

## Introduction

Aurubis welcomes the opportunity to comment on the revision of the State Aid Guidelines for climate, environmental Protection and Energy (CEEAG).

The CEEAG are a key instrument in the industrial transformation towards a climate neutral economy. The revision must support the right framework for European Energy Intensive Industry to contribute to the transition, while remaining competitive on the global scale.

Aurubis is a leading worldwide provider of non-ferrous metals. We process complex metal concentrates and diverse recycling raw materials. Aurubis is the global leader for copper recycling. We have already contributed to decreasing GHS emissions in the EU. Aurubis has decreased the direct CO<sub>2</sub> emission by 35% since 2000. The carbon footprint of Aurubis' copper cathode is only 40% of the carbon footprint of global competitors.

As energy intensive industry and price taker in global competition we are facing higher production costs due to the electricity costs that our competitors do not have. Carbon leakage is already evident by rising copper production numbers in Asia and not in Europe. While European copper production did not show any significant growth, Asian copper production increased significantly: more than 5 times its output and more than doubled its market share from 27% in 1990 to 62% in 2017.

No transition will be achieved without a strong industrial base in Europe. Copper is a strategic material for the low carbon transition and plays a vital role in most decarbonisation solutions. EU copper production has world-leading environmental performance. Copper sector is one of Europe's most electrified industries, and a leading example of circular economy in action. Demand for copper will increase – especially with increasing electrification. However, without a level playing field, this increased demand could only be met with increased imports from regions (particularly China) which have a much higher CO<sub>2</sub> footprint and less stringent climate regulations in place.

The challenges for our industry are related to the availability and access to climate-neutral energy (mainly electricity) at globally competitive prices. The transition will require enormous investments to develop, upscale and implement new or existing decarbonization technologies. These investment costs cannot be born solely by the energy intensive industries and must be limited, given the high level of global competition. A revised state aid framework is extremely important to provide non-ferrous metals producers with the much-needed financial support and long-term regulatory certainty.

## Summary of position and recommendations

### General

The aid granted under the CEEAG will be important for the energy intensive industry to remain competitive, while creating incentives to facilitate projects to promote energy efficiency, emissions reduction and the development of innovative production and processes.

**Long term certainty.** The framework should provide long-term certainty on support for both investment and operating costs, and on regulatory costs to enhance companies' competitiveness and willingness to initiate sustainable projects. This is important to de-risk investments and make low-carbon solutions competitive with carbon intensive ones.

The framework should provide long-term certainty on exemptions scheme. While the current EEAG provisions run until 31/12/2021, the draft CEEAG, paragraph 414 sets 31/12/2023 as deadline to eventually adjust ongoing provisions. This deadline is too short and does not lead to investment security. Also, the CEEAG have no clear timeframes, so that the commission can review or amend the guidelines (paragraph 415) at any given point which does also not foster investment security.

## Section 4.1 Aid for the reduction and removal of greenhouse gas emissions including through support for renewable energy

### Extension of scope

We welcome the extension of scope to aid most decarbonization technologies as these new areas represent additional opportunities for industrial decarbonization. It is important that support to new areas should not be passed

on into additional charges to industrial energy-intensive consumers, who face international competition and carbon and investment leakage.

New technologies like Hydrogen production which is needed to decarbonize parts of the industry should at least for the quick run-up be exempted from the surcharges, to make the production of Hydrogen possible at compatible prices.

The provisions shall clearly state that aid for industrial decarbonization does refer to both - reduction of direct and indirect emissions. For the copper sectors, the indirect emissions represent the bulk of the footprint.

We also welcome the support schemes for new areas such as environmental objectives, recycling and resource efficiency. In addition to decarbonization efforts, industry is required to contribute to other environmental goals and reduce the environmental impacts coming from industrial activities. Contribution to circular economy and improvements of environmental performance shall be achieved in cost efficient manner and shall not entail disproportionate burden for industry. Support for recycling activities will help to maintain investment conditions in strategic value chains and secure global competitiveness of EU industry

### **Carbon contracts for difference**

We welcome the introduction of CCfD as an instrument to support industrial decarbonization as well as to cope with the increased production costs and maintain competitiveness of EU industry. Many of the potentially most impactful low-carbon production processes still cost more than the existing technologies. Industrial companies cannot develop and implement full scale operations for these low carbon technologies if they can't recover the significant investments and operating cost and remain competitive

Carbon contract for difference shall guarantee low carbon project developers a fixed carbon price, at a level that covers the incremental capital ("capex") and operating ("opex") cost of their technology.

The framework of CCfD shall complement the EU ETS by providing a predictable carbon price based on which competitive, long-term investment decisions could be taken.

At least in the initial phase, Carbon Contracts for Difference must compensate for the full difference in costs between new and old technology without taking into account the CO2 price.

Competitive bidding is not appropriate for complex and heterogeneous production processes. Tenders can only be used for projects with similar CO2 avoidance costs, since otherwise projects with higher CO2 avoidance costs would have no chance. There is high variability in the copper sector in terms of product specialization, production routes, deployed technologies, raw materials. Thus, respective decarbonization projects and CO2 avoidance cost will be significantly different, also leading to various environmental benefits. Contracts for difference for complex and specific production processes should be awarded via application procedures.

## **Section 4.11 Aid in the form of reductions from electricity levies for energy-intensive users**

We welcome that the new Guidelines will continue to allow for levies reductions for energy-intensive users. This is extremely important considering that the financial burden for these levies will most likely increase in the coming years due to higher renewable support. Without the reduction, electro-intensive industries facing the highest level of global competition, would not be able to remain internationally competitive, deliver environment and energy benefits and invest in green technologies.

### **Eligibility**

We recognize that copper production is considered at a significant competitive disadvantage because of electricity levies. However, we are concerned that industrial gases such as oxygen and hydrogen as well as recycling activities that provide essential material for copper production processes are not eligible for reduction from electricity levies. The impact on the whole value-chain should be taken into account to prevent the carbon-leakage effects.

### Industrial gases

We are concerned that Industrial Gases (NACE 20.11) – including oxygen and hydrogen are removed from the list of sectors eligible for reductions from electricity levies for energy intensive users. This will have a negative impact on

the competitiveness of EU copper industry by the rising cost of electricity due to environmental taxes and financing costs of renewable energy supports.

Oxygen production is very important and an integral part of the copper production process. Use of oxygen enrichment of combustion air for copper smelting contributes to energy efficiency and decrease of direct carbon emissions. The production of oxygen requires significant electricity consumption, representing up to 24-40% of total electricity use in copper smelters (Lauri Pesonen , 2017, "Understanding electrical energy use at copper smelters").

Oxygen enrichment is considered as the best available technology to improve energy efficiency for copper production. Furthermore, our flash smelting furnaces in the primary copper production route, under normal conditions, operate without any extra fossil fuels by only using the high oxygen enrichment of the combustion air. By this progress we managed to reduce our direct CO<sub>2</sub> footprint significantly in the past.

Without aid for energy intensive users, higher costs for industrial gases will have a negative impact on EU competitiveness at global trade and industrial value chains. The copper industry is electro-intensive and a price-taker on global markets. **The competitiveness of the EU copper smelters is determined by the processing revenues (treatment charge and refining charge) minus the operating cost, including energy and electricity costs. Therefore, the electricity levies have a high impact on erosion of profit margins. Not exempted, the electricity levies (20, 40, 60 €/MWh) for the cost of oxygen production represent respectively for 8, 15 and 23 % of the profit margin.**

Considering the important role of the industrial gases (mainly oxygen and hydrogen) in the decarbonization of industrial processes such as copper production, withdrawal of sector 20.11 from the list would not only increase the risk of carbon leakage but also inhibit copper sector's continued decarbonization efforts. Also, a level playing field between outsourced and insourced industrial gases should be safeguarded.

**We therefore ask for the re-inclusion of industrial gases in the updated guidelines,**

#### Recycling

In par. 192 the European Commission encourages the circularity and support for replacement of primary raw material with secondary raw materials as an improvement of resource efficiency. This is fully in line with the business model that Aurubis is currently focusing on namely closing the loop and recycling. However, the recycling processes or the processes of separation are also energy intensive processes. **Therefore, the relevant NACE Codes should also fall under the energy intensive sectors especially the (NACE 38.22).** Without this energy-intensive separation, recycling is not possible or even more CO<sub>2</sub> intensive in the following steps of the value-chain

#### **Scope and cumulative level**

Costs related to the low carbon transition are not limited to RES surcharges. In fact, the transition has led to European electricity consumers being burdened with numerous other costs and charges, which threaten the global competitiveness of the most electro-intensive companies (and particularly those who are 'price takers').

This draft guideline does not cover levies which reflect part of the cost of providing electricity. **We call for the scope to be further extended to include the possibility to exempt energy intensive users from surcharges due to capacity mechanisms funding and from system balancing and adequacy costs.** Such costs should be fully compensated being directly related to RES development.

The draft guidance (par. 355) asks the Member States to consider the combined financial effect of all eligible levies and include all reductions in a single scheme. This seems not appropriate because the electricity prices, levies and tax structures are very different depending on the respective Member state, which requires individual solutions. Furthermore, a European surcharge regime will not be implementable on the short timeframe.

**The compensation should not be made conditional to a minimum level of the levies.** The cost across the EU is very different and any minimum overall level of levies would not reflect reality and create distortions.

Due to the very large energy consumption and the partial nature of exemptions, energy intensive industries would have major competitive disadvantages compared to producers based in third countries that do not have comparable climate legislation and related regulatory costs.

## Proportionality of aid

According to the present draft, the aid should be proportionate if the beneficiaries pay at least 25% of the costs generated by the electricity levies or if the Member state limits the costs to 1.5% of the gross value added of the undertaking concerned.

This minimum level of contribution is higher compared to what companies are exposed to in current guidelines i.e. 15% or 20% of the surcharge and a cap of 0,5 % GVA.

Competitiveness of copper industry is influenced by the fact that the sector is energy intensive. The price of electricity has significant influence on the profitability of copper producing companies. The energy cost, mainly electricity represents up to 30% of operating (production) costs.

The global playing field is not advanced that far yet, so such an increase of contribution will negatively impact the competitiveness of the European industry. European industry can only achieve the needed investment levels for climate neutrality with a guarantee of reasonable profitability, and consequently comparable costs to those incurred by competitors in third countries.

**We call on the EU Commission to set the minimum contribution back to 15 %. We support limitation of the cost to all eligible undertakings. The burden for electro-intensive industries shall not go beyond what they can bear so cap of 0,5 % GVA must be kept. A cap of 1.5% GVA could be seen reasonable if it covers all electricity related surcharges, including the cost for indirect CO2 emissions.**

Lower aid intensity will be counterproductive with respect to the higher European Green Deal ambition and stricter objectives for industry. Electrification of industrial production processes will play an important role in the clean energy transition. Therefore, the existing individual reliefs from electricity levies that have so far proven necessary in terms of maintaining competitiveness should be preserved

Granting the aid in the form of a reduction in levies is preferable instead of fixed annual compensation amount (refund).

## Conditionality

It is important to note that due to high energy intensive nature and exposure to global competition, our industry have by nature the strongest incentive to be as energy efficient as possible to reduce the costs. However, should some form of conditionality be considered, it should be well designed, proportionate and should have an incentive effect without penalizing the companies that have already invested in these measures.

**The draft introduces some ambitious requirements. We are particularly concerned about the concrete feasibility and implications.** We also notice some inconsistencies between the efficiency requirements, which are at industrial site level, while the aid granted by EEAG is at undertaking level.

- The aid could be linked to the implementation of a certified energy management system. However, implementation of measures with a payback time of less than 3 years is very difficult, especially in Germany as EMAS is a system audit not an energy reduction audit and therefore an extension of the workload seems probable
- Reduction of the carbon footprint of electricity by at least 30% is very strict considering the current possibilities and requirements. For example, Germany currently has a regulation that EEG exempted companies get their electricity consumption from sources that are mainly not renewable.
- The requirement to invest a significant share of at least 50 % of the aid amount in projects that lead to substantial reductions of the installation's greenhouse gas emissions could impact the flexibility of the company to implement its own decarbonization strategy and investment decision.

## Taxonomy

We strongly disagree that access to any support scheme shall be subject to the compliance with EU taxonomy criteria. The Taxonomy Regulation is a voluntary classification system establishing which activities are defined as

environmentally sustainable economic activities. The intention is to create greater transparency for investors. The use of taxonomy criteria as a condition for State Aid, would expand the application of this instrument beyond its original intention, without achieving any additional benefits and helping industrial decarbonization.

There is no link or consistency between activities included in the EU Taxonomy and sectors/activities subject to carbon leakage risks.