synthetic magnesia equals to 1,09 kg CO<sub>2</sub>/kg MgO.**

Given the above, we can conclude that the only way to reduce the CO<sub>2</sub> emissions in the magnesia sector is to reduce the industrial activity and production level for this strategic material in Europe with the consequence to import from other countries to satisfy demand.

### Magnesia geogenic process emissions – conclusions and recommendations

The current proposals for the allocation rules for Phase 4 of the EU Emission Trading System (ETS), asking for further decreases of the process emissions free allocations through the application of a Cross Sectoral Correction Factor (CSCF) and an additional decrease of the Benchmark value will lead to significant competitiveness distortions for the sector and threaten its viability.

Since process emissions cannot be abated without significant investment<sup>1</sup>, the European magnesia sector will experience difficulty in maintaining their current level of net carbon costs. It is highly unlikely that the emissions intensities of these sectors will improve at the rate of decline of the CSCF and benchmark.

Therefore, in order to ensure production and preserve the survival of the European magnesia production sector, we **request 100% free allowances for process emissions** and also support the adoption of the following suggestions included in the **Preparation Document for the Council meeting (Environment) on 28 February 2017** (hereby attached).

#### **Cross- sectoral correction factor (page 11):**

*In case the demand for free allowances triggers the need to apply a uniform **cross-sectoral correction factor\*** (For all emissions coming from combustion and also from process emission, which can be potentially reduced without reducing production) the share of allowances to be auctioned should be reduced by up to [1%] of the total quantity.*

<sup>1</sup> Significant investments in innovation, e.g. carbon capture and storage (CCS) technology, cannot be covered by individual sectors.

**Non reduction of benchmarks (related to process emissions) (page 26):**

*b) Where the annual reduction rate exceeds 1,5% or is below 0,3%\*(**Not applicable for non-reducible process emissions**) the benchmark values for 2021-2025 shall be the benchmark values applicable in the period 2013 to 2020 reduced by the relevant one of these two percentage rates in respect of each year between 2008 and 2023.*

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**About Euromines**

**Euromines**, the European Association of Mining Industries, Metal Ores & Industrial Minerals, represents large and small companies and subsidiaries in Europe and in other parts of the world which provide jobs to more than 350,000 people. Through the activities and operations of these members, more than 42 different metals and minerals are produced. Their sustainable exploitation can increase Europe's supply of mineral resources, help ease imports from third countries usually applying lower environmental, corporate and social standards and foster the socio-economic growth of Europe's Regions.

The mining industry plays a crucial role in the ability of the European Union (EU) to nurture a sustainable growth including access to and supply of raw materials. Linked to all industries across all supply chain stages, raw materials are essential to numerous industrial sectors covering over 30 million jobs in Europe.