

**Delivering the European Green Deal – The Fit for 55 Package
Updating the EU Emissions Trading System (ETS)
ECGA Input to the Public Consultation**

The Emissions Trading System (2021 – 2030) should remain the main market instrument for Europe’s industries to cost-effectively reduce their emissions.

Carbon and graphite products are commodities that are traded worldwide. This leads to high trade intensity and a globally competitive market. Major producers outside of Europe are headquartered in China, Japan, and the USA and, while companies in the EU face both direct and indirect carbon costs, such costs are not faced by their other major international competitors. This situation means that European companies must absorb costs or lose competitiveness, neither of which the companies are positioned to do.

Carbon emissions related to the sector’s production process occur both on-site from the combustion of fuels (direct emissions) and through electricity use due to the use of carbon-bearing raw material at the location of electricity production (indirect emissions). For example, feedstock production requires heating up to 3,000°C during the high temperature graphitisation process step – much of which is done by electrical heating. Graphite production therefore is highly energy-intensive, but also inherently an electricity-intensive production process. The fact that electricity accounts for the largest share of the energy mix to produce artificial graphite¹ has also been noted by the Commission in earlier correspondence with the sector.

Currently all carbon and graphite activities falling under NACE code 23.99 have been considered eligible for CL-support from 2021 onwards; however, as the status before and after 2030 remains uncertain, ECGA would like to underline several elements we believe are essential to achieving the ETS as well as the Fit for 55 Package objectives, as follows:

- Free allocation should continue to be the key tool for sectors exposed to carbon leakage alongside financial compensation for CO₂ costs and electricity prices (electricity represents a substantial share of the carbon and graphite industry operating expenses);
- Article 3 of the draft Revised ETS should include a clear definition of the „decarbonisation“ concept that ensures its coherent use across legislation (The Climate Law, ETS, Energy Efficiency, The European Industrial Strategy);
- The process emissions allocation factor should be kept at 97%, without distortions;
- When defining carbon leakage protection, the sectors’ ability to pass-on costs into product prices should be taken into consideration;
- Given the latest trade and competition policy developments, the other Union policies and legislation currently being revised (CBAM, EED, State Aid for environment and energy, etc.), the international

¹ European Commission Joint Research Centre (2001), BREF note non-ferrous metals industry.

commitments and material market developments, as well as the ETS State Aid Guidelines should also be updated to maintain a level playing field.

In more detail:

Free allocation for carbon leakage sectors should be dynamic, considering recent production levels and it should allow industrial growth and extended production. The aim of the carbon leakage rules is to safeguard the international competitiveness of the EU energy intensive industries and maintain incentives for long-term investment in low carbon technologies if no comparable efforts are undertaken in other major economies. At the same time, to ensure the carbon leakage protection and competitiveness safety, all sectors found on the CL List should benefit from the same 100% CL factor; there should be no CLL tiered approach.

By making free allocation conditional on **decarbonisation** efforts, the specific objective of incentivising the uptake of low-carbon technologies will be supported. In this context, the „decarbonisation“ concept should be clearly defined, and its coherent use ensured across legislation (the Climate Law, ETS, Energy Efficiency, The European Industrial Strategy). At the same time, **the Energy Efficiency Audit Reports** to which the free allocation is now conditioned upon should be defined, applied, and referred to in a coherent manner along the different legislative acts such as the Energy Efficiency Directive, The ETS State Aid Guidelines as well as the Revised ETS. This way, the introduction of additional conditionalities for receiving free allocation in the form of investment obligations coupled to the energy audit under Art. 8 EED is avoided.

The European carbon and graphite sector has already begun implementing all necessary measures linked to the “Energy Efficiency First », taking utmost account in energy planning, and in policy and investment decisions, of alternative cost-efficient energy efficiency measures to make energy demand and energy supply more efficient, in particular by means of cost-effective end-use energy savings, demand response initiatives and more efficient conversion, transmission and distribution of energy, whilst still achieving the objectives of those decisions.

The broadening of the scope of free allocation must also provide additional incentives for installations to reduce GHG emissions, even if not covered by ETS. There are several installation using climate friendly alternatives to conventional natural gas-based process and, therefore, falling out of the ETS scope and not receive free allocation. Broadening the scope will also effectively prevent that those plants converting to low- or zero-carbon technologies are facing competitive disadvantages. The benchmark definitions should be revised so that an installation that partly electrifies and does not emit the same level of CO₂ would keep the same amount of free allocation.

Benchmarks for the determination of the free allocation to industry. The benchmark level should be better tailored to meet the individual circumstances of each sector and comply with the technological progress.

The **process emissions**² allocation factor should be kept at 97%, without distortions. Process emissions are particularly significant for the carbon and graphite sector most of the times accounting for over 50% of direct emissions. Within subsectors and installations, discrepancy of share of process emissions is very high, depending on raw material and technology, making especially difficult for the industry to improve its emissions intensity to match the rate of decline of free allowances anticipated through the Fit for 55 Package. In this context, the EC has already acknowledged the difficulty in reducing process emissions: where the fall-back approach for process emissions is used, the number of free allowances provided is equivalent to 97% of the process emissions. Currently the carbon and graphite sector has no sustainable, efficient commercial solution available to reduce direct emissions in its processes. At the same time, the available energy infrastructure and mix make it impossible to change from natural gas to electricity consumption in some thermal process, while there are no feasible commercial solutions available on the market to make investments in CO₂ capture facilities.

For the carbon and graphite sector, the **indirect emissions** intensities are higher than the direct emissions ones, thus indirect costs are higher than the direct costs. As free allocation only offsets part of the direct carbon cost and State Aid is currently not provided to compensate for the **indirect carbon costs** of the surveyed installations, the total net carbon cost to be borne by the industry is significant. At the same time, the current system for indirect cost compensation encourages installations to prefer direct emissions over indirect emissions. This hinders greater electrification of the production process, thereby slowing down an essential step in the transition to a low carbon economy.

Indirect emissions costs, primarily due to electricity consumption, represent an important part of the sector's operating costs. The average annual electricity consumption of the sector based on data collected from companies in the sector amounts to 1.4TWh in the period 2014-2016. Using the electricity emissions factor, established by the EC for the calculation of the carbon leakage indicator, of 0.376 t of CO₂/MWh, average annual indirect emissions from electricity consumption can be calculated at 532,400 tons. Assuming full cost pass through of EUA prices in electricity prices, significant recent increases in the former are expected to lead to a significant increase in indirect emission costs compared to previous periods.

In conclusion, ECGA believes that following the review of the Fit for 55 climate-related policy instruments, the Commission should also revise and amend the ETS-related State Aid Guidelines to ensure consistency with, and contribute to, the fulfilment of the climate neutrality objective while respecting a level playing field.

Financial compensation, support and incentive measures are also of utmost importance to prevent carbon leakage and achieve the Fit for 55 Package objectives. Energy intensive industries acting in the carbon and graphite industry constantly must improve their energy efficiency as they struggle to reduce a major cost via more efficient processes. Several companies have made over the last few years major efforts to further reduce their emissions in accordance with best available techniques (BAT) prescribed at EU level and increase their energy efficiency up to the level that technology and physics allow. Additional expenses would lead not only to a carbon but also an investment leakage, fewer jobs, less production and

² "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 CO₂ content of the used raw materials - geogenic emissions) are unavoidable.

less innovation. ECGA advocates for R&D support for technologies which can deliver emission intensity or electricity intensity improvements, following a more structured review of opportunities.

About the European Carbon and Graphite Association (ECGA)

The European Carbon and Graphite Association (ECGA) represents European carbon and graphite producers, the activities concerned are those under PRODCOM code 23.99.14 which covers the most energy intensive but also the most critical activities in the sector.

The European carbon and graphite producing sector is mainly concentrated in eight European Economic Area (EEA) Member States (Spain, Norway, Austria, Poland, France, Germany, the United Kingdom and Slovakia) but trading activities are present all over Europe. It is a multimillion 'added value' generating sector, with a worldwide turnover volume of €3 to 5 billion annually. Roughly 40,000 people are employed either directly or indirectly through this industry.

The main downstream market of the sector is the electrode market, especially the steel industry, for which the recycling of scrap steel reduces the CO₂-emissions of the sector. Electrodes for electric arc furnaces make up the biggest revenue share and create considerable interdependencies between the two sectors. Other important downstream markets are refractories, the aluminium industry, electronics and lithium-ion batteries.

The European carbon and graphite sector is an energy intensive sector, whose products and raw materials are an integral part of any economy and society. Standing at the beginning of most value chains, the sector is a critical supplier of essential materials and products in other key economic sectors including electronics, steel and batteries. The carbon and graphite sector therefore generate added value and growth through employment, economic growth, development, innovation and generating trade.