

ANNEX # 1

RUSAL's additional comments for the second round of the public consultations on the Carbon Border Adjustment Mechanism (CBAM)

1. Summary

RUSAL welcomes the commitment of the European Commission (Commission) to transition towards a greener and more sustainable economy meeting the EU's climate goals. Our position is that while the aim of the Carbon Border Adjustment Mechanism (CBAM) is admirable, there are unintended consequences of its proposed application which would be counterproductive to the Green Deal.

This ranges from questions over WTO compliance through to the continuation of a de facto artificially high price for primary aluminium (PA), which damages the EU downstream sectors (transport, construction, packaging etc), which directly employ more than 200,000 people across the continent. The costs of raw materials constitute up to 86% of average business costs for semi-fabricated aluminium (source: *OECD Measuring distortions in international markets – the aluminium value chain*). This means that if CBAM is introduced in relation to primary aluminium, EU producers of semi-fabricated products must pay more for primary aluminium than their competitors, putting them at a clear disadvantage.

The downstream aluminium producers' extra-costs from already existing in the EU import duty for PA was estimated at €17.8 billion in 2000-2017, averaging almost €1 billion per year (Luiss Guido Carlo University research¹). Automotive and packaging sectors, being the growing end-users of aluminium products are among the main losers.

Moreover, the primary function of the CBAM – to prevent carbon leakage – will not work for PA. That horse bolted long ago; today, the EU imports c. 75 % of its PA needs, and this will grow, as due to high electricity and labour costs, primary aluminium smelters started relocation from the EU to other countries about 30 years ago since when no new smelters have been built in the EU. Since early 2000, EU smelting capacity has shrunk by c. 30 %.

More detailed analysis and suggestions for alternative solutions to meet Europe's Green Deal ambitions for the Primary aluminium industry are below. We hope that realisation of this initiative will ensure the efficiency and sustainability of low-carbon transformation of the EU to the benefit of its citizens - and our many customers in downstream sectors.

2. Background – RUSAL and Europe

RUSAL is the world's largest producer of low-carbon aluminium (6% of global supply) with some 95% of its metal produced by independent hydropower supplied by its parent company, EN+. It is a vertically integrated, private company listed on the Hong Kong Stock Exchange. The Company's offices operate in 20 countries across five continents.

¹ LUISS report, 2019, "The impact of the EU trade measures on the competitiveness of downstream activities"

By implementing innovative and energy-saving technologies RUSAL is able to reduce greenhouse gas emissions at all production stages. This has enabled RUSAL to become one of the first in the world to master the production of 'green' aluminium under the ALLOW brand.

The EU imports 6 of the 7.8 million tons of primary aluminium that it consumes every year, RUSAL supplies around 17% of total primary aluminium demand. In 2019, the EU aluminium downstream consumed 1.3 million tonnes of RUSAL's aluminium. Therefore RUSAL is vitally interested in the continuous future well-being and development of the EU downstream producers.

RUSAL's EU assets produce more than 30% of alumina in the EU; it is a significant employer in the EU with 1,200 jobs in three production facilities (Aughinish in Ireland, Kubal in Sweden and Eurallumina in Italy).

Since 2007, RUSAL has invested more than 530 million euros in its EU facilities

- Aughinish – EURO 242 mln;
- Kubal – EURO 222 mln;
- Eurallumina – EURO 66 mln.

RUSAL's EU subsidiaries are key contributors to the development of local transport and energy infrastructures and community programs.

RUSAL is a committed and socially responsible participant in both the EU and other markets around the world, and it conducts business in line with EU and Member States' legislation and the rules and norms of international trade.

3. Problems with current proposed implementation of the CBAM

WTO issues

A unilateral and sector specific carbon border adjustment mechanism (CBAM) automatically places it out of the WTO legal order. On the basis of the information available to-date, none of the currently discussed CBAM options appears to be fully compatible with WTO rules and other international commitments of the EU, as well as EU law. A genuine environmental measure may be adopted only on the multilateral basis, where circumvention would not be possible due to multilateral commitments. Concerns also arise with regard to the potential extraterritorial application of EU law and the way the proceeds from the CBAM are going to be used.

Proposed taxation of international trade flows is an unprecedented initiative on the international level and may only be efficient if adopted at the multilateral level, with the Paris Agreement and the WTO being a perfect basis for that.

In any event, establishing a WTO and EU law compatible CBAM will take quite a lot of time, while the Commission already has in its hands a truly environmental and WTO compatible measure in the form of removal of import duties on low carbon goods such as low carbon aluminium (LCA), currently subject to 3-6 % import duty. It is noted that such immediate and ideal environmental and industrial policy measure is not available for many other sectors and subsectors where the EU does not apply import duties or import duties are negligible, such as steel or cement.

Instead, the Commission may wish to consider permanent unilateral import tariff suspension vis-à-vis products with low carbon content, such as LCA. This could easily be implemented by the creation of a

separate customs nomenclature (CN) code and establishing a reliable system of CO2 content certification. This move would be in full compliance with EU and WTO law and fully lies in the competence of the EU Institutions. RUSAL has been proactive in industry-wide efforts to define LCA benchmark reflecting average performance and would be pleased to share the available knowledge.

Such an approach could apply only to selected products that are currently subject to substantial WTO-bound import tariffs of >2 % in the EU. It would support the EU in its climate agenda and level playing field for the EU downstream. This approach would not be suitable for steel or electricity which are subject to zero import tariffs, or cement – 1.7 %. RUSAL will gladly provide its views and proposals on such an initiative for the PA sector.

Additionally, a move to liberalise low-carbon aluminium trade would encourage industry-wide incentives for research collaboration for decarbonisation and sustainability. This could cover inert anode and other breakthrough technologies for emissions/cost reductions, x-ray/sensor-based/laser detection technologies for recycling, among others.

Carbon leakage

A CBAM initiative, at the current level of detail, is particularly not appropriate for sectors/subsectors that are characterised by high deficit of domestic production and are not at risk of significant carbon leakage, such as the unwrought primary aluminium (PA) subsector.

If the EU opts for a unilateral and sector specific carbon taxation mechanism, it is very important, in the opinion of RUSAL, as a large supplier and producer of primary aluminium in the EU, to raise the point of mismatch of the available CBAM mechanisms and the structure and nature of the EU aluminium industry.

It is noted that such CBAM is unlikely to genuinely serve its main stated goals – to reduce carbon emissions on the EU and global level, and to prevent “carbon leakage” in the EU. For example, due to easy circumvention of the CBAM by way of so called carbon absorption, resource reshuffling, etc., which are beyond control of the EU, emissions and “carbon leakage” will just migrate from one sector/subsector and jurisdiction, to another and thus won't have any benefits for the environment and decarbonisation where implied.

Not including the raw material production (alumina), there are at least two distinctively different subsectors in the aluminium industry. Primary aluminium (PA) subsector producing unwrought aluminium and alloys using the electrolytic smelting process, and the downstream (DS) aluminium subsector, which consumes the production of PA sector and transforms it into rolled, extruded, casted, forged or other type of semi-finished products then sold to various industrial applications and further processing.

Primary aluminium is the major cost of manufacturing of downstream (semi-finished) products accounting for circa 60-80% of the total cost of extrusion and FRP production and 65% of casting production for producers.

Each subsector may be in an absolutely different situation in case of CBAM implementation, as far as the risk of carbon leakage is concerned.

EU PA subsector

Substantial leakage (albeit non-carbon but electricity and other costs related), has already occurred in the EU PA industry. Primary aluminium producers have gradually closed their capacities or have transferred the facilities from the EU influenced by high electricity tariffs labour and environmental costs, and not by the EU ETS².

Since 2000, the EU has lost more than 30% of its primary aluminium production capacity - production of primary aluminium in the EU-28 declined from 2.95 mln t in 2000 to 2.0 mln t in 2019. Today, over 75 % of EU primary aluminium demand is met by imports, not a single greenfield PA facility was launched in the EU in the last 27 years while the primary aluminium production facilities all have being given free EU ETS allocations³. At the same time, the application of the EU ETS to the aluminum industry began only in 2013. This suggests that other factors, rather than carbon charges, were the reason for the decline in EU production.

Thus, the risk of “carbon leakage” of the remaining production in the PA subsector should be addressed in an industrial policy measures format. The CBAM would not by any means be an appropriate measure to restore production for this subsector, and such an approach will contradict the stated goals of the measure. Importantly, if implemented, such CBAM would most negatively affect the EU aluminium downstream subsector which still covers up to 96% of the Union demand and employs 90 % of the total industry’s workforce while being increasingly dependent upon imported primary aluminium as explained below⁴.

The demand for primary aluminium in the EU is strong and growing. In 2019 the total consumption of primary metal in the EU-28 was 7.8 mln t. Despite the expected slowdown on the back of COVID-19, the recovery is forecasted to start very soon. According to CRU “demand loss will be only temporary, with a recovery expected in spring 2021”⁵. So, primary aluminium demand will restore, and based on some forecast, even surpass the level of 2019 not later than in 2022.

EU downstream (DS) subsector

The decreased production of primary metal in the EU has been replaced by imports from non-EU countries. At the moment, three quarters of primary aluminium consumed in the EU are imported (please refer to Chart 1). Thus, in the case of CBAM imposition on PA the DS subsector will experience a cost rise for the entire range of its main raw material, unwrought aluminium, representing generally 60-80% of the total cost of DS products. The EU downstream segment is already suffering from higher domestic price for unwrought⁶ aluminium on the back of the existing import duty for unwrought aluminium. The additional cost pressure from a CBAM tariff would further deteriorate the EU aluminium industry’s global competitive position. The extra-costs and lower profits could lead to a

² Study on the Competitiveness of the EU Primary and Secondary Mineral Raw Materials Sectors/ Final Report for DG Internal Market, Industry, Entrepreneurship and SMEs/ 30th January 2015

<http://www.euromines.org/files/news/ec-report-study-competitiveness-eu-primary-and-secondary-mineral-raw-materials-sectors/study-competitiveness-eu-primary-and-secondary-mrms-april2015.pdf>

Competitiveness of the EU Non-ferrous Metals Industries FWC Sector Competitiveness Studies/Ecorys

<https://op.europa.eu/en/publication-detail/-/publication/9c9b0126-7710-44b0-a96c-93a78b7fb938>

³ The last aluminium smelter commissioned in the EU was in 1993 in Slovakia.

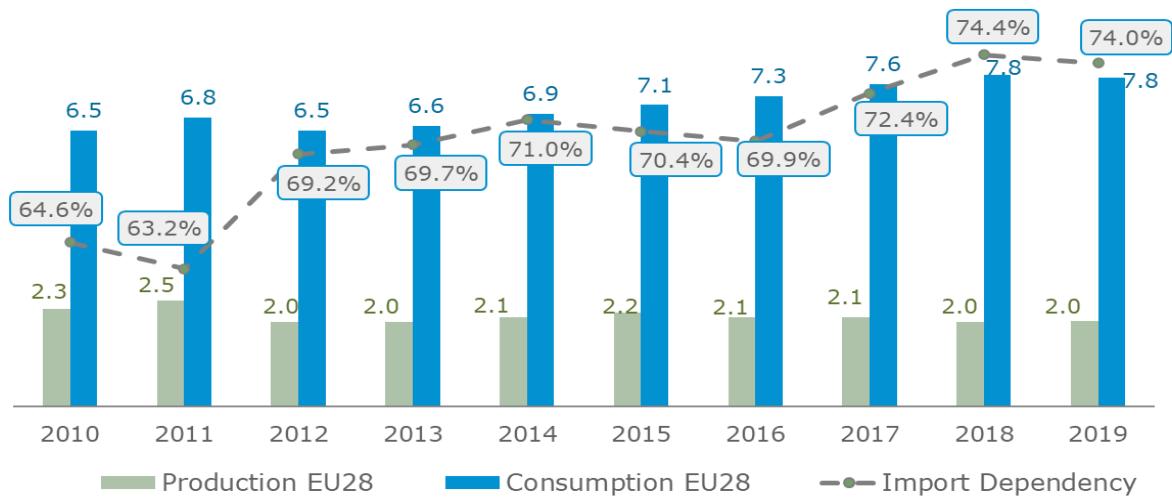
⁴ <https://face-aluminium.com/wp-content/uploads/2019/09/LUISS-study-presentation-final.pdf>

⁵ <https://www.lightmetalage.com/news/industry-news/aluminum-response-to-the-novel-coronavirus-crisis/>

⁶ product obtained by casting without further hot or cold working, e.g. ingots for rolling, ingots for extruding, ingots for forging, ingots for remelting, cast plate or castings, from primary smelter or re-melted from scrap.

decrease in the EU downstream output and employment, as most downstream producers operate with decent profit margins not exceeding 10%.

Chart 1. EU28 primary aluminium production, consumption and share of import, mln t



Based on multiple examples, such as an import duty on primary aluminium in the EU and the recent Section 232 tariffs imposed in the USA, any import duty means the domestic price for primary aluminium is inflated. CBAM implementation on PA would lead to a similar same effect as the current EU import duties on primary aluminium - an inflation of EU domestic prices.

According to the current EU legislation, primary aluminium and aluminium alloys are subject to the EU import duties of 3-6 %. Through empirical evidence, it has been proven that EU producers of metal align their domestic prices with the highest possible level of imported duty paid PA (see, for instance, Ecorys, 2011⁷ and GRIF LUISS, 2019). As a matter of fact, the EU market prices for primary aluminium always include the import duty, whatever a country of origin is. Based on LUISS evaluation, the total estimated cumulative extra costs sustained by the EU aluminium downstream subsector range from EUR9.7 to EUR17.8 billion in the period 2000-2017.

The evidence of the negative effect of the primary aluminium cost increase on the economy has also been seen in the United States, after President Trump Section 232 imposed tariff of 10% on all unwrought aluminium. According to the statistics, U.S. producers raised prices by the same amount as importers did, which resulted in 10 % higher domestic prices of primary aluminium in the USA. The Director of Immigration and Trade Policy of the American Action Forum estimated that without accounting for tariff exclusions granted at the request of U.S. businesses, “Imposed under Section 232 10% tariffs on aluminium realized in the additional cost burden for US economy at total US\$983.9 million annually”.⁸

Thus, an introduction of the CBAM would lead to an overall growth in domestic prices for primary aluminium (raw material) corresponding to the carbon levy paid, and subsequent rise in prices for downstream semi-finished products.

⁷ ECORYS Research and Consulting, 2011 “Competitiveness of the EU Non-Ferrous Metals Industries”

⁸ <https://www.americanactionforum.org/research/the-total-cost-of-trumps-new-tariffs/>

4. Conclusions and proposals

In our opinion, a CBAM in the PA subsector is not an adequate, potentially harmful, measure from the point of view of the green agenda and competitiveness of the EU aluminium industry as a whole.

For the PA subsector an alternative and faster and even “greener” route should be considered. Such a route could include the expeditious suspension of EU import tariff for low-carbon primary aluminium (LCA), e.g. primary aluminium produced with associated footprint at 4.0 CO₂ t per t of aluminium (smelters, scope 1&2).

In this context, the Commission could introduce separate custom code on LCA products, and a permanent unilateral import tariff suspension for such products. A separate CN code combined with dismantling of tariffs for LCA would be compliant with WTO rules and would not risk retaliation from the EU’s trading partners.

Coupled with a clear and reliable system of CO₂ footprint certification, this would be a perfect trade, industrial and Green Deal measure as it would truly create incentives for decarbonisation of the aluminium sector worldwide and provide the EU DS subsector with competitively priced primary aluminium with the lowest possible carbon footprint. In fact, such tariff measures are likely to boost the EU DS subsector as its low carbon aluminium products with a green label and high value added in the EU will be at highest possible demand all over the world.

RUSAL is open to further comments and discussions and will be happy to provide any additional information.

ANNEX # 2

Calculations of losses to the EU downstream subsector in case a CBAM is applied on primary aluminium

RUSAL has made its own estimation of potential losses of the EU downstream subsector due to the CBAM introduction on PA. The calculations were made for two main options for the design of the CBAM currently considered by the Commission.

According to the Commission a CBAM is likely to take form of a (1) border tax/customs duty or (2) exporters/importers will have to purchase emissions allowances under the EU ETS with regard to selected carbon intensive products and depending on the product’s carbon footprint. Both alternatives mean additional levy/tariff/tax on selected products. At this stage there is no clear information on the type and size of the future levy to make exact calculations.

Therefore, the calculations for the first option are based on a credible assumption that all PA imports would be subject to a carbon levy in the amount of an average rate of 5 and 10 % of products’ value.

The second option implies that imports to the EU are to be included into the ETS and will require purchasing allowances for CO₂ emissions by foreign producers or importers or the obligation to purchase allowances from a separate pool outside the ETS dedicated to imports, which would mirror the ETS price. The metal with carbon emissions below 4.0 tonnes of CO₂ equivalent per tonne of primary aluminium Level 1 (International Aluminium Institute)⁹ is considered as low-carbon, as it was proposed by the Carbon Trust¹⁰.

⁹ Aluminium Carbon Footprint Technical Support Document (2018)

¹⁰ <https://prod-drupal-files.storage.googleapis.com/documents/resource/public/The-Case-for-Low-Carbon-Primary-Aluminium-Labeling.pdf>

In only “Imports” case we assume that only imports with associated CO₂ emissions over 4 tCO₂/t Al will have to buy emissions allowances from the ETS or separate pool and only on the CO₂ volume exceeding 4tCO₂/t Al threshold. We estimated the total share of the imported primary aluminium with 4 tCO₂/t Al or higher at 17% of total EU unwrought aluminium consumption, and we expect that extra premium from CBAM imposition will be 17% of the premium for the marginal importer, i.e. importer with the highest level of emissions.

Imported products should not be subject to higher CBAM rates than domestic like products. Therefore, if EU producers get free allowances, they must be taken into account in setting a CBAM rate on imports. In “All Suppliers” case we assume that all primary aluminium suppliers, including importers and EU producers, with associated CO₂ emissions over 4 tCO₂/tAl will have to buy quotas from the ETS or separate pool and only on the CO₂ volume exceeding 4 tCO₂/tAl threshold, so that carbon emission costs of EU and foreign producers would be identical.

We estimated the total share of the supplied primary aluminium with 4 tCO₂/tAl or higher at 31% of total EU unwrought aluminium consumption, and we expect that extra premium from CBAM imposition will be 31% of the premium for the marginal supplier, i.e. supplier with the highest level of emissions.

As it follows from the tables below, based on RUSAL’s estimation, the introduction of the CBAM will lead to the inflation of the domestic price for primary aluminium by EUR60-200 per tonne of unwrought aluminium (Table 1 and 2) for both options. That would realize in the 4-10% higher cost for average downstream producer whose profit margins are normally below 10 %.

The total extra-costs for the EU downstream producers for the period 2021-2025 are estimated at EUR3.5 -10.0 bln for different scenarios of the CBAM introduced (Table 3).

Table 1. The potential price inflation due to CBAM Flat tariff (first option)

The extra-premium of EU domestic price for unwrought aluminium is calculated as carbon duty/tax primary importers will have to pay (i.e. 5% or 10% from LME price). The final price also includes 3.5% import duty premium of Rotterdam ingot over LME high grade price.

Primary aluminium price - Flat rate	2021	2022	2023	2024	2025
LME High Grade primary Al cash, EUR/t	1,538	1,599	1,682	1,795	2,036
Flat rate, base case, %	5%	5%	5%	5%	5%
Flat rate, base case, EUR/t	77	80	84	90	102
Flat rate, upper case, %	10%	10%	10%	10%	10%
Flat rate, upper case, EUR/t	154	160	168	179	204
Final price, incl import duty and CBAM - base case, EUR/t	1,669	1,735	1,825	1,947	2,209
Final price, incl import duty and CBAM - upper case, EUR/t	1,746	1,815	1,909	2,037	2,311

Table 2. The potential price inflation due to ETS CBAM (second option)

The price for CO₂ emission is assumed at the current level of 25 EUR per tonne¹¹. For extra-costs estimation it is assumed that either all importers (in Only “Imports” case) or all suppliers, including EU producers (in “All Suppliers” case) will have to buy quotes in excess of low-carbon level 4 tCO₂/tAl (All emission volumes are as of Scope 1& 2, smelters).

¹¹ <https://markets.businessinsider.com/commodities/co2-european-emission-allowances>

Primary aluminium price - ETS CBAM	2021	2022	2023	2024	2025
LME High Grade primary Al cash, EUR/t	1,538	1,599	1,682	1,795	2,036
CO ₂ price (based on EU ETS), EUR/t	25	25	25	25	25
Only Imports case: Only importers with CO₂ higher than LCA 4.0 tCO₂/tAl to pay CBAM, i.e. buy CO₂ over 4.0					
Share of total consumed, with CO ₂ higher than LCA 4.0 tCO ₂ /tAl	17%	17%	17%	17%	17%
Cost of CO ₂ for marginal exporter, EUR/t	355	355	355	355	355
CBAM premium as cost for marginal exporter * share of metal CBAM paid, EUR/t Al	61	61	61	61	61
All Suppliers case: All suppliers (incl EU) with CO₂ higher than LCA 4.0 tCO₂/tAl to pay CBAM, i.e. buy CO₂ over 4.0					
Share of total consumed, with CO ₂ higher than LCA 4.0 tCO ₂ /tAl	31%	31%	31%	31%	31%
Cost of CO ₂ for marginal exporter, EUR/t	355	355	355	355	355
CBAM premium as cost for marginal exporter * share of metal CBAM paid, EUR/t Al	111	111	111	111	111
Final price, incl import duty and CBAM - Only Importers, EUR/t	1,653	1,716	1,801	1,918	2,168
Final price, incl import duty and CBAM - All Suppliers, EUR/t	1,703	1,766	1,852	1,968	2,219

Table 3. The estimated loss of EU downstream segment from CBAM introduction.

As it is assumed that the domestic price is always includes import duty and CBAM payment for any design of CBAM chosen. Therefore, EU downstream producers will have to buy metal on inflated price regardless the metal's country of origin and their costs will be higher by the price premium. The total extra-costs are estimated as a price premium for unwrought aluminium multiplied by the total unwrought aluminium consumption.

	2021	2022	2023	2024	2025	Total 2021-2025
Total downstream producers extra-cost estimated						
EU unwrought aluminium consumption, estimated, kt	11,826	10,272	11,313	11,695	12,500	57,606
Flat rate, base case, price premium, EUR/t	77	80	84	90	102	
Flat rate, base case, extra-cost, EUR mln	910	821	951	1,049	1,273	5,004
Flat rate, upper case, price premium, EUR/t	154	160	168	179	204	
Flat rate, upper case, extra cost, EUR mln	1,819	1,643	1,903	2,099	2,545	10,009
ETS CBAM, Only Imports case, price premium, EUR/t	61	61	61	61	61	
ETS CBAM, Only Imports case, extra-cost, EUR mln	716	622	685	708	757	3,489
ETS CBAM, All Suppliers case, price premium, EUR/t	111	111	111	111	111	
ETS CBAM, All Suppliers case, extra-cost, EUR mln	1,313	1,141	1,256	1,299	1,388	6,397