

MAGES's contribution to the European Commission's public consultation on a strategy for long term EU GHG emissions reductions

The magnesite industry, like other energy intensive industries, will be essential in the carbon economy transition by bringing the essential materials and solutions. But the necessary conditions need to be addressed to ensure that Europe is at the forefront of the energy and industrial transformation.

However, for the magnesite industry to successfully transition to a low-CO2 economy while maintaining production in Europe, certain framework conditions will need to be met, especially given long investment cycles and the fact that operate in highly competitive and dynamic international context.

The protection of EU industries is a clear priority on a strategy for long term EU GHG emissions reductions. The magnesite industry is one of the sectors at very high risk due to its high exposure to international trade and carbon intensity. Regarding the carbon leakage risk, we have also to consider that the European magnesia sector competes at all levels, local, national and international mainly on costs. Cost increases cannot be passed to consumers precisely because the companies compete at global level and must maintain cost structures comparable to the ones of their international competitors.

Process emissions are particularly significant for the magnesia sector accounting for over 70% of direct emissions. This result indicates that it will be difficult for this sector to improve their emissions intensity leading to exposure to a greater risk of CL. 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 in the absence of economically viable techniques for the capture and uses of CO2 released (CCUS). This fact, a potential reduction in EU production, allows the entry of magnesia of non-European origin, with environmental requirements and use of fuels that are less demanding than the European requirements. Also, must take into account the CO2 generated during transport to the EU. This situation is contrary to the principles of EU climate change strategy, since the problem of climate change is a global problem, and European citizenship should promote a global reduction in CO2 emissions from the products, goods and services consumed in the EU (have been produced or not in the EU).

Magnesite was considered a critical raw material for the EU policies due to its economic importance. The strategic uses are numerous in industrial sectors and agriculture (food chain supply). The European production fulfils all the environmental and safety regulations for all applications.

In this context, a strong industrial base, securing a reliable fair international competition, a level playing field and unhindered access to raw materials is of key importance for Europe's prosperity and growth. The Magnesia Sector needs an innovation policy which provides clear incentives for breakthrough technologies for CO2 reduction in a cost-effective way.

The transition to a low-carbon society, a circular economy and higher levels of digitisation will, under the right conditions, enable new business models or structures. These new business models or structures can potentially further strengthen existing value chains by filling in existing business gaps, deeper integration

with customer value chains, creating new, dynamic links leading to entirely new value chains, and fostering innovation and employment generation.

While magnesite industry, like other energy intensive industries, are a part of the solution, **there is need for EU support**. The gestation time of breakthrough technologies is long, and many have not reached industrial scale demonstration level. It is important that all the technology pathways get their fair chance in view of the wide range of economics, technology readiness and development stages in the context of policy choices and financing strategies. **For most energy intensive companies 2050 is just one (large) investment cycle away from today**. This implies that the framework conditions will have to be continuously and progressively addressed within 10 years at the latest to enable low-CO2 technology investments in the right timeframe.

Moreover, **much higher levels of final electricity demand are to be expected if industrial low-CO2 technologies are deployed across the EU**. A decarbonised power sector would have a major impact on indirect CO2 emissions reductions. Indeed, for the most electro-intensive industries, decarbonized power would lead to up to 90% reductions in overall emissions. Transition to higher levels of electrification can create a virtuous cycle between the EU's renewable energy and industrial transition under the right conditions. The main goal should be access to competitively priced, abundant and reliable low-CO2 electricity on the one hand and identification of new or enhanced roles the energy intensive industry can play in facilitating the energy transition on the other hand. **Further efforts must be made to lower regulatory costs related to electricity consumption by energy intensive industry on a level playing field basis across the EU and also vis-à-vis international competitors. To carry out this, there is an urgent need to strategically map the infrastructure needs in relation to an industrial low-carbon transition**. It will be crucial to ensure not only supply security but that the new electricity supply is low-CO2 and competitively priced.

On the other hand, protection of competitiveness is vital to ensure high levels of investment and maintenance of production in the EU. **During the transition continued protection for energy intensive industries should be provided to safeguard competitiveness and investments in Europe**. A large and ambitious mission-oriented **R&D and innovation support program is needed** to accompany the most promising low-CO2 technologies to industrial scale demonstration level by 2030 at the latest and help achieve cost reductions in key enabling low-CO2 processes. It's necessary **development of adequate financing mechanisms** to face the high cost that comes with low- CO2 process investments including support for replacement of existing and productive assets with low-CO2 processes and a **new state aid regime** that acknowledges the size and scope of the industrial low-CO2 transition.

Finally, a **supportive and stable regulatory framework** is therefore required to ensure that energy intensive industry successfully transition to a low-CO2 economy while maintaining basic materials production, which is essential in Europe:

- 1/ Protection against unfair international competition towards a level playing field,
- 2/ Full carbon leakage protection from both direct and indirect costs of the EU ETS,
- 3/ A large and ambitious mission-oriented RD&I program for industrial low-CO2 technologies, including funding for industrial demonstration and scale up,
- 4/ Competitively priced, carbon-neutral energy,

- 5/ Consistency within the energy and climate policy framework to ensure that energy consumption and low-carbon policies are compatible,
- 6/ Reconsideration and a better alignment of the environmental state aid guidance,
- 7/ Industrial symbiosis and a circular economy through the effective combination of energy recovery and recycling,
- 8/ Streamlining of the permitting procedures allowing a timely and predictable set of infrastructures and interconnections,
- 9/ Transparent accounting framework for CCU across sectors and value-chains to allow business cases to emerge.

The existing framework for energy intensive industries to move ahead with enabling a low- carbon transition in Europe is unfortunately not adequate at this moment. The R&D gap towards demonstration and commercialisation of low-CO₂ technologies is not fully addressed and there remain major challenges to bring down cost of new technologies. Infrastructure that could enable the roll out of new processes across Europe is barely present and the **financing instruments at EU and Member State levels to facilitate investments are insufficient.** Furthermore, **existing regulations can have a counterproductive effect.** For instance, **high and rising electricity prices as a consequence of EU and national regulations could close off the road to higher levels of electrification in energy intensive industries.** Finally, the continued importance of maintaining a competitive industrial base is not well aligned across all policy areas, leading to an important risk of investment leakage (including of low-CO₂ investments).

The scenario of achieving low-CO₂ economy within the Union by 2050 has direct implications on the EU carbon budget that needs to be included to identify appropriate, cost-efficient EU implementation measures.

The EU-ETS should play a role in making industrial low-CO₂ technologies increasingly competitive in the market. Within that context, policies aimed at promoting industrial low-CO₂ technologies have to be accompanied by mechanisms which offset the costs for industries exposed to global competition whenever appropriate. Public financing aims at mitigating the financial risk involved and at providing incentives for private operators to engage in projects which would normally not be financed based on market returns on investment.

All policies which promote industrial low-CO₂ technologies will have to ensure that the total deriving costs for industry are minimised. Moreover, CCUS must be affordable and accessible to the largest possible number of industrial installations potentially concerned.