



MYTILINEOS

To:

European Commission
Directorate-General for Competition
1049 Bruxelles/Brussel
BELGIQUE/BELGIË

Maroussi, November 20th, 2020

Subject: Competition Policy Supporting the Green Deal

To whom it may concern,

Mytilineos is one of the largest industrial companies in Greece, with activities in numerous sectors (*including Metallurgy, Electricity generation and supply, Gas trading, and EPC works*). One of our key lines of business concerns the operation of the largest vertically integrated alumina/aluminium production facility in Europe, where roughly 820,000 tonnes of alumina and 185,000 tonnes of primary aluminium are produced each year. The company is also making important strides in the field of aluminium recycling, having recently completed a large-scale investment to enable recycling at our plant, as well as the takeover of 'EPALME' (*the largest independent producer of recycled aluminium in Greece*). This enables us to produce another 50,000 tonnes of recycled aluminium each year, with plans to further scale up production to 65,000 tonnes by 2022. In the electricity sector, our company owns and operates 1.2 GW of thermal generation capacity (*consisting of three gas-fired power plants, including an industrial-scale high-efficiency cogeneration plant*) and is currently in the process of constructing a new 826 MW CCGT, which is expected to come online in 2022. Mytilineos is also expanding quickly in the field of renewable electricity, with over 200 MW of RES units already in operation and a multitude of projects in the pipeline. MYTILINEOS is also the leading independent power supplier in Greece. Additionally, through METKA EGN and its SES BU, MYTILINEOS enjoys established expertise and extensive know-how in building (and operating) RES & storage (and high-efficiency low carbon thermal plants) in all five continents of the world, including some of the most iconic RES projects, figuring among the global leaders in the industry. Finally, MYTILINEOS is one of the key regional stakeholders in the gas market, too: aside from being the largest importer of LNG in Greece and the second largest importer of natural gas in the country, we are also leaders in natural gas trading in Greece, while also holding a significant share in the (downstream) supply market.

Our company is fully committed to the European Commission's target of achieving climate neutrality by 2050. To this end, we recently announced an ambitious pledge to ensure that 100% of our aluminium will be produced using carbon-neutral electricity by 2030¹. This constitutes an incredible challenge, which so far has only been possible for aluminium smelters operating in very specific countries with access to massive volumes of hydropower and/or nuclear generation (*e.g. Norway*,

¹ [ClimateYourBusiness](#), 2020. Mytilineos: Green Aluminium by 2030.

Canada). Given the massive investments that will be required, as well as the increased costs that consuming renewable electricity tends to entail, the EU's competition policy (*and, in particular, its state aid policy*) will inevitably play a crucial role in: (i) enabling our company to make good on its pledge, and (ii) more generally, facilitating the decarbonisation of European industry.

In view of the above, our response to this consultation first seeks to outline the main challenges involved in decarbonising our company's operations (*with a particular focus on the aluminium sector, given that the challenges involved in decarbonising the energy sector are already widely discussed in the public sphere*), before outlining various ways in which the EU's competition policy could facilitate the transition.

Decarbonising the Aluminium Sector

Primary aluminium is produced via the process of electrolysis, during which massive volumes of electricity are consumed at an extremely steady rate. This means that the most effective way of decarbonising this process is to consume low-carbon (preferably zero-carbon) electricity. Ensuring a decarbonised electricity supply would reduce our aluminium plant's carbon footprint by over 80%. However, the requirement for an extremely steady and uninterrupted supply of massive volumes of electricity makes it very difficult -and expensive- to cover this demand using renewable electricity, which tends to be much more variable and unpredictable.

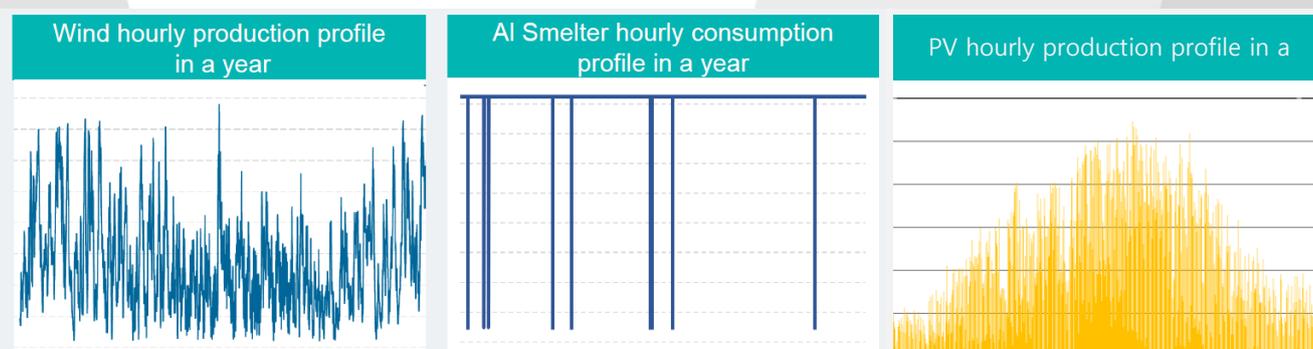


Figure 1: An aluminium smelter's consumption profile compared to the generation profile of a wind turbine and a PV unit

In order to ensure a steady, uninterrupted supply of electricity, the variable renewable production has to be 'firmed up' using some form of controllable generation. This leads to additional costs, which are often referred to as 'firming costs' or 'shaping costs'². This is particularly problematic for aluminium producers, who are exceedingly sensitive to electricity prices. Due to the electro-intensive nature of aluminium production, electricity tends to account for an incredible 40% of total production costs³, and therefore even a small increase in the electricity price can render an aluminium smelter uncompetitive. This reality is compounded by the intense global competition to which European

² These costs are discussed in both the [Industrial Transformation Masterplan](#) and a [report](#) that was published by DG ENER last year, titled "Competitiveness of corporate sourcing of renewable energy".

³ [European Commission](#), 2018. Composition and drivers of energy prices and costs in energy intensive industries.

smelters are exposed, especially from China. A report that was recently published by the OECD⁴ documents the massive overcapacity that has been built up in the Chinese primary aluminium sector (*which depresses global aluminium prices*), as well as the massive state subsidies received by Chinese aluminium smelters (*the OECD report concluded that global aluminium companies received USD 70 billion in different forms of support between 2013-2017; 85% of these documented subsidies went to just five Chinese firms*). As a result, China's share in global primary aluminium production has increased at an alarming rate over the past twenty years, from 11% in the year 2000 to 56% today⁵.

The combination of these factors makes it exceedingly difficult for aluminium smelters (and, indeed, other electro-intensive consumers) to consume renewable electricity. This is also the reason why, until now, the only cases of renewables PPAs in the primary aluminium sector are found in the Nordics, where the abundant hydropower can 'firm up' the variable wind production in an extremely cost-competitive and low-carbon manner. As a result, in a report published last year, DG ENER specifically mentioned that ***"it is apparent that more can be done to facilitate corporate sourcing of renewables in the aluminium industry"***⁶.

In this regard, the review of the European Union's competition policy constitutes an important opportunity to assess some of the barriers that are still preventing industrial consumers from consuming renewable electricity. Given that industry accounts for a huge chunk (37%⁷) of the EU's electricity consumption, removing these barriers is a prerequisite to achieving a carbon-neutral electricity system. Facilitating these 'hard to abate' consumers in their attempts to consume renewable electricity would pave the way for a rapid decarbonisation of both European industry and the European power sector (*for example, our company's aluminium plant consumes around 2.85 TWh of electricity each year; **covering just this one plant's consumption using renewables would increase the share of RES in Greece's final electricity consumption by an incredible 5%***).

1. A Global Approach to Competition Policy

Given the intense global competition that many European industries are subject to, it is absolutely crucial for the EU to start taking a more global approach to competition policy (and especially state aid policy), instead of focusing exclusively on the internal market. The situation outlined above with regard to China's increasingly monopolistic role in aluminium production is not unique to our sector. China has grown to account for over 50% of global crude steel production⁸ and also has a dominant position in the production of numerous critical raw materials, including rare earths (99% of global production) and magnesium (93%)⁹.

A key aspect of the EU's competition policy has always been the definition of the 'relevant market'. When the EU's state aid policy (and its competition policy more generally) was conceived, the EU was (along with the USA) **the** relevant market on the global stage, and therefore it made complete sense

⁴ [OECD](#), 2019. Measuring Distortions in International Markets: The Aluminium Value Chain.

⁵ [International Aluminium Institute](#), 2020. Primary Aluminium Production.

⁶ [European Commission](#), 2019. Competitiveness of corporate sourcing of renewable energy.

⁷ [European Environment Agency](#), 2020. Final energy consumption by sector and fuel in Europe.

⁸ [World Steel Association](#), 2020. Global crude steel output increases by 3.4% in 2019.

⁹ [European Commission](#), 2020. Critical raw materials.

to focus on maintaining a level playing field within the internal market. However, times have changed. The markets in which we operate have become increasingly global and interconnected, and European companies are now competing directly against companies from third countries that are not subject to the same rules. The EU's internal market is a sub-market that belongs to the (much larger) global market, in which the companies with the largest market shares are usually not European. Therefore, comparing the competitive position of two or more European companies achieves nothing in terms of safeguarding genuine competition in the actual market (i.e. the global one). China is on track to claim even larger shares of the global market over the coming years, which inevitably leads to the question: **is the EU's approach to competition law essentially benefitting Chinese production and leading to a genuine lack of competition on the global level?** Our current policies effectively 'cap' the level of dominance that can be achieved within Europe, but we are not also checking the impact that this has on competition in the actual (global) market, while we also tend to disregard the only relevant -from a climate perspective- impact, namely the rise or drop of global emissions. In this way, the EU's competition policy might actually (unintentionally) be facilitating the players who enjoy genuine dominance in the global market. Very simply, if Chinese companies (which are usually state-owned in one way or another) end up accounting for 100% of global aluminium production, then there will be no competition in the global market, to the detriment of consumers across the world.

And when bringing in sustainability considerations, competition policy could just be the ideal vehicle: namely, comparing (on a global scale) environmental/climate performance could serve as the silver bullet for competition to justly boost EU industrial production. However, building on the initiative of the Hellenic Competition Commission, we would like to stress that competition policy should not be trapped in an overly narrow interpretation of 'sustainability' (i.e. **reducing local emissions in the EU, which in some sectors such as primary aluminium has actually led to a significant increase in global emissions**) but rather an all-encompassing view of "sustainability", as outlined in the 17 UN SDGs: efficiency, affordability, industrial growth, securing jobs, fighting poverty (including energy poverty) are among them, as is also climate change.

Therefore, in order to "promote and protect effective competition in markets, delivering efficient outcomes to the benefit of consumers" (*the goal of EU competition rules, as per the consultation document*), it is crucial to start focusing more on ensuring a level playing field at the global level, rather than focusing exclusively on the internal market. It could be argued that this is the role of the EU's trade policy instead; however, trade policy is inherently too slow and inflexible to effectively deal with this issue.

2. Competitiveness of European industry as objective of common interest

In the Green Deal Communication, the Commission outlined its vision to become a 'global leader' in the fight against climate change. The achievement of this goal is dependent on our ability to (re)establish Europe as an important producer of clean goods and raw materials, given that it is impossible for Europe to 'lead' any market in which its companies do not have a significant presence. Thus, we need to ensure that industrial production in Europe is sustainable but also globally competitive at the same time. If, on the contrary, we resign to the idea of a gradually shrinking NFM industry in the EU (despite sharply rising EU and global demand), as a result of higher climate ambition, as outlined in the 2030 Impact Assessment, the EU will not only fail to lead other economies by example but will maximize its import dependence, further compromise its "strategic autonomy" and

offer a bad service to the global effort against climate change, since its domestic production will be largely replaced by more carbon-intensive production elsewhere (as unequivocally documented in the aluminium industry over the past 15 years).

In this regard, it is very important to highlight the climate supremacy that Europe has already achieved with regard to industrial production across many sectors. For example, the carbon footprint of producing primary aluminium in Europe is around three times lower than producing the same aluminium in China¹⁰. In the case of nickel, Chinese production is eight times more carbon intensive than its European equivalent. Similar examples can be formulated for many other European sectors, and especially those with electrified processes (since the European electricity mix has a much lower average carbon content than the Chinese electricity mix).

Therefore, the most effective way in which Europe can help to reduce global emissions is to focus on boosting the level of clean domestic production. This would displace the need for carbon-intensive imports, leading to a reduction of emissions on the global level, which is genuinely aligned with IPCC objectives. In order to achieve this, **the competitiveness of the EU's energy-intensive industries should be explicitly recognised as an objective of common interest**. This would reflect European industry's substantial contribution to fighting climate change, but also its contributions to the achievement of many of the UN's other Sustainable Development Goals (including the fight against poverty).

3. Support for investments in low-carbon technologies

The consultation document poses us the question of whether the EU Taxonomy should be used to define the 'positive environmental benefits' of a project, which could determine the level of state aid that said project is eligible for. The suitability of this proposal will depend very much on how well-designed the Taxonomy ends up being. Unfortunately, the Technical Expert Group (TEG) that developed the first set of proposals for the Taxonomy's technical screening criteria and Do No Significant Harm (DNSH) criteria **was characterised by a striking lack of industrial representation and transparency**. As a result, many of the proposed thresholds, already found in the draft delegated Acts published by the Commission today, **are incredibly unrealistic** and, in some cases, **even impossible to achieve** (we had hoped that after repeatedly reaching out to the Commission since the publication of the Final TEG report these issues would have been addressed in the draft delegated acts, however, the texts put out for consultation have actually exacerbated the problem¹¹!). For example, in order for

¹⁰ [European Aluminium](#), 2019. Vision 2050; European Aluminium's Contribution to the EU's Mid-Century Low-Carbon Roadmap.

¹¹ Indicatively, no primary aluminium smelter in the EU does (or can with feasible and economically viable investment) meet the thresholds set in order to qualify as sustainable, whereas the vast majority of primary smelters in the EU (roughly 90%) is deemed to be "doing significant harm". This, however, is not even the result of process emissions from the industrial user but rather the allocation to the smelters of emissions from another industrial sector, namely electricity production. On combined heat & electricity production, the threshold set is not only impossibly low, it's actually incomprehensible, since emissions seem to be measured on the energy INPUT (rather than the output)! As far as electricity production is concerned, here again the [life-cycle analysis](#) is completely missing... the taxonomy exclusively focuses on **final** emissions: the embedded carbon footprint of RES equipment, largely imported from in China, [using chinese aluminium, silicon etc with a considerable carbon footprint](#), is completely disregarded. When discussing "sustainability" ("sustainable finance") it is imperative

primary aluminium production to qualify as making a substantial contribution towards climate change mitigation, the TEG proposes a criterion that implies that almost the entirety of the aluminium smelter's electricity supply would have to be decarbonised. This is proposed despite the fact that the TEG itself (on the very next page of the report) acknowledges that *"the availability low carbon electricity may be a limiting factor, depending on the region"*. Thus, linking state aid to the EU Taxonomy leads to a very real risk that projects will not be able to receive the required level of state aid, even in cases where the project in question can make important contributions towards the objectives of the Green Deal. The level of state aid cannot possibly be linked to the achievement of impossible targets, nor can it lead to a black-listing of the entire industry covered.

However, state aid can play a crucial role in facilitating the investments that will be required in order to meet our climate targets. These investments usually entail additional costs when compared to conventional (but more polluting) technologies, making it difficult (or often even impossible) for European companies to proceed with these investments while preserving their global competitiveness. Thus, public funding can play a crucial role in **bridging the investment gap**, by covering the additional costs that low-carbon investments (and sustainable investments more generally) tend to entail. This would enable European companies to decarbonize their processes without compromising their global competitiveness. Possibilities for public funding to cover the additional costs of low-carbon investments are already foreseen in certain cases (e.g. for Carbon Capture and Storage under the EEAG, whereas the same logic also forms the basis for funding under the Innovation Fund). However, these examples are limited in number, and the same form of support should be foreseen for the full range of investments that will be required in order to meet our climate targets. It is important to note that apart from the initial capital investment, low-carbon projects also often involve high operating expenditures compared to conventional projects. Therefore, in order for these investments to be feasible, the support would also have to cover the additional OPEX (as is the case under the Innovation Fund).

Furthermore, state aid in the energy sector is usually targeted at the production side (e.g. aid for the production of renewable electricity). However, this often leads to unintended consequences that limit the effectiveness of the aid. For example, as acknowledged by the Commission¹², the possibility for renewable producers to receive stable revenues (above the market price) under a support scheme has created a strong disincentive for these producers to sell their electricity to industrial consumers. As a result, while we have made significant strides forward with regard to the production of renewable electricity, industrial consumers in particular are still struggling to consume this electricity. In order to reach the level of RES penetration that would be required to meet the EU's climate targets, it is important for **state aid to be granted in a more holistic manner that facilitates both the production and consumption of renewable energy**. Our specific proposals in this regard are outlined in more

that the notions of efficiency, affordability, growth, jobs etc (UN SDGs 7, 8, 9, 11, 12) are equally considered, for if we fail to do so, we shall undoubtedly compromise the achievement of the objective, namely actually achieving our global sustainable goals. E.g. using a heat & power cogeneration plant achieving overall efficiencies above 90% or a CCGT reaching efficiencies of 63% are directly considered to be doing significant harm according to the taxonomy, likely sentencing the EU in a long-term coal & lignite-fired capacity lock-in.

¹² [European Commission](#), 2019. Competitiveness of corporate sourcing of renewable energy.

detail in our response to the recent inception impact assessment for the review of the Renewable Energy Directive¹³.

4) The use of competition policy to scrutinize other pieces of EU legislation

Finally, the EU's competition policy should also be used to scrutinize other policy instruments, in order to ensure a fair approach with regard to the treatment of each sector. For example, if we consider the TEG's proposals for the EU taxonomy, both electrified vehicles and electrified heating (heat pumps) are automatically considered sustainable (regardless of the carbon footprint of the electricity they consume) based on the presumption that the electricity grid will 'clean up' over time (the same presumption is also applied in the context of the Innovation Fund). However, electrified industrial production (e.g. aluminium) is not automatically considered taxonomy-compliant, and instead companies in our sector have to comply with an incredibly low emission limit that is currently impossible to achieve in most Member States. Aside from the lack of fair treatment, this also creates a massive barrier for other industrial sectors attempting to electrify their own processes, despite the fact that the Commission specifically highlights the crucial role that electrification will have to play in order for us to achieve our climate targets¹⁴. The fair treatment of each sector is essential in order to allow the economy to blossom, to the benefit of consumers. Unduly penalizing certain sectors: (a) unjustly benefits others, thus distorting competition between different products and materials, and (b) deprives the EU population and Member States of massive, sustainable growth potential.

5) As regards the significance of state aid policy design and implementation regarding certain aspects of electricity markets, we would respectfully refer the Commission to our contribution in **State aid case no SA.54915 (2019/N)**.

Yours sincerely,
For MYTILINEOS S.A.

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¹³ <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12553-Revision-of-the-Renewable-Energy-Directive-EU-2018-2001/F554076>

¹⁴ [European Commission](#), 2018. In-depth analysis accompanying the Communication.