



# Sustainability-Linked Financing Framework

2022



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## 1. Introduction

### 1.1. Preface

Companhia Brasileira de Alumínio (CBA) is the only fully vertically integrated aluminium company in Brazil. The company's operations range from bauxite mining, through the refinery where bauxite is processed into aluminium oxide and smelters where molten aluminium is produced, to facilities where the aluminium is made into a range of casting products (ingots, slabs, billets and rod) and semi-fabricated products (caster rolls, sheet, foil, extruded profiles, and parts and components). These materials are mainly supplied to the packaging, automotive and transportation industries and to strategic customers in the building and construction and consumer products industries, with whom the Company collaborates constantly to deliver increasingly lightweight and durable material solutions. Much of the electricity used at CBA's largest plant in Alumínio (SP), in southeastern Brazil, is sourced from 21 hydropower plants owned by the Company, a renewable energy source enabling low-carbon aluminium production.

CBA has always been engaged around environmental, social and governance issues and has worked proactively to become increasingly sustainable. Aligned with its effort to continue developing its environmental, social and governance (ESG) practices, CBA intends to issue Sustainability-linked Export Facilities, such as Export Credit Note or Export Prepayment, showing its commitment to the achievement of certain ESG KPIs. As part of this commitment, CBA hired Sustainalytics to provide a second opinion on the classification of this export facilities based on the Sustainability Linked Loan Principles (SLLP) or Sustainability Linked Bond Principles (SLBP).

### 1.2. Approach to Sustainability

CBA's verticalized business model allows a responsible social-environmental action throughout the aluminium chain, in addition to enabling our products a high-quality recognition and supplying to national and international markets, serving several sectors, such as the automotive, transport, packaging and construction. Another differential of our performance is the co-creation projects in collaboration with customers and partners, which add value to the solutions offered and contribute to sustainability throughout the value chain.

CBA's integrated industrial production is based in Alumínio, a city in the state of São Paulo, where we have been installed since our foundation in 1955. There, we carry out the process of transforming bauxite into aluminium products. In February 2020 CBA completed the acquisition of Arconic's operations in Itapissuma, in the northeast of Brazil. This unit presents the capacity to produce 50,000 metric tons per year of rolled aluminium products for packaging, making CBA the Latin American market leader in this segment.

The production process of our aluminium is fueled by bauxite mined in Minas Gerais and Goiás states. Mined land is reclaimed and returned to surface landowners with the same or better physical and chemical properties than before it was mined. The bauxite is transported by truck to the railway yards, arriving by train to our factory, which has a total installed capacity to produce

440 thousand tons of primary aluminium per year. Our production is also increased by recycling aluminium scrap.

The electricity used in our production process is mostly renewable. We have 15 wholly owned and 6 jointly owned hydropower plants, with enough generation capacity to meet the entire electricity requirement at our Alumínio Plant. This positions us in the first quartile of the global cost curve in the aluminium industry. Our hydropower plants are located in the South, Southeast and Midwest of Brazil, with an installed capacity of 1.4 GW. Of this capacity, approximately 0.6 GW is operated directly by CBA and the remainder by joint-venture partners. To further expand our electricity assets under management and strengthen our position as a self-generator, in October 2021 we announced the creation of a new business unit dedicated to managing our electricity assets, starting in 2022. As a result, our hydropower plants, which were previously managed by Votorantim Energia under a service agreement, have been operated internally by CBA since February 2022. In 2021, CBA also announced investments in wind power as part of a strategy to diversify our energy mix. In August, we completed the acquisition of a stake in Ventos de Santo Anselmo and Ventos de Santo Isidoro (capacity of 171.6 MW), two wind farms owned by VTRM, a joint venture between Votorantim Energia and the Canada Pension Plan Investment Board (CPP Investments). In addition to the process of transforming bauxite into aluminium, we also recycle internal and external aluminium scrap. Recycling provides an additional source of raw materials in the value chain by reusing scrap produced on- and off-site. This supports not only higher production volumes but also increased cost efficiency. It also provides savings on raw materials, inputs and electric power, generating higher value-added aluminium and reduced environmental impact.

Scrap recycling is carried out at Alumínio, Itapissuma and on a dedicated basis at Metalex. Located in Araçariçuama, in São Paulo state, Metalex recycles internal aluminium scrap as well as scrap purchased externally or supplied by customers and partners, and it has a production capacity of 75 thousand tons of aluminium billets per year. In 2021, Metalex started operation of a new Casthouse melting furnace dedicated to scrap recycling. Known as a side-well furnace (because it is charged from the side), the new unit will expand the facility's billet production capacity to 90,000 metric tons per year, in a total investment of R\$ 17 million.

As part of our commitment to building a circular economy, in February 2022 CBA announced the acquisition of 80% of Alux do Brasil, one of Brazil's top producers of secondary aluminium, with an option to buy the remaining 20% in the third year after completing the transaction. In January this year Brazil's antitrust regulator granted final approval of the deal, allowing the integration to start in February.

CBA's acquisition of Alux is aligned with our long-term strategy to expand our aluminium recycling capacity and will deliver on our commitment to consistently reduce our carbon footprint. It will also allow us to enter a new business segment of selling secondary aluminium alloys. Potential synergies between Metalex and Alux include the joint use of its new scrap separation and cleaning line and continued growth in the recycling market.

At CBA, we understand that our future depends on a corporate strategy that guarantees the conditions for our business today and in the coming decades. Therefore, sustainability is our base, the starting point that guides and structures our actions and projects to improve our competitiveness and generate more value for our shareholders, customers, suppliers, employees and society as a whole. This commitment is expressed in our Manifest, available at: <https://ri.cba.com.br/en/esg/esg-strategy/>

### 1.2.1. 2030 ESG Strategy

In 2018, the Company implemented a specific strategy on sustainability, setting targets through 2025. A year later, CBA created a Sustainability Department and Sustainability Committee.

Further on, in 2020, CBA recognized the need to develop our environmental, social and governance (ESG) practices, supporting the growth of our ESG culture within the Company. We undertook a realignment of our sustainability strategy, based on the 2018 strategy. Therefore, the 2030 ESG strategy was developed, which places sustainability as one of the core pillars of the business. CBA understands that it's not enough to do its part in building a better future, it aspires to lead and point the way to inspire its employees, partners, customers and suppliers.

Centered on 10 levers, which unfold into 15 programs and 31 long-term goals, the strategy aims to: “Provide, by 2030, an offering of low-carbon aluminium products and sustainable solutions in partnership with stakeholders, while developing the communities where we operate and positively influencing the broader aluminium value chain”.

Find out below all the levers, programs and goals in CBA's 2030 ESG Strategy:

	LEVERS	PROGRAMS	2030 GOALS
ENVIRONMENTAL	1 – Climate change management	P1 – Greenhouse gas emissions management	1.1 Reduce emissions by 40% (on average for cast products, cradle-to-gate) 1.2 Offer customers a carbon-neutral product range 1.3 Create a roadmap to becoming emissions neutral by 2050 1.4 Develop a climate change adaptation plan
		P2– Energy management	2.1 Source 100% of our plants’ power requirement from renewable sources 2.2 Reduce our energy intensity (electric power and fuels)
	2 – Circular economy	P3 – Aluminium recycling	3.1 Increase the ratio of aluminium recycled from industrial and end-of-life scrap at Metalex to 80% 3.2 Increase the ratio of aluminium recycled from industrial and end-of-life scrap in billet production at the Alumínio (SP) plant to 50% 3.3 Increase the ratio of scrap collected from external sources for recycling
		P4 - Carton and flexible packaging recycling	4.1 Recycle 40,000 metric tons of cartons and flexible packaging per year
SOCIAL	3 – Natural resources	P5 – Water stewardship	5.1 Reduce water withdrawals per metric ton of molten aluminium by 20%
		P6– Biodiversity	6.1 Create/expand 1 hectare of ecological corridors for every 10 hectares of mined and reclaimed land 6.2 10% of key suppliers and customers co-investing in forest and biodiversity programs
	4 – Dam management	P7 – Residue storage dams	7.1 Eliminate residue disposal in dams 7.2 Send 100% of dry red mud residue for use in cement production and other applications
		P8– Diversity and inclusion	8.1 Achieve 50% gender and racial diversity in leadership positions within the Company
GOVERNANCE	5 – Valuing people	P9 - Health and safety	9.1 Zero fatalities or severe injuries in CBA’s operations 9.2 Achieve an injury frequency rate lower than 1
		P10 – Social legacy	10.1 Achieve 100% of social SLA 10.2 Provide 1-to-1 match funding for corporate social investment 10.3 Contribute to strengthening recycling cooperatives in Brazil
	7 – Sustainable value chain	P11– Sustainable procurement	11.1 100% of suppliers compliant with CBA’s Sustainable Procurement Policy 11.2 Increase local sourcing from SMEs by 10%
		P12 – Sustainable solutions for customers	12.1 100% of billets produced at Metalex with greenhouse gas emissions lower than 1.4 tCO2/t 12.3 Increase revenue from sustainable solutions for downstream customers
T	8 – . Ethics and transparency	P13 - Ethics and transparency	13.1 Achieve an average rating of 4 for CBA’s third party-audited Compliance Program (*Currently KPMG methodology)
	9 - ESG Ownership	P14 - ESG Ownership	14.1 100% of operations certified to the ASI Performance and Chain of Custody standards 14.2 100% of employees with assigned ESG targets 14.3 Apply ESG criteria in 100% of funding and investment decisions 14.4 Embed ESG considerations in all pillars of CBA’s culture and business practices
	10 - . ESG Communications	P15 – ESG Communications	15.1 Achieve a RepTrak® Score greater than 80

Also in 2020, the Company adhered to the UN Global Compact (a business movement led by the United Nations that has established ten principles on human rights, labor, environment and anticorruption) and the 2030 Agenda, and supports the 17 Sustainable Development Goals (SDGs), in addition to joining the Brazilian Business Council for Sustainable Development's (CEBDS).

For more information, please consult CBA Annual Report available at: <https://relatorioanual2021.cba.com.br/en/>

## 2. Environmental management

To CBA, the search for efficiency aligns with the greatest commitment to sustainability, so that our products may sustain quality for which we have been acknowledged for over six decades by the market, keeping an optimized process and low environmental impacts. In this regard, we have continuously put in place measures for lowering new water consumption, cutting down waste generation, leveraging material recycling and depleting greenhouse gas (GHG) emissions in our operations.

One of the greatest testaments to CBA's commitment to sustainability is the Company's certification against the ASI Performance Standard and Chain of Custody Standard, which was first obtained in 2019 and maintained in 2020 and 2021. This certification attests that CBA's aluminium conforms to internationally recognized social, environmental and governance standards across the aluminium lifecycle. CBA was the first aluminium producer in the Americas to receive certification to both standards concurrently, covering the Company's mines, an aluminium plant, corporate offices, and all product types. In 2020 CBA's operations underwent desktop and on-site audits for continued ASI certification, and the Itapissuma operation was integrated into CBA's certification against the ASI Performance Standard. In 2021 Metalex facility was also certified against the Performance Standard, and the Itapissuma against the Chain of Custody Standard

### 2.1. Climate Change

Climate change is today one of society's chief concerns. The aluminium industry is generally seen as carbon-intensive due to its consumption of fossil fuels and electricity in production. Because CBA produces low-carbon aluminium— with most of its electricity requirement sourced from clean hydroelectric dams owned by the Company—this provides a competitive advantage.

CBA has been working hard to reduce its emissions even further. With the introduction of CBA's ESG 2030 strategy, the reduction target has become more ambitious: a 40% average decrease for casting products, from the mining stage including Metalex Unit, in relation to the 2019 rates.

Since 2018, we have voluntarily published our greenhouse gas emissions inventories in the public emissions registry under the Brazilian GHG Protocol Program. This inventory accounts for all emissions arising from our own activities, electrical energy consumption and activities related to our value chain. This voluntary publication demonstrates CBA's transparency and commitment to the topic. In addition, our data is verified by a third party accredited by Inmetro, allowing us to obtain the Gold Seal of the GHG Protocol Brazilian Program.

The inventory result allowed us to calculate that for each ton of cast product (which includes ingot, slab, caster and billet) produced at CBA, 2.63 tCO<sub>2</sub>e (tonnes of equivalent carbon dioxide) are emitted, from bauxite mining to the casting process. The index is one of the best in the world, being even lower when compared to low carbon products that are offered in the market, the indicator is around 4.0 tCO<sub>2</sub>e/t Al.

When we talk about the electrolysis process, which is the most representative step in emissions terms in the aluminium chain, around 70% of CO<sub>2</sub> emissions, in CBA only 2.56 tCO<sub>2</sub>e are generated per ton of aluminium liquid produced. The result is below the value of 8.0 tCO<sub>2</sub>e/t primary aluminium, defined as the maximum acceptable value by the ASI (Aluminium Stewardship Initiative) certification, and also below the global average of 12,8 tCO<sub>2</sub>e per ton of liquid aluminium, as reported by the IAI (International Aluminium Institute).

CBA also performs well against statistics published by the CRU. According to CRU data, the Company's smelter GHG emissions are in the first—and lowest—quartile on a global basis.

To keep abreast of climate change issues, CBA also participates in a range of programs supported by climate change experts:

- **CDP Climate Change:** in 2021, for the second consecutive year, CBA received a top-tier score for our response to the Carbon Disclosure Project's (CDP) climate change questionnaire, the global gold standard for environmental reporting. CBA received a leadership level score of "A-", the highest among aluminium producers responding to the questionnaire, strengthening our position as a global leader on the climate agenda.
- **Science Based Targets initiative (SBTi):** in 2020, CBA joined the Science Based Targets initiative, committing to set and meet targets aligned with limiting global temperature rise. In 2022, the company had its emission reduction targets approved by SBTi, being the first primary metal producer in the world to have its commitment validated by the movement that shows how actions are based on science to combat climate change.
- **Task Force on Climate related Financial Disclosures (TCFD):** since 2021, CBA also supports the TCFD, which develops and issues recommendations on climate-related financial disclosures
- **Net Zero Ambition Movement:** in 2022, to reinforce our commitment to sustainable development and the Science Based Targets (SBTi) initiative, we joined the Net Zero Ambition Movement, an initiative of Rede Brasil of the UN Global Compact, which aims to engage companies in the challenge of reducing greenhouse gas emissions and integrate the SDG 13 into business strategy.

### 3. Rationale for the Framework

In order to enhance the power of our company to address environmental issues where we have the ability to effect positive change, we intend to issue Sustainability-Linked Export Facilities and commit to specific environmental outcomes, leveraging ambitious timelines to achieve sustainability performance that is relevant, core and material to our business.



Our framework provides a high-level approach to our Sustainability-Linked Export Facilities and we hope our issuance will inspire other similar companies to do the same. This transaction will also support CBA's 2030 ESG Strategy.

## 4. Alignment with the Sustainability-Linked Loan Principles, 2020

The Sustainability-Linked Loan Principles ("SLLP"), as administered by the International Capital Market Association ("ICMA"), are voluntary process guidelines that outline best practices for financial instruments to incorporate forward-looking ESG outcomes and promote integrity in the development of the Sustainability-Linked Loan market by clarifying the approach for issuance of a SLL.

Our Sustainability Linked Securities Framework is in alignment with the five core components of the SLLP:

1. Selection of Key Performance Indicators (KPIs)
2. Calibration of Sustainability Performance Targets (SPT)
3. Sustainability-Linked Securities Characteristics
4. Reporting
5. Verification

Sustainability-Linked Loans are any type of Loan instrument for which the financial and/or structural characteristics can vary depending on whether the issuer achieves predefined Sustainability/ ESG objectives. In that sense, issuers are thereby committing explicitly to future improvements in sustainability performance targets that are relevant, core and material to their overall business, within a pre-determined timeline.

As a result, SLLs are a forward-looking performance-based instrument. The proceeds of SLLs are intended to be used for general purposes; hence, the use of proceeds is not a determinant in our categorization.

CBA is committed to the Sustainable Development Goals (SDGs) as it understands that private sector engagement is essential to accelerate the fulfillment of the 2030 Agenda. In that sense, the KPI we selected is material and relevant, contributing to the sustainable development goals determined by the UN.

### 4.1. Selection of KPI

The KPI we select is core, relevant and material to our business.

#### KPI: GHG Emissions

- **Definition:** ton CO<sub>2</sub>e / tons of casting products.
- **Rationale:** Climate change is today one of society's chief concerns. The aluminium industry is generally seen as carbon-intensive due to its consumption of fossil fuels and electricity in production. Because CBA produces low-carbon aluminium, with most of its electricity requirement sourced from clean hydropower plants owned by the Company—this provides a competitive advantage. Although the Company's emissions are among the lowest in the



industry, CBA has undertaken efforts to reduce them even further. This concern is aligned with SDG 13 – Take urgent action to combat climate change and its impacts.

- **Applicability:** This KPI considers only the production of casting aluminium products, which occur at Alumínio (Alumínio/SP) and Metalex (Araçariçuama/SP) units. The Alux unit, whose CBA acquired 80%, will have its results included from 2022 when it was acquired. CBA Itapissuma Unit is not considered as it does not sell casting products.

**Table 1. 2020 Casting aluminium production**

2020 Casting aluminium production	%
Alumínio Unit	85.6%
Metalex Unit	14.4%
Itapissuma	0
<b>Total</b>	<b>100.0%</b>

- **Methodology:**

CBA elaborates its greenhouse gas emissions inventories considering the Brazilian GHG Protocol Program. The Company's inventory reported in 2020 was awarded with Gold level reporting status by the Brazilian GHG Protocol, which is applicable for entities that provided a complete scope 1 and 2 inventories information and have been independently assured as to the traceability and reliability of reported data.

The KPI calculation methodology considers the emissions from the aluminium chain until reaching our cast production. In the case of the unit located in Alumínio city, we have all the steps from mining to Downstream operations (scope 1 and 2). Regarding Metalex, the unit buys ingots at the market, instead of producing it. For this reason, the carbon footprint considers the chain emissions (scope 3). For these greenhouse gas emissions from the acquisition of ingots (scope 3), the CRU database is used, which annually estimates the emissions of all aluminium producers in the world.

Once our gross emissions from the chain are measured, we deduct the potential values reduction that our project portfolio provides. The reduction potential is related to the implementation of projects such as the biomass boiler (focused on alternative fuel), upgrading Smelter Technology (focused on technological adaptation) and the project to increase scrap consumption (focused on operational improvement). Please, see more information in section 4.2, item **Strategy to achieve the SPTs**.

**a) KPI calculation:**

**KPI = (Total casting aluminium Emissions (Alumínio and Metalex Units) / Total casting aluminium production (Alumínio and Metalex Units))<sup>1</sup>**

Alumínio Unit Emissions = Chain Emissions<sup>2</sup> (scope 1 and scope 2) - Project Reduction Potential

Metalex Unit Emissions = Chain Emissions<sup>2</sup> (scope 1, scope 2 and scope 3 -category 1) - Project Reduction Potential

Alux Unit Emissions = Chain Emissions<sup>2</sup> (scope 1, scope 2 and scope 3 -category 1) - Project Reduction Potential

Notes:

<sup>1</sup>**Total casting aluminium production (Alumínio and Metalex Units):** accounts for 100% of CBA's casting aluminium production in 2020 and 2021. Alux unit was acquired in 2022 with capacity to produce 46 thousand tons of aluminium per year.

<sup>2</sup>**Chain Emissions:** Emissions from mining to casting. For Metalex, we consider the carbon footprint of the ingots we buy on the market – category 1 of scope 3. The values are in the table 3 below. The carbon footprint measures the total greenhouse gas emissions from mining through the product manufacture up to the factory gate (cradle-to-gate).

**Table 2: 2020 GHG emissions considered in the KPI (tonCO<sub>2</sub>e)**

Emissions (thousand tCO <sub>2</sub> e)	Total CBA	CBA Plant	Metalex	Representativeness of Alumínio Plant	Representativeness of Metalex Plant
<b>Scope 1</b>	1,064.0	1,000.0	15.3	94.0%	1.4%
<b>Scope 2</b>	72.5	65.5	0.2	90.4%	0.3%
<b>Scope 3</b>	265.2	0	265.2	0.0%	100.0%
<b>Total</b>	1,401.7	1,065.5	280.7	72.6%	23.7%

**Table 3: Carbon footprint considered to calculate the category 1 – scope 3 for Metalex Unit**

Origin	Carbon footprint	Unit
Hindalco Ingot (India)	16.95 <sup>1</sup>	kg CO <sub>2</sub> e / kg
Aluar Ingot (Argentina)	6.37 <sup>1</sup>	kg CO <sub>2</sub> e / kg
Rusal Ingot (Russia)	2.93 <sup>1</sup>	kg CO <sub>2</sub> e / kg
Sohar Ingot (Middle East)	7.12 <sup>1</sup>	kg CO <sub>2</sub> e / kg
CBA Ingot	3.52 <sup>2</sup>	kg CO <sub>2</sub> e / kg

<sup>1</sup> Value obtained from CRU database

<sup>2</sup> Value calculated considering Scope 1 and 2 of CBA ingot (cradle to gate)

**Table 4. Project reduction potential in % of total emissions**

Project reduction potential in % of total emissions	
Biomass boiler	32.44%
Upgrading Smelter Technology	20.64%
Increase Scrap consumption	46.92%
<b>Total</b>	<b>100%</b>

- **Past Performance:** We established this KPI during the 2030 ESG Strategy development, in 2020, using 2019 as baseline. To calculate Metalex' emissions per product we mapped the traceability of the metal purchased from the market using CRU database.

**Table 5. Emissions per casting products**

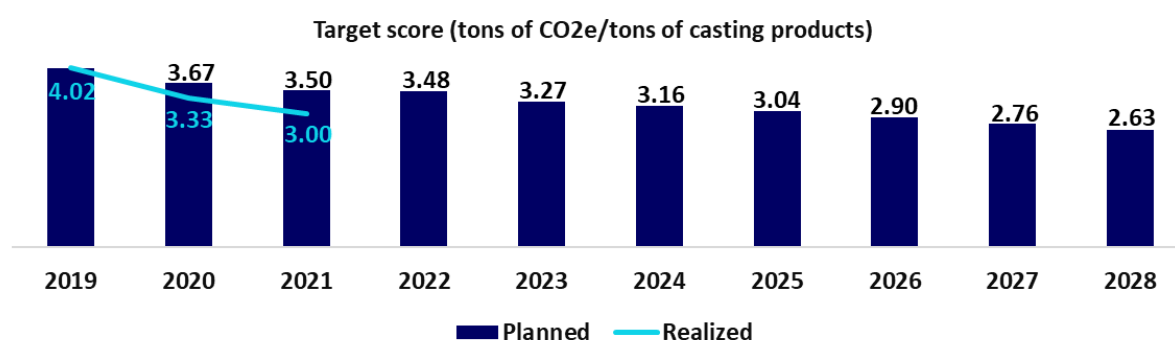
t CO2e/t casting	2018	2019	2020
CBA	-	<b>4.02</b>	<b>3.33</b>
Impact of the Alumínio Unit	2.84	3.05	2.64
Impact of the Metalex Unit	NA	0.97	0.70

## 4.2. Sustainability Performance Target (SPT)

- **Target Score:** Reduce emissions by 21.0% until 2028 (on average for casting products, cradle-to-gate), considering 2020 as the baseline.

**Table 6. Emissions per casting products**

t CO2e/t casting	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Target Score</b>	<b>4.02</b>	<b>3.33</b>	<b>3.00</b>	<b>3.48</b>	<b>3.27</b>	<b>3.16</b>	<b>3.04</b>	<b>2.90</b>	<b>2.76</b>	<b>2.63</b>
<b>% of reductions</b>										
<b>Target Score</b>			<b>9.9%</b>	<b>-4.5%</b>	<b>1.8%</b>	<b>5.1%</b>	<b>8.7%</b>	<b>12.9%</b>	<b>17.1%</b>	<b>21.0%</b>



This graph demonstrates CBA's performance against projections made in 2020, using 2019 as a baseline. CBA's performance has been better than planned, as in addition to the mapped projects, other process improvement actions have had a positive impact on the results.

- **Baseline:** 2020.

In order to establish this KPI, we used 2020 as the baseline. Our data incorporates the emissions reduction due to the implementation of the biomass boiler.

It is important to point that for the target established in the 2030 ESG Strategy, the baseline is 2019.

- **Target date:** Annually up to 2028.
- **Alignment with Science Based Targets (SBTi):** In 2022 Cba was the first primary aluminium company in the world to have science-based targets approved by the SBTi. SBTi has a specific methodology for aluminium only for the refinery and smelter stages (scope 1 and 2). For the other stages of the process and for scope 3, the SBTi indicates the use of absolute targets. For this reason, CBA has set 3 science-based targets. The goal of the ESG Strategy 2030 for casting products is a consolidation considering the main GHG emissions of CBA in scopes 1, 2 and 3. Although these goals are different, the main challenges are aligned and the actions to achieve them are similar. The 3 targets approved were:
  - Reduce scope 1 and 2 GHG emissions from aluminium manufacture 40% per tonne of primary aluminium by 2030 from a 2018 base year.
  - Reduce absolute scope 1 and 2 GHG emissions for all other activities 35% over the same timeframe.
  - Reduce absolute scope 3 GHG emissions from purchased goods and services, fuel and energy-related activities and upstream and downstream transportation and distribution 13.5% by 2030 from a 2019 base year.

- **Strategy to achieve the SPTs:**

CBA produces low carbon aluminium, with most of its electricity requirement sourced from clean hydroelectric dams owned by the Company. Although the Company's emissions are among the lowest in the industry, CBA has undertaken efforts to reduce them even further. With the introduction of CBA's ESG 2030 strategy, the reduction target has become even more ambitious: a 40% average decrease for casting products, from the mining stage, in relation to the 2019 rates.

Currently, the main barriers to reduce GHG emissions are:

- Technological process: We use the Soderberg technology which emits more industrial gases compared to the Prebake technology. As a technological change is not feasible, we are working to improve the Soderberg technology through the project "Upgrading Smelter Technology" (more details below).
- Increase recycling content: technological process to treat the scrap and the access to scrap in the market.
- Maintenance of clean source energy use

To overcome these barriers, CBA is developing structured projects, such as:

- **Upgrading Smelter Technology:** As part of the project to upgrade the Smelter technology (Green Soderberg), the smelter pot feeding process is being switched to an intermittent feed system that will reduce greenhouse gas, particulate and fluoride emissions and increase efficiency and safety. It will also reduce water consumption by intermittently switching off the wet scrubber systems. By feeding materials (aluminium oxide and electrolyte bath) intermittently in regular quantities and at regular intervals, the use of these resources is optimized. In 2019, 36 of a total of 1,040 pots were switched to the new system as a pilot. In 2020, drawing from experience gained from implementation in 2019, several important improvements were made to optimize the process, parts and equipment and to adjust the system design. In 2021, we converted an additional 34 pots with the improvements made to the pilot pots and tested in 2020.
- **Biomass Fired Boiler:** In 2020, CBA implemented the biomass boiler in its refinery process. This boiler aims to promote the generation of steam that was previously done by burning Natural Gas and fuel oil in conventional boilers. In 2020 the boiler started its activities in March and had a gradual increase in steam production until June, when in fact the boiler started to operate at full capacity. The boiler started operation in 2020, but only operated a full year in 2021. The CO<sub>2</sub>e emissions intensity fell from 0.55 tCO<sub>2</sub>e/t of aluminium oxide in 2019 to 0.31 tCO<sub>2</sub>e/t in 2020 and 0.20 tCO<sub>2</sub>e/t in 2021 (compared to a global industry average of 1.21 tCO<sub>2</sub>e/t). For this project, CBA did not need to make investments, as it was a partnership with the company Combio, which was responsible for all costs of implementation and maintenance.
- **Expanded Recycling:** Aluminium is recognized as a solution for developing less resource-intensive and more circular supply chains that re-utilize materials and minimize waste and environmental impact. Reusing materials is an important way to reduce pressures on the world's natural resources, while also minimizing waste from discarding end-of-life products. This makes recycling process scrap one of the most important processes at CBA. Recycling provides an additional source of raw materials in the value chain by reusing scrap produced on- and off-site. This supports not only higher production volumes but also increased cost efficiency. It also provides savings on raw materials, inputs and electric power, generating higher value-added aluminium and reduced environmental impact.
- In a process known as remelting, process scrap is recycled into new products. Scrap recycling is carried out at Alumínio, Itapissuma and on a dedicated basis at Metalex. Located in Araçariguama (SP), Metalex recycles internal aluminium scrap as well as scrap purchased externally or supplied by customers and partners. Metalex will invest R\$ 100 million in a new scrap treatment line that will allow it to process a wider range of end-of-life-scrap (window and door frames from demolition sites, car parts, discarded equipment, etc.) and process scrap. This will enable CBA to expand its recycling capacity to produce even more sustainable billet products. In 2021 occurred the first phase of the expansion, a new sidewall furnace

was installed and expand billet production capacity from 75,000 to 90,000 metric tons per year. In the second phase, the new recycling line will increase the ratio of scrap in the billet production mix from 60% to 80%. The new recycling line is scheduled to start operation in 2023. In addition to increased efficiency and productivity, the project will also help to minimize environmental impacts, with process upgrades further reducing the facility's carbon footprint.

- As mentioned earlier, CBA acquired 80% of Alux do Brasil, which has a production capacity of 46,000 metric tons per year. This acquisition is aligned with our long-term strategy to expand our aluminium recycling capacity and to deliver on our commitment to consistently reduce our carbon footprint. Potential synergies between Metalex and Alux include the joint use of its new scrap separation and cleaning line and continued growth in the recycling market.

### 4.3. Sustainability-Linked Export Facilities Characteristics

The Sustainability-Linked Export Facilities that we intend to issue under our Framework will have the above mentioned emissions KPI, which will result in a step-up or step-down of the interest rate, depending on our achievement (or lack thereof) of the KPI.

Our calculation of the relevant KPI or SPT, may exclude the effects of certain material acquisitions and/or material changes in laws or regulations applicable or relating to our production activities, in each case to be set forth, if applicable, in further detail in the terms and conditions of each our Sustainability-Linked Export Facilities.

### 4.4. Reporting

Annually, we will publish and keep readily available and easily accessible on our IR website a Report which will include:

- i. Yearly information on the performance of the selected KPI;
- ii. a verification assurance report relative to the SPT including details on the (i) performance against the SPT, (ii) the related impact, (iii) timing of such impact, and (iv) impact on the security's characteristics (if any); and
- iii. any relevant information enabling investors to monitor the progress of the SPT.

Information may also include when feasible and possible:

- iv. Qualitative or quantitative explanation of the contribution of the main factors, for the evolution of the performance/KPI on an annual basis.
- v. Any re-assessments of the KPI and/or restatement of the SPT and/or pro-forma adjustments of baselines or KPI scope.

#### 4.5. Verification

Annually, we will seek independent and external verification, with limited assurance engagement, of our performance level against the SPT for the stated KPI by a qualified external reviewer with relevant expertise, as we already do for our Annual Report. The performance against the SPT will be made publicly available on our IR website in the annual report or any other report as decided by the CBA.

We will also obtain a Second Party Opinion (SPO) or other external review from consultants with recognized environmental and social expertise to provide an opinion on this Framework as well as its alignment to the SLLP.