



# Greenhouse gas emissions Inventory

## Nexa Resources 2022

**Nexa Resources**

**Trade name:** Nexa Resources

**CNPJ (Corporate Taxpayer Registry):** 42.416651/0016-93

**Economic sector:** Extractive Industries

**Subsector:** Extraction of non-ferrous metallic minerals

**Address (administrative office):** Luiz Carlos Berrini, 105 – 6th floor – São Paulo – Cidade Monções – SP - 04571-900

**Person responsible for publishing the inventory:** Júlia Morelli  
Faria([julia.faria@nexaresources.com](mailto:julia.faria@nexaresources.com))



## 1. INSTITUTIONAL INFORMATION:

We are a company with more than 65 years of experience in the development and operation of mining and metallurgical assets in Latin America, and we are among the five largest zinc producers in the world.

In addition to zinc and by-products such as silver and gold, we produce copper and lead. We are part of the conglomerate of investee companies of Votorantim S.A., our main shareholder (64.7% of total capital). Nexa Resources S.A. was formed in 2017, from the integration of Brazilian and Peruvian operations.

Our products are part of people's daily lives and are present in the most diverse applications. The zinc we produce is applied from agricultural plantations to the manufacture of airplanes, and copper is an integral part of the production of automobiles and cell phones. Both are essential minerals for the energy transition from fossil sources to renewable sources, as they make up, for example, wind turbines and solar panels. In 2022, we aligned our purpose for mining that changes with the world, understanding the need to increasingly integrate our activities with opportunities for sustainable development in society.

Since October 2017, our shares have been traded on the NYSE stock exchange. In addition, the shares of the subsidiary Nexa Peru are traded on the Lima stock exchange (BVL). We are headquartered in Luxembourg City (Luxembourg) and have administrative offices in São Paulo (Brazil) and Lima (Peru). We operate 6 polymetallic mines, 3 of which are located in Peru (Cerro Lindo, El Porvenir and Atacocha), 2 in the State of Minas Gerais (Vazante and Morro Agudo) and the most recent in the state of Mato Grosso (Aripuanã), with operations beginning in 2022. In 2022, we produced 296.4 thousand tons in our mines.

We also operate 3 zinc smelters (refineries): Cajamarquilla, in Peru, Três Marias and Juiz de Fora, in Brazil, which produce metallic zinc, zinc oxide and by-products. We also have mineral exploration projects in Peru, Brazil and Namibia. Cajamarquilla is among the 5 largest zinc refineries in the world by volume produced, being the largest in the Americas. In 2022, adding up the activities of our refineries in Brazil, we sold 616 thousand tons, of which 575.9 thousand tons of metallic zinc and 40.3 thousand tons of zinc oxide, for customers around the world in different sectors, such as transportation, energy, agriculture, health and consumer goods.



## 2. INVENTORY DATA AND LIMITS

**Person responsible for preparing the inventory:** Júlia Morelli Faria

**Email of the person responsible:** julia.faria@nexaresources.com

**Year of the inventory:** 2022

### Verification

**The inventory has been verified by a third party:** Yes

**Verifying body:** PwC – PricewaterhouseCoopers Brasil

**Person responsible for verification:** Cintia Cespedes

(cintia.cespedes@pwc.com)

**Inventory Type:** Complete

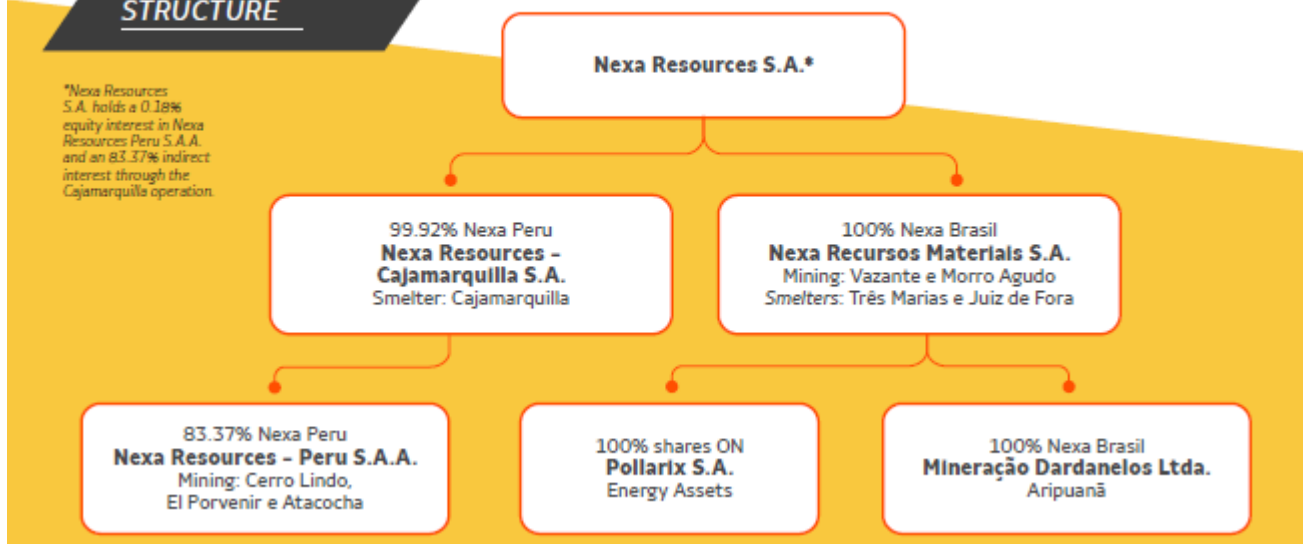
### 2.1. Organizational Limits

Below is a list of the organization's units and controlled companies included in this inventory. Reporting of disaggregated emissions is mandatory for units with scope 1 emissions equal to or greater than 10,000 tCO<sub>2</sub>e per year. Reporting of emissions from other units, as well as from controlled companies, is optional. Disaggregated emissions by units can be found in Section 3.8 - Emissions by operational units.



## ORGANIZATIONAL STRUCTURE

\*Nexa Resources S.A. holds a 0.18% equity interest in Nexa Resources Peru S.A.A. and an 83.37% indirect interest through the Cajamarquilla operation.



### Reference:



Parent Company



Subsidiary



Unit

[ Does the parent company have operational control? | % of equity interest of the Parent company ]



Nexa Resources



Morro Agudo – Mining - Brazil

[Yes | 100%]



Vazante – Mining - Brazil

[Yes | 100%]



Juiz de Fora – Metallurgy – Brazil

[Yes | 100%]



Três Marias – Metallurgy – Brazil

[Yes | 100%]



Aripuanã – Mining - Brazil

[Yes | 100%]



Atacocha - Mining - Peru

[Yes | 83,37%]



Cerro Lindo – Mining - Peru

[Yes | 83,37%]



El Porvenir – Mining - Peru

[Yes | 83,37%]



Cajamarquilla – Metallurgy – Peru

[Yes | 99,92%]



To consolidate the inventory, an Operational Control approach was used.

## **2.2. Operating limits reported in inventory**

### **Scope 1**

- ❖ Mobile combustion
- ❖ Stationary combustion
- ❖ Fugitive emissions
- ❖ Industrial processes
- ❖ Agricultural activities
- ❖ Land use change
- ❖ Solid waste and liquid effluents

### **Scope 2**

- ❖ Electricity purchased - Location-based approach
- ❖ Electricity purchased - Market-based approach

### **Scope 3**

- ❖ Upstream transportation and distribution
- ❖ Operational waste
- ❖ Business travel
- ❖ Employee commuting (home-work)
- ❖ Downstream transportation and distribution



### 3. EMISSIONS

#### 3.1. Summary of total emissions

GEE (t)	Emissions in metric tons, by type of GHG				Emissions in metric tons of CO2 equivalent (tCO2e)			
	Scope 1	Scope 2 (location based)	Scope 2 (market-based)	Scope 3	Scope 1	Scope 2 (location based)	Scope 2 (market based)	Scope 3
CO <sub>2</sub>	201,640.81	456,073.71	12,968.39	50,188.64	201,640.81	456,073.71	12,968.39	50,188.67
CH <sub>4</sub>	61.50	-	-	6.19	1,722.11	-	-	173.57
N <sub>2</sub> O	10.57	-	-	1.80	2,802.11	-	-	477.53
HFCs	1.47	-	-	-	2,307.93	-	-	-
<b>Total</b>					<b>208,472.96</b>	<b>456,073.71</b>	<b>12,968.39</b>	<b>50,839.77</b>

#### 3.2. SCOPE 1 emissions breakdown by Category

	Stationary combustion	Mobile combustion	Fugitive emissions	Industrial processes	Agricultural activities	Land use change	Solid waste and liquid effluents	Total Scope 1 emissions
CO <sub>2</sub> (t)	139,837.66	58,361.38	4,29	3,422.96	2.47	12.06	-	<b>201,640.82</b>
CH <sub>4</sub> (t)	50.74	3.36	-	-	2.72	-	4.69	<b>61.50</b>
N <sub>2</sub> O (t)	6.92	2.72	-	-	0.92	-	0.01	<b>10.57</b>
HFC (t)	-	-	1,47	-	-	-	-	<b>1.47</b>
CO <sub>2</sub> e (t)	143,092.10	59,176.94	2,312,22	3,422.96	322.64	12.06	134.05	208,472.97
Biogenic CO <sub>2</sub> emissions (t)	122,783.41	4,329.54		-	-	-	7.97	127,120.92



### 3.3. SCOPE 2 Emissions – Location based approach

	Purchased Electrical Energy	Transmission and distribution losses	Purchased thermal energy	Total Scope 2 emissions
CO2 (t)	456,073.72	-	-	456,073.72
CH4 (t)	-	-	-	-
N2O (t)	-	-	-	-
CO2e (t)	456,073.715	-	-	456,073.715
Biogenic CO2 emissions (t)	-	-	-	-
Biogenic CO2 removals (t)	-	-	-	-

### 3.4. Scope 2 Emissions - Market-based approach

	Purchased Electrical Energy	Transmission and distribution losses	Purchased thermal energy	Total Scope 2 emissions
CO2 (t)	12,968.40	-	-	12,968.40
CH4 (t)	-	-	-	-
N2O (t)	-	-	-	-
CO2e (t)	12,968.40	-	-	12,968.40
Biogenic CO2 emissions (t)	-	-	-	-
Biogenic CO2 removals (t)	-	-	-	-



### 3.5. SCOPE 3 emissions breakdown by category

Category	Emissions of tCO <sub>2</sub> e	Biogenic emissions tCO <sub>2</sub>	Removals of biogenic tCO <sub>2</sub>
Transport and distribution (upstream)	31,631.67	2,015.06	0.000
Operational waste	58.90	5.77	0.000
Business travel	1,047.07	97.49	0.000
Employee commuting (home-work)	1,016.37	74.44	0.000
Transport and distribution (downstream)	17,085.73	893.69	0.000
<b>Total</b>	<b>50,839.74</b>	<b>3,086.45</b>	<b>0.000</b>

### 3.6. Other greenhouse gases not covered by the Kyoto Protocol

There is no report of greenhouse gases emissions not covered by the Kyoto Protocol.

### 3.7. Emissions outside Brazil

The reported data consolidate emissions from operations carried out in Peru.

	Emissions in metric tons, by type of GHG				Emissions in metric tons of CO <sub>2</sub> equivalents (tCO <sub>2</sub> e)			
	Scope 1	Scope 2 (location based)	Scope 2 (market based)	Scope 3	Scope 1	Scope 2 (location based)	Scope 2 (market based)	Scope 3
CO <sub>2</sub>	48,548.22	388,974.38	10,755.15	15,873.30	48,548.22	388,974.38	10,755.15	15,873.30
CH <sub>4</sub>	4.23	-	-	1.10	118.44	-	-	30.80
N <sub>2</sub> O	1.36	-	-	0.45	362.52	-	-	121.37
HFCs	0.45	-	-	-	890.06	-	-	-
<b>Total</b>	-	-	-	-	49,919.248	388,974.383	10,755.154	16,025.470





### 3.8. Emissions per unit

The data below includes all Nexa Resources mining and smelter units, located in Brazil and Peru

Unit	Emissions in metric tons of CO2 equivalents (tCO2e)				Biogenic CO2 emissions (t)			
	Scope 1	Scope 2 (location based)	Scope 2 (market based)	Scope 3	Scope 1	Scope 2 (location based)	Scope 2 (market based)	Scope 3
ARIPUANÃ	6,859.26	2,213.24	2,213.24	-	666.23	-	-	-
ATACOCHA	1,438.57	12,462.48	-	568.55	0.36	-	-	28.27
CAJAMARQUILLA	18,080.08	293,905.09	10,755.15	6,204.08	467.14	-	-	41.71
CERRO LINDO	27,682.42	56,813.26	-	9,012.30	1,367.47	-	-	448.05
CORP BRASIL	833.83	-	-	814.35	84.99	-	-	4.09
CORP PERU	1,167.92	-	-	240.52	57.40	-	-	-
EL POVENIR	1,550.31	25,793.53	-	-	7.35	-	-	-
JUIZ DE FORA	89,083.93	17,601.10	-	7,712.45	508.72	-	-	139.72
MORRO AGUDO	7,509.63	3,195.65	-	467.03	743.20	-	-	47.67
TRÊS MARIAS	44,738.53	30,751.93	-	9,554.39	122,360.18	-	-	608.11
VAZANTE	9,528.52	13,337.38	-	16,266.04	857.88	-	-	1,768.84



## 4. METHODS

### 4.1. Intersectoral methods and/or tools

The inventory was exclusively prepared with the tool provided by the Brazilian GHG Protocol Program. No intersectoral method and/or tool was used.

### 4.2. Emission factors

Was an emission factor different from those suggested by the Brazilian GHG Protocol Program used?

Yes, for the calculation of emissions regarding the operations located in Peru, we used the country-specific emission factors, officially available by the Peruvian government's Ministry of the Environment through the "Reporte Anual de Gases de Efecto Invernadero" (2014), the latest technical literature available.

## 5. OTHER ELEMENTS

### 5.1. Information on the organization performance, compared to internal (eg, other units) or external (eg, peers) benchmarks.

Our greenhouse gas emissions (GHG) in 2022 experienced a significant reduction compared to the previous year. Considering scope 1 and scope 2 (market based), emissions reduced from 254,999.57 to 221,441.365 tCO<sub>2</sub>e, a 13% decrease year over year. This reduction was mainly due to Aripuanã's demobilization, as 2021 presented a peak in labor and equipment mobilization aiming the project evolution, while in 2022, the unit has started its ramp up process. Moreover, this also impacted Scope 2 emissions resulting in a 67%, due to the additional electricity consumed by the mine's production process.



## GHG EMISSIONS IN 2022 (in tCO<sub>2</sub>e)

GRI 305-1, 305-2, 305-3

	2020	2021	2022	% of total emission in 2022
Scope 1 – Direct Emissions	252,649.06	247,218.64	208,472.97 <sup>3</sup>	76.5%
Scope 2 <sup>1</sup> – electric energy consumption (market Place)	434,465.94 <sup>2</sup>	7,780.93	12,968.40	4.8%
Scope 3 – value chain	86,276.16	47,570.63	50,841.13	18.7%
<b>TOTAL</b>	<b>773,391.15</b>	<b>302,570.20</b>	<b>272,282.49</b>	<b>100%</b>

1. The emissions reported on these pages refer to the purchasing choice approach. The scope 2 emissions for the localization approach totaled 456,073.715 tCO<sub>2</sub>e in 2022 (the "2" is underwritten)

2. The 2020 figures for electricity consumption (scope 2) follow the location approach. Since 2021 we follow the market place approach

3. Representative decrease mainly due to the demobilization of the Aripuanã project, which went into operation in 2022

## 5.2. Description of GHG emission indicators for the organization's activities. For example, tCO<sub>2</sub>e/manufactured products

Emissions intensity in 2022 was 0.36 tCO<sub>2</sub>e per ton of zinc metal and zinc oxide sold, considering Scopes 1 and 2. This indicator places Nexa as one of the zincs players with the lowest CO<sub>2</sub> emissions. It also reinforces our ambition to be one of the lowest greenhouse gas emissions zinc producers in the world, reaching net zero by 2050.

## 5.3. Description of strategies and projects for managing GHG emissions

We have been reducing greenhouse gas (GHG) emissions through innovation, collaboration and the use of technology, aiming to become one of the lowest carbon footprint zinc producers in the world. We have made three public commitments regarding emissions:

- ❖ Absolute reduction of Scope 1 emissions by 20% (52 thousand tons of CO<sub>2</sub> equivalent), keeping Nexa's energy matrix almost entirely composed of renewable sources.
- ❖ Reach neutrality by 2040
- ❖ Reach net Zero by 2050.

To achieve these goals, we have developed a portfolio of projects and initiatives that provide details on our progress in those directions. Not exhaustively, but as an example, in 2022, we



carried out a project to replace diesel by natural gas in various processes at Cajamarquilla smelters. In Três Marias, we concluded pilot tests with bio-oil in one of the 47 zinc oxide furnaces. This renewable oil aims to replace the current fuel oil. Progressing with the technical validation, we aim to expand the project to other furnaces, which will contribute to the decarbonization process. Regarding mobile fleet fuels, we completed the testing phase with equipment that partially replaces diesel with hydrogen and started to negotiate contracts to scale up this substitution across Nexa units and advance with some logistics partners.

An important progress in 2022 was the greenhouse gas emissions diagnosis project for scope 3 and potential alternatives for decarbonization. This project was conducted in collaboration with a consulting firm, Way Carbon, and established an initial base that will guide our understanding and identifying categories that were not previously considered, that might be included in future inventories.

#### **5.4. Information on contracts with customers and suppliers that include clauses linked to the preparation of GHG inventories and/or the submission of related information.**

Information not reported.

#### **5.5. Information about uncertainties, exclusions of data sources and other characteristics of the preparation of the inventory.**



Nexa Resources is continuously working towards improvements in the management of GHG emissions and in 2022 this topic became a public commitment, enhancing efforts to set significant improvements regarding data management routines, registering information, data gathering, controls, training and better understanding of emissions in scopes 1, 2 and 3.

### **5.6. Description of internal actions to improve the quality of the GHG inventory. For example, systematization of data collection, contracting external verification, etc.**

Nexa has made a public commitment related to climate change, and reinforces this topic as part of its strategy. Year after year, it has been working on improvements regarding the topic's management and since 2020 Nexa has fully incorporated the GHG Protocol methodology as for emissions inventory in all units and corporate areas.

### **5.7. Information on the purchase of electrical energy from a renewable sources**

In 2022, from the total of 12,559,698.95 GJ of electrical energy consumed, 99% came from assured renewable sources (hydroelectric). Aripuanã and Cajamarquilla units had part of their consumption indicated as non-renewable, since it could not be proved renewable.

### **5.8. Information on self-production of energy from a renewable sources for own consumption.**

In 2022, Nexa consumed a total of 12,599,698.95 GJ of electrical energy and 91,171.86 (1%) is related to Atacocha's own production.

## **5.9. Information on your organization's carbon stock, in tonnes, as of December 31<sup>st</sup> of the year ended**

The information has not been reported.

## **6. COMPENSATIONS AND REDUCTIONS**

### **6.1. Emissions compensation**

The information has not been reported.

### **6.2. Emission reductions**

We have developed projects to improve performance in terms of clean energy, reducing greenhouse gas (GHG) emissions in operations and throughout the business value chain, and achieving strategic goals in this area. Our decarbonization roadmap encompasses all Nexa units and seeks economically and environmentally viable alternatives with higher energy efficiency and lower carbon emissions.

We aim to reduce pollution in our operations through projects focused on optimizing treatment systems and operations, increasing the use of renewable energy, and seeking commercial agreements with suppliers of this energy model.

To achieve our goals, we identify, develop, and execute projects to actively position ourselves in actions against climate change. We continuously analyze and prioritize projects that contribute to our objectives, based on indicators such as financial return, emission reduction, water recirculation, waste generation reduction, and production increase, which are monitored monthly.

In 2022, we invested in projects at various stages of maturity, from R&D to implementation, such as the Energy Matrix Conversion in Cajamarquilla, which avoided nearly 3,000 tCO<sub>2</sub>eq. Another project, in partnership with Hydragen, progressed with field tests, confirming the applicability of the technology, which proposes a 5 to 15% reduction in diesel usage. We conducted tests using bio-oil, a fuel derived from vegetable tar, at the Três Marias unit. The tests indicated lower energy consumption, reduced nitrogen oxide (NO<sub>x</sub>) emission levels, and a decrease in sulfur oxide (SO<sub>x</sub>) emissions, fully aligned with the commitments within the company's ESG strategy.

Through innovation, collaboration, and the use of technology, we have been reducing our greenhouse gas (GHG) emissions, aiming to become one of the zinc producers with the lowest carbon footprint in the world.

(A free translation of the original in Portuguese)

**Nexa Recursos Minerais S.A.**  
**Independent auditors' limited assurance**  
**report on the information included in**  
**the 2022 Greenhouse Gas (GHG)**  
**Emissions Inventory**





(A free translation of the original in Portuguese)

## **Independent auditors' limited assurance report on the information included in the 2022 Greenhouse Gas (GHG) Emissions Inventory**

To the Board of Directors and Stockholders  
Nexa Recursos Minerais S.A.

### **Introduction**

- 1 We were engaged by Nexa Recursos Minerais S.A. ("Nexa" or "Company") to present our limited assurance report on the information included in the Company's Greenhouse Gas Emissions Inventory for 2022 ("2022 GHG Inventory") for the year ended December 31, 2022. This report contains, among other information, a description of the procedures for significant quantifications, the criteria, the methodology for preparing the 2022 GHG Inventory, and the organizational and operational limits related to the Company's activities.

### **Responsibilities of the Company's management**

- 2 The Company's management is responsible for the preparation and fair presentation of the information included in the 2022 GHG Inventory, in accordance with the criteria defined in paragraph 3 and limits defined in paragraph 4 below, and for such internal control as it determines is necessary to enable the preparation of information free from material misstatement, whether due to fraud or error.
- 3 The criteria for assessing the information in the 2022 GHG Inventory of the activities performed by the Company, with respect to the measurement, obtaining, compilation, calculations and estimates, and the reporting of the emissions information for 2022, were based on the following documents:
  - (a) FGV-GVCes/WRI: Specifications of the Brazilian GHG Protocol Program: Accounting, Quantification and Publication of Corporate Greenhouse Gas Emission Inventories. 2nd edition and respective technical notes.
  - (b) ABNT NBR ISO 14064-1: Part 1 - "*Especificação e orientação a organizações para quantificação e elaboração de relatórios de emissões e remoções de gases de efeito estufa*" (Specification and guidance to organizations for quantification and reporting of greenhouse gas emissions and removals), 2007.
- 4 According to the FGV-GVCes/WRI criterion, mentioned in paragraph 3, the organizational limit of the 2022 GHG Inventory was defined considering the operational control approach. The operational limits considered include emission sources from scopes 1 and 2 according to the Brazilian GHG Protocol

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Nexa Recursos Minerais S.A.

Program, as well as the following scope 3 emission categories: Upstream Transportation and Distribution; Waste Generated in Operations; Business Travel; Employee Commuting; Downstream Transportation and Distribution.

### **Auditor's responsibility**

- 5 Our responsibility is to express a conclusion on the information included in the Company's 2022 GHG Inventory based on our limited assurance engagement carried out in accordance with the Technical Communication CTO 01 - "Issuance of an Assurance Report related to Sustainability and Social Responsibility", issued by the Federal Accounting Council (CFC), based on the Brazilian standard NBC TO 3000 - "Assurance Engagements Other than Audit and Review", also issued by the CFC, which is equivalent to the international standard ISAE 3000 - "Assurance Engagements Other than Audits or Reviews of Historical Financial Information", issued by the International Auditing and Assurance Standards Board (IAASB). Those standards require that we comply with ethical and independence requirements, and other responsibilities, including in relation to the application of the Brazilian Standard on Quality Control (NBC PA 01) and, therefore, the maintenance of a comprehensive quality control system, including documented policies and procedures regarding the compliance with the applicable ethical requirements, professional standards and legal and regulatory requirements.
- 6 Moreover, the aforementioned standards require that the work be planned and performed to obtain limited assurance that the information included in the 2022 GHG Inventory, taken as a whole, is free from material misstatement in relation to the criteria defined in paragraph 3 and limits defined in paragraph 4 above.
- 7 A limited assurance engagement conducted in accordance with the Brazilian standard NBC TO 3000 and ISAE 3000 mainly consists of making inquiries of management and other professionals of the entity involved in the preparation of the information, as well as applying analytical procedures to obtain evidence that allows us to issue a limited assurance conclusion on the information, taken as a whole. A limited assurance engagement also requires the performance of additional procedures when the independent auditor becomes aware of matters that lead the auditor to believe that the information taken as a whole might present significant misstatements.
- 8 The procedures selected are based on our understanding of the aspects related to the compilation and presentation of the information included in the 2022 GHG Inventory, other circumstances of the engagement and our analysis of the areas in which significant misstatements might exist. The following procedures were adopted:
  - (a) planning the work, taking into consideration the criteria defined in paragraph 3 and limits defined in paragraph 4 above, the materiality and the volume of quantitative and qualitative information and the operating and internal control systems that were used to obtain the information included in the Company's 2022 GHG Inventory;
  - (b) understanding the calculation methodology and the procedures adopted for the compilation of the emissions information through interviews with the managers in responsible for the preparation of the information;
  - (c) holding meetings with Nexa's factories and mining units, in order to interview managers and collect data and information; and



Nexa Recursos Minerais S.A.

- (d) applying analytical procedures and selective testing, as applicable, to quantitative information and making inquiries regarding the qualitative information and its correlation with the information included in the 2022 GHG Inventory.
- 9 We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our limited assurance conclusion.

**Scope and limitations**

- 10 The procedures applied in a limited assurance engagement are substantially less detailed than those applied in a reasonable assurance engagement, the objective of which is the issuance of an opinion on the information included in the 2022 GHG Inventory. Consequently, we were unable to obtain reasonable assurance that we would become aware of all significant matters that might be identified in a reasonable assurance engagement, the objective of which is the issuance of an opinion. Had we performed an engagement with the objective of issuing an opinion, we might have identified other matters and possible misstatements in the information included in the 2022 GHG Inventory. Therefore, we do not express an opinion on this information.
- 11 Non-financial data are subject to more inherent limitations than financial data, due to the nature and diversity of the methods used to determine, calculate and estimate these data. Qualitative interpretations of the relevance, materiality, and accuracy of the data are subject to individual assumptions and judgments. Furthermore, we did not consider in our engagement the data reported for prior periods, nor future projections and goals.
- 12 Information and data on sustainability actions and activities, general information and points of view related to the climate change subject, description of management activities of the process of preparing the 2022 GHG Inventory, and description of operational activities, which are not the basis for the 2022 GHG Inventory, were not part of the scope of the work performed and, therefore, have not been included in our limited assurance engagement.

**Conclusion**

- 13 Based on the procedures performed, described in this report, no matter has come to our attention that causes us to believe that the information included in the 2022 GHG Inventory of Nexa Recursos Minerais S.A., for the year ended December 31, 2022, has not been fairly presented, in all material respects, in accordance with the criteria defined in paragraph 3 and limits defined in paragraph 4 above.

São Paulo, June 13, 2023

PricewaterhouseCoopers  
Auditores Independentes Ltda.  
CRC 2SP000160/O-5

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CPF: 15107822819  
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Signed: 13 July 2023 | 15:48

**Witness Events****Signature****Timestamp****Notary Events****Signature****Timestamp****Envelope Summary Events****Status****Timestamps**

<b>Envelope Summary Events</b>	<b>Status</b>	<b>Timestamps</b>
Envelope Sent	Hashed/Encrypted	13 July 2023   15:12
Certified Delivered	Security Checked	13 July 2023   15:47
Signing Complete	Security Checked	13 July 2023   15:48
Completed	Security Checked	13 July 2023   15:48

<b>Payment Events</b>	<b>Status</b>	<b>Timestamps</b>
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