

# Earnings Release 4Q23 and 2023

## Nexa Reports Fourth Quarter and Full Year 2023 Financial Results Full Year Net Loss of US\$289 million and Adjusted EBITDA of US\$391 million

Luxembourg, February 21, 2024 – Nexa Resources S.A. ("Nexa Resources", "Nexa", or the "Company") announces today its results for the three and twelve-month periods ended December 31, 2023.

### CEO Message – Ignacio Rosado

"In 2023, we continued to focus on increasing efficiency across our organization. We deployed several initiatives, which streamlined our cost base and supported our strategic priorities. Significant effort was also made on overcoming the challenges we encountered in the ramp-up of our Aripuanã mine, which is now firmly on track to reach nameplate capacity in mid-2024. We closed the year achieving operational guidance with strong financial and operational discipline despite a very challenging environment. Metal production and sales were at the high-end and mid-range, respectively, while mining and smelting costs were in line.

On the ESG front, we hold a strong belief in our commitments, and we are confident that our ongoing efforts will catalyze our journey to a low-carbon, climate-resilient economy, fostering a future where our business practices and products seamlessly coexist with the environment.

We expect 2024 will likely be another challenging year for zinc price, due to a sluggish global economic growth, mainly driven by geopolitical instabilities and uncertainties about the easing of monetary policy by central banks in key economies. However, we will remain focused on our priorities, including completing the Aripuanã ramp-up, making meaningful progress in the Cerro Pasco integration project, maintaining discipline in capital allocation, and aiming for continued operational efficiency and positive cash flow generation.

We firmly believe that the long-term strong fundamentals of our business, together with the unique quality of our assets and the resilient performance culture we are developing will allow us to continue to improve our performance in the coming years. With this aim in mind, we will keep focused on identifying and capturing opportunities and strengthening our execution capabilities, advancing our sustainability agenda, and creating value for all our stakeholders, including the communities in which we operate."

### Summary of Financial Performance

US\$ million (except per share amounts)	4Q23	3Q23	4Q22	2023	2022
Net revenues	<b>630</b>	649	780	2,573	3,034
Gross profit	<b>69</b>	67	84	296	639
Net income (loss)	<b>(108)</b>	(63)	(81)	(289)	76
EBITDA <sup>(1)</sup>	<b>4</b>	67	36	143	650
Basic and diluted earnings (loss) per share ("EPS")	<b>(0.71)</b>	(0.56)	(0.62)	(2.18)	0.37
Adjusted net income (loss) <sup>(1)</sup>	<b>(7)</b>	(49)	3	(41)	187
Adjusted EBITDA <sup>(1)</sup>	<b>105</b>	82	120	391	760
Adjusted basic and diluted earnings (loss) per share <sup>(1)</sup>	<b>(0.01)</b>	(0.43)	(0.04)	(0.41)	1.14
Cash provided by operating activities before working capital <sup>(1) (2)</sup>	<b>96</b>	47	141	315	733
Capex	<b>111</b>	82	116	309	381
Free cash flows <sup>(1)</sup>	<b>43</b>	14	(20)	(41)	(246)
Total cash <sup>(3)</sup>	<b>468</b>	422	516	468	516

US\$ million (except per share amounts)	4Q23	3Q23	4Q22	2023	2022
Net debt <sup>(1)</sup>	<b>1,269</b>	1,242	1,161	1,269	1,161
Net Debt/LTM Adj. EBITDA	<b>3.24x</b>	3.06x	1.53x	3.24x	1.53x

(1) Refer to "Use of Non-IFRS Financial Measures" for further information. Adjusted EBITDA, adjusted net income (loss) and adjusted EPS, exclude the items presented in the "Net income (loss) reconciliation to Adjusted EBITDA" section for further details on page 16 of this earnings release. For details on segment definition and accounting policy, please refer to explanatory note 2 – "Information by business segment" in the "Consolidated financial statements at December 31, 2023".

(2) Working capital had a positive impact of US\$50 million in 4Q23, totaling US\$101 million in 2023. Working capital in 4Q22 had a negative impact of US\$10 million, totaling negative US\$235 million in 2022.

(3) Cash, cash equivalents and financial investments.

## Executive Summary

### Operational Performance

- Zinc production of 90kt in 4Q23 rose by 21% compared to 4Q22, mainly explained by the increase in treated ore volume from all the mines and higher production at the Aripuanã mine. Compared with 3Q23, zinc production increased by 3%, mainly due to the higher volumes from Cerro Lindo, Atacocha, and Morro Agudo, in addition to further production from the Aripuanã ramp-up.
- Run-of-mine mining cost in 4Q23 was US\$48/t, up 3% from 4Q22, mainly explained by higher operational costs and higher variable costs. Compared to 3Q23, run-of-mine mining cost was up 10% due to higher variable costs.
- Mining cash cost net of by-products<sup>1</sup> in 4Q23 increased to US\$0.45/lb compared to US\$0.20/lb in 4Q22. This increase was primarily due to lower by-products credits from our Peruvian mines with a negative impact of US\$0.25/lb, higher operational costs explained by mine development in Cerro Lindo and El Porvenir and higher TCs. Compared to 3Q23, cash cost was up US\$0.10/lb due to lower by-products credits from Cerro Lindo and higher operational costs.
- The smelting segment delivered total production (zinc metal and oxide) of 144kt in 4Q23, down 8% from 4Q22, mainly driven by lower volumes in Cajamarquilla and Três Marias. Compared to 3Q23, production was down 4%, also impacted by lower volumes from these two smelters units.
- In 4Q23, zinc metal and oxide sales were 143kt, down 14% from 4Q22 following lower production volumes, in addition to a slowdown in demand, particularly for zinc oxide in the period. Compared to 3Q23, metal sales were down 7%, explained by the aforementioned reasons.
- Smelting conversion cost was US\$0.29/lb in 4Q23 compared with US\$0.25/lb in 4Q22 explained by higher maintenance and energy costs, and FX impact, which were partially offset by lower personnel costs. Compared to 3Q23, conversion cost was relatively flat.
- Smelting cash cost<sup>1</sup> was US\$1.00/lb in 4Q23 compared to US\$1.20/lb in 4Q22. This decrease was driven by lower cost of raw materials explained by lower zinc prices, which was partially offset by lower by-products contribution. Compared to 3Q23, cash cost decreased by US\$0.01/lb.

### Financial Performance

- Net revenues in 4Q23 were US\$630 million compared with US\$780 million in 4Q22. This decrease was mainly due to lower zinc prices and smelting sales volume. Compared to 3Q23, net revenues decreased by 3% due to lower smelting sales volume, which was partially offset by higher zinc prices and higher mining production volumes. In 2023, net revenues amounted to US\$2,573 million, down by 15% compared to 2022 due to the aforementioned reasons.
- In 4Q23, net loss was US\$108 million, totaling US\$289 million in 2023, resulting in basic and diluted loss per share of US\$0.71 and US\$2.18, respectively.

<sup>1</sup> Our cash cost net of by-products credits is measured with respect to zinc sold.

- Adjusted EBITDA<sup>2</sup> in 4Q23 was US\$105 million, compared with US\$120 million in 4Q22 and US\$82 million in 3Q23. Compared to 4Q22, the decrease was mainly driven by lower smelting sales volume and zinc prices (zinc down by 17%). Compared to 3Q23, the increase was due to higher zinc LME prices, partially offset by lower smelting sales volume. In 2023, Adjusted EBITDA amounted to US\$391 million, down by 49% compared to 2022, mainly due to lower LME metal prices, the impact of Aripuanã's ramp-up and lower smelting sales volume.
- Adjusted EBITDA for the mining segment in 4Q23 was US\$47 million compared with US\$40 million in 3Q23. This increase was mainly driven by higher volumes from Cerro Lindo and higher zinc prices. Compared to 4Q22, Adjusted EBITDA decreased by 40%.
- In 2023, Adjusted EBITDA for the mining segment totaled US\$149 million, down 66% compared to US\$440 million in 2022, mainly driven by lower zinc prices and the impact of the Aripuanã's ramp-up.
- Adjusted EBITDA for the smelting segment in 4Q23 was US\$58 million compared with US\$49 million in 3Q23. This increase was mainly driven by higher zinc prices, positive raw material inventory effect (higher inventory consumption in addition to lower raw material costs) and higher by-products contribution, which were partially offset by lower sales volume. Compared to 4Q22, Adjusted EBITDA increased by 27%.
- In 2023, Adjusted EBITDA for the smelting segment was US\$247 million, down 24% compared to 2022, mainly due to lower zinc prices and sales volume, as well as higher operating costs.
- Adjusted net loss in 4Q23, was US\$7 million, totaling US\$41 million in 2023. Adjusted net loss attributable to Nexa's shareholders was US\$1 million in 4Q23 and US\$54 million in 2023, resulting in adjusted basic and diluted loss per share of US\$0.01 and US\$0.41, respectively. Refer to our "Net income (loss)" section for further details.

### Financial Position, Investments and Financing

- Total cash<sup>3</sup> at December 31, 2023, was US\$468 million compared to US\$516 million at December 31, 2022. Our available liquidity in 4Q23 remained at US\$788 million, including our undrawn sustainability-linked revolving credit facility of US\$320 million.
- At December 31, 2023, our free cash flow was negative US\$41 million, impacted by the reasons explained above and partially offset by the positive impact of working capital variations of US\$101 million, as a result of initiatives deployed throughout the year relating to inventories levels, as well as trade account receivables payment terms. Our investments in sustaining CAPEX (including HS&E investments) amounted to US\$309 million, including US\$80 million related to Aripuanã. Refer to our "Net cash flows from operating activities excluding working capital variations and free cash flow - Reconciliation" section for further details.
- Net debt to Adjusted EBITDA ratio for the last twelve months ("LTM") increased to 3.24x compared with 3.06x at the end of September 2023 and 1.53x at the end of 4Q22. This increase was mainly explained by lower LTM Adjusted EBITDA, impacted by the reasons explained above. Total debt slightly increased due to a new US\$50 million export financing line effective in 4Q23.

### Environmental, Social and Governance ("ESG") and Corporate Highlights

- During 2023, we advanced the waste dry disposal system on an industrial scale at our Três Marias smelting unit, which consists of filtering the waste pulp for subsequent disposal through the dry stacking process, as waste disposal in this unit was going directly to its tailings deposit. The initiative achieved excellent results, filtering an average of 74% of the operation's material throughout the year. In December 2023, filtration reached more than 90%. And from 2024 onwards, we expect filtration to reach between 95% and 100%.

<sup>2</sup> Adjusted EBITDA exclude the items presented in the "Net income (loss) reconciliation to Adjusted EBITDA" section on page 16 of this earnings release - US\$101 million in 4Q23, totaling US\$248 million in 2023.

<sup>3</sup> Cash and cash equivalents and financial investments.

- In 2Q23, we obtained the authorization from the Regional Superintendence for the Environment of the State of Minas Gerais to use biofuel to replace fossil fuels, used in all 47 furnaces in the zinc oxide operation in Três Marias. At the end of 2023, we achieved our goal for the year, to expand the use of biofuel to 12 furnaces. This initiative supports our goal to reduce scope 1 CO2 emissions by 20% until 2030.
- In July 2023, we registered our carbon emissions on "LMEpassport", the London Metal Exchange platform which promotes sustainability and transparency across the base metals sector. Nexa's zinc production has one of the lowest carbon footprints recorded in the sector, with an emission intensity of 0.36 tons of CO2 equivalent (scopes 1 and 2) according to the GHG protocol methodology, an achievement that positions Nexa as a global leader in carbon reduction within the zinc industry.
- In September 2023, Nexa was recognized as a leader in Social Governance and awarded "Company of the Year - Mining Sector 2023" by Brasil Mineral (a Brazilian magazine specializing in the mining sector). This recognition was partly in acknowledgement of our training program for 1,987 people in Aripuanã, which focused in giving support to participants to get back into the job market.
- In October 2023, Nexa announced the successful closing of a US\$320 million sustainability-linked revolving credit facility. The applicable margin is subject to compliance with carbon reduction key performance indicators, reflecting the company's unwavering commitment to reducing its carbon footprint. Such efforts are consistent with Nexa's ESG ambitions, targeting net-zero greenhouse gas emissions by 2050, in alignment with the Paris Agreement.
- Also in October 2023, Nexa delivered school material kits to more than 2,700 students from schools in the Cajamarquilla region, from kindergarten to high school. This initiative aims to foster local development and contribute to the academic degree of children, embracing our commitment to quality education.
- In 4Q23, Nexa carried out medical services campaigns benefiting more than 1,600 individuals in the Cerro Pasco region in Peru, focusing on vulnerable groups such as children and the elderly. These campaigns offered General Medicine, Geriatrics, Pediatrics, Gynecology, Dentistry, Ultrasound, Nutrition, Psychology, Laboratory, and Pharmacy. Our support of these medical initiatives reaffirm our commitment to enhance the quality of life and health of the communities in the areas where we operate.
- In February 2024, CDP ("Carbon Disclosure Project") concluded its 2023 evaluation for the cycle of the year 2022 and announced that our rating in the Climate Change questionnaire was upgraded, changing from C to B. This result reflects the efforts, disclosure, and transparency of Nexa related to governance, strategy, risk management, metrics, and targets.
- Nexa declared in February 2023 and paid in March 2023 a distribution to Nexa's shareholders of US\$25 million in respect of fiscal 2023. Given current low zinc price scenario, Nexa will evaluate and may consider a dividend payment for fiscal 2024 subject to market conditions and Company's performance.
- In April 2023, Ms. Renata Penna was promoted to the position of Vice President of Legal & Governance at Nexa. Ms. Penna joined Nexa as Chief Legal Counsel and Head of Governance in 2017. Nexa is committed to continue strengthening its leadership, aligned with its business strategy and objectives towards an efficient organization, promoting a more collaborative, ethical and diverse culture.
- In September 2023, Fitch Ratings affirmed its 'BBB-' rating and 'stable' outlook for Nexa.
- In December 2023, S&P changed Nexa's rating and outlook from 'BB+' 'positive' to 'BBB-' 'stable', upgrading the company to investment grade level.
- In January 2024, S&P has affirmed its 'BBB-' rating and 'stable' outlook for Nexa, while Moody's has affirmed its 'Ba2' rating and changed Nexa's outlook from 'stable' to 'negative'.

## Growth Strategy and Asset Portfolio

- We remain focused on free cash flow generation and continue to evaluate our capital allocation framework, which includes priorities related to ESG and HS&E, while ensuring that Nexa’s capital is appropriately allocated to the highest return assets.
- The strategic review of our assets continues with initiatives to optimize the portfolio. We continue to assess risk-return alternatives for our Magistral copper project in Peru and for our Morro Agudo mine in Brazil.
- In 4Q23, we continued to advance the technical studies of the Pasco Integration project. As previously mentioned, this project is expected to develop a robust organic growth option for Nexa. Technical studies cover a range of work, from mine planning to major projects to sustain and expand production, such as mine design and studies for underground interconnection, shaft upgrade and plant engineering assessment, as well as key routes to improve capacity to provide a long-term solution for tailings storage facilities (“TSF”). Furthermore, we continue to advance with the necessary environmental studies and permits. We expect to start and complete the project approval process with our technical committee and board of directors in 2024.

## 2023 Results and Guidance

### Production, Sales and Cash Cost Guidance

As previously disclosed in our press release dated [February 01, 2024](#), we reported solid 2023 operational results, and provided our production and metal sales guidance for the three-year period 2024-2026, as well as cash costs, capital expenditures and other operating expenses guidance for 2024.

- 2023 mining production guidance was achieved, with all metals in the upper range of the guidance. Zinc production totaled 333kt in 2023. Cerro Lindo and Morro Agudo mines achieved the upper range of the guidance, while El Porvenir and Vazante mines exceeded the annual guidance, and Atacocha mine was slightly below the lower range. Aripuanã reached the middle range of the guidance (following the guidance revision disclosed in October 2023).
- We achieved the upper range of the annual guidance for copper, lead, and silver production of 33kt, 65kt and 10MMoz, respectively.

### Mining segment – production

Mining production (Metal in concentrate)		2023	Guidance 2023		
<b>Zinc</b>	<b>kt</b>	<b>333</b>	<b>299</b>	<b>-</b>	<b>334</b>
Cerro Lindo		78	69	-	79
El Porvenir		56	51	-	55
Atacocha		8.2	9	-	11
Vazante		146	131	-	144
Morro Agudo		23	17	-	23
Aripuanã		22	20	-	23
<b>Copper</b>	<b>kt</b>	<b>33</b>	<b>29</b>	<b>-</b>	<b>33</b>
Cerro Lindo		29	25	-	28
El Porvenir		0.4	0.2	-	0.3
Aripuanã		4.4	4.2	-	5.0
<b>Lead</b>	<b>kt</b>	<b>65</b>	<b>53</b>	<b>-</b>	<b>65</b>
Cerro Lindo		13	11	-	13
El Porvenir		25	20	-	26

Mining production (Metal in concentrate)		2023	Guidance 2023	
Atacocha		11	10	- 12
Vazante		1.4	1.1	- 1.2
Morro Agudo		8.3	4.9	- 6.1
Aripuanã		6.3	5.7	- 6.9
<b>Silver</b>	<b>MMoz</b>	<b>10</b>	<b>9.1</b>	<b>- 10</b>
Cerro Lindo		3.5	3.5	- 3.8
El Porvenir		4.3	3.7	- 4.5
Atacocha		1.4	1.0	- 1.2
Vazante		0.6	0.3	- 0.4
Aripuanã		0.5	0.4	- 0.5

## Smelting segment – sales

Smelting sales		2023	Guidance 2023	
<b>Metal Sales</b>	<b>kt</b>	<b>590</b>	<b>580</b>	<b>- 605</b>
Zinc metal		556	545	- 565
Zinc oxide		34	35	- 40

Metal sales of 590kt in 2023 achieved the middle range of the annual guidance driven by lower production volumes of our smelters compared to 2022, in addition to overall lower demand. Zinc metal sales of 556kt were also in the middle range of the guidance, while zinc oxide sales of 34kt were slightly below the lower range, mainly explained by a slowdown in domestic demand.

## Cash Costs

Mining Operating costs	Cost ROM (US\$/t) 2023	Cash Cost (US\$/lb) 2023	Cost ROM (US\$/t) 2023e	Cash Cost (US\$/lb) 2023e
<b>Mining <sup>(1)</sup></b>	<b>45.2</b>	<b>0.40</b>	<b>43.9 - 46.4</b>	<b>0.35 - 0.38</b>
Cerro Lindo	40.6	(0.06)	40.1 - 42.1	(0.12) - (0.10)
El Porvenir	62.8	0.29	57.3 - 60.7	0.26 - 0.28
Atacocha	32.9	(0.44)	33.1 - 35.4	(0.45) - (0.38)
Vazante	57.1	0.61	57.2 - 59.0	0.59 - 0.65
Morro Agudo	37.9	0.82	35.0 - 38.2	0.80 - 0.94

<sup>(1)</sup> C1 Weighted Cash cost net of by-products credits is measured with respect to zinc sold per mine.

Smelting Operating costs	Conversion cost (US\$/lb) 2023	Cash Cost (US\$/lb) 2023	Conversion cost (US\$/lb) 2023e	Cash Cost (US\$/lb) 2023e
<b>Smelting <sup>(2)</sup></b>	<b>0.30</b>	<b>1.10</b>	<b>0.29 - 0.32</b>	<b>1.07 - 1.12</b>
Cajamarquilla	0.28	1.03	0.27 - 0.29	1.04 - 1.08
Três Marias	0.26	1.16	0.27 - 0.30	1.08 - 1.13
Juiz de Fora	0.50	1.21	0.45 - 0.49	1.19 - 1.28

<sup>(2)</sup> C1 Weighted Cash cost net of by-products credits is measured with respect to zinc sold per smelter.

- In 2023, run-of-mine mining costs of US\$45.2/t was in line with our 2023 guidance, and C1 cash cost of US\$0.40/lb, was slightly higher than our 2023 guidance. For further information, please see the section "Business performance – Mining segment".
- Smelting C1 cash cost of US\$1.10/lb and Conversion cost of US\$0.30/lb in 2023 were in line with our 2023 guidance. For further information, please see the section "Business performance – Smelting segment".

## Capital Expenditures ("CAPEX") Guidance

- Nexa invested US\$111 million in 4Q23, totaling US\$309 million in 2023. Of this amount, 95% of the investment was classified as sustaining, which includes CAPEX to sustain operations, HS&E and mine development.
- At Aripuanã, sustaining and HS&E CAPEX in 4Q23 accounted for US\$28 million, totaling US\$80 million in 2023. Of this amount, US\$6 million was invested in mine development in the quarter, totaling US\$23 million in 2023.
- The appreciation of the Brazilian real against the U.S. dollar had a negative impact of US\$1.7 million in the quarter, totaling a negative impact of US\$5.4 million in 2023.

CAPEX (US\$ million)	2023	Guidance 2023
<b>Non-Expansion</b>	<b>316</b>	<b>303</b>
Sustaining <sup>(1)</sup>	293	268
HS&E	16	26
Others <sup>(2)</sup>	7	10
<b>Expansion projects <sup>(3)</sup></b>	<b>4</b>	<b>7</b>
Reconciliation to Financial Statements <sup>(4)</sup>	(11)	-
<b>TOTAL</b>	<b>309</b>	<b>310</b>

(1) Investments in tailing dams are included in sustaining expenses.

(2) Modernization, IT and others.

(3) Including Vazante deepening, among other several projects to improve operational performance.

(4) The amounts are mainly related to capitalization of interest net of advanced payments for imported materials and tax credits.

## Exploration & Project Evaluation and Other Expenses Guidance

- In 4Q23, we invested US\$24 million in exploration and project evaluation, totaling US\$92 million in 2023. This was US\$8 million below our guidance due to our optimization initiatives throughout the year.
- In addition, we have invested US\$7 million in technology, related to projects to improve our current operations and US\$13 million to continue contributing to the social and economic development of our host communities.
- As part of our long-term strategy, we will maintain our efforts to replace and increase mineral reserves and resources. We expect to continue advancing with exploration activities, primarily focusing on identifying new ore bodies and upgrading resources classification through infill drilling campaigns.

Other Operating Expenses (US\$ million)	2023	Guidance 2023
<b>Exploration</b>	<b>57</b>	<b>49</b>
Mineral Exploration	39	30
Mineral rights	5	5
Sustaining (mine development)	14	14

Other Operating Expenses (US\$ million)	2023	Guidance 2023
<b>Project Evaluation</b>	<b>35</b>	<b>50</b>
Três Marias Project	14	15
<hr/>		
<b>Exploration &amp; Project Evaluation</b>	<b>92</b>	<b>100</b>
<b>Other</b>	<b>21</b>	<b>20</b>
Technology	7	6
Communities	13	14

Note: Exploration and project evaluation expenses consider several stages of development, from mineral potential definition, R&D, and subsequent scoping and pre-feasibility studies (FEL1 and FEL2).

## Guidance 2024-2026

As previously disclosed in our press release dated [February 01, 2024](#), we announced our 2023 operational results, and provided our production and metal sales guidance for the three-year period 2024-2026, as well as our cash costs, capital expenditures and other operating expenses guidance for 2024.

Guidance is based on several assumptions and estimates and is subject to the continuous evaluation of several factors, including but not limited to metal prices; operational performance; maintenance and input costs; and exchange rates.

Nexa will continue to monitor risks associated with global supply chain disruptions, which could be exacerbated, among other factors, by the ongoing Russia-Ukraine war, the Israel-Hamas conflict, unusual weather conditions, the global recession, and its potential impact on the demand for our products, inflationary cost pressure, metal prices, community protests, and changes to the political situation or regulatory frameworks in the countries in which we operate that could affect our production levels and our costs. Refer to "Risks and Uncertainties" and "Cautionary Statement on Forward-Looking Statements" for further information.

### Mining Segment

Mining production (Metal in concentrate)		2023	2024e		2025e		2026e				
<b>Zinc</b>	<b>kt</b>	<b>333</b>	<b>323</b>	-	<b>381</b>	<b>326</b>	-	<b>381</b>	<b>330</b>	-	<b>378</b>
Cerro Lindo		78	73	-	86	78	-	86	82	-	94
El Porvenir		56	51	-	57	59	-	72	43	-	50
Atacocha		8	8	-	9	9	-	11	17	-	20
Vazante		146	130	-	148	122	-	139	121	-	140
Morro Agudo		23	18	-	23	-	-	-	-	-	-
Aripuanã		22	42	-	57	58	-	72	67	-	75
<b>Copper</b>	<b>kt</b>	<b>33</b>	<b>30</b>	-	<b>35</b>	<b>28</b>	-	<b>35</b>	<b>24</b>	-	<b>29</b>
Cerro Lindo		29	24	-	28	24	-	28	19	-	23
El Porvenir		0.4	0.2	-	0.3	0.4	-	0.5	0.3	-	0.4
Aripuanã		4.4	5.7	-	7.3	4.1	-	5.9	4.4	-	6.4
<b>Lead</b>	<b>kt</b>	<b>65</b>	<b>66</b>	-	<b>82</b>	<b>67</b>	-	<b>78</b>	<b>71</b>	-	<b>83</b>
Cerro Lindo		13	11	-	13	12	-	13	9.5	-	11
El Porvenir		25	23	-	28	23	-	24	24	-	28
Atacocha		11	11	-	12	12	-	15	15	-	17
Vazante		1.4	1.0	-	1.4	1.0	-	1.2	1.0	-	1.1
Morro Agudo		8.3	4.3	-	6.6	-	-	-	-	-	-
Aripuanã		6.3	16	-	20	19	-	24	22	-	25
<b>Silver</b>	<b>MMoz</b>	<b>10</b>	<b>11</b>	-	<b>13</b>	<b>11</b>	-	<b>13</b>	<b>11</b>	-	<b>13</b>
Cerro Lindo		3.5	4.0	-	4.2	3.7	-	4.0	2.6	-	3.0
El Porvenir		4.3	4.6	-	5.4	4.3	-	4.7	4.8	-	5.7
Atacocha		1.4	1.1	-	1.2	1.2	-	1.5	1.2	-	1.4
Vazante		0.6	0.3	-	0.5	0.3	-	0.4	0.4	-	0.4
Aripuanã		0.5	1.0	-	1.5	1.5	-	1.9	1.7	-	2.2

## Smelting Segment

Smelting sales		2023	2024e		2025e		2026e	
<b>Zinc metal</b>	<b>kt</b>	<b>556</b>	<b>545</b>	<b>- 565</b>	<b>545</b>	<b>- 565</b>	<b>545</b>	<b>- 565</b>
Cajamarquilla		326	315	- 325	315	- 325	315	- 325
Três Marias		147	155	- 160	155	- 160	155	- 160
Juiz de Fora		82	75	- 80	75	- 80	75	- 80
<b>Zinc oxide</b>	<b>kt</b>	<b>34</b>	<b>35</b>	<b>- 40</b>	<b>35</b>	<b>- 40</b>	<b>35</b>	<b>- 40</b>
Três Marias		34	35	- 40	35	- 40	35	- 40
<b>Metal Sales</b>	<b>kt</b>	<b>590</b>	<b>580</b>	<b>- 605</b>	<b>580</b>	<b>- 605</b>	<b>580</b>	<b>- 605</b>

## 2024 Cash Costs

Mining Operating costs	Cost ROM (US\$/t)	Cash Cost (US\$/lb)	Cost ROM (US\$/t)		Cash Cost (US\$/lb)	
	2023	2023	2024e		2024e	
<b>Mining <sup>(1)</sup></b>	<b>45.2</b>	<b>0.40</b>	<b>44.0</b>	<b>- 51.4</b>	<b>0.23</b>	<b>- 0.42</b>
Cerro Lindo	40.6	(0.06)	41.0	- 45.0	(0.22)	- 0.03
El Porvenir	62.8	0.29	58.4	- 71.6	(0.02)	- 0.25
Atacocha	32.9	(0.44)	34.3	- 43.2	(0.27)	- (0.02)
Vazante	57.1	0.61	55.8	- 63.6	0.52	- 0.60
Morro Agudo	37.9	0.82	27.9	- 40.0	0.80	- 1.24

<sup>(1)</sup> C1 Weighted Cash cost net of by-products credits is measured with respect to zinc sold per mine.

Note: Consolidated cash costs do not include Aripuanã. Given we are expecting Aripuanã's ramp-up to be completed in mid-2024, we are not providing guidance at this time.

Smelting Operating costs	Conversion cost (US\$/lb)	Cash Cost (US\$/lb)	Conversion cost (US\$/lb)		Cash Cost (US\$/lb)	
	2023	2023	2024e		2024e	
<b>Smelting <sup>(2)</sup></b>	<b>0.30</b>	<b>1.10</b>	<b>0.29</b>	<b>- 0.32</b>	<b>1.07</b>	<b>- 1.18</b>
Cajamarquilla	0.28	1.03	0.29	- 0.32	1.02	- 1.13
Três Marias	0.26	1.16	0.25	- 0.27	1.12	- 1.23
Juiz de Fora	0.50	1.21	0.38	- 0.42	1.17	- 1.28

<sup>(2)</sup> C1 Weighted Cash cost net of by-products credits is measured with respect to zinc sold per smelter.

## 2024 CAPEX

CAPEX (US\$ million)	Guidance 2024
<b>Non-Expansion</b>	<b>307</b>
Sustaining <sup>(1)</sup>	261
HS&E	24
Others <sup>(2)</sup>	21
<b>Expansion projects <sup>(3)</sup></b>	<b>4</b>
<b>TOTAL</b>	<b>311</b>

<sup>(1)</sup> Investments in tailing dams are included in sustaining expenses.

<sup>(2)</sup> Modernization, IT and others.

<sup>(3)</sup> Includes Vazante deepening (US\$2.4 million), among other several projects to improve operational performance.

## 2024 Exploration & Project Evaluation and Other Expenses

Other Operating Expenses (US\$ million)	Guidance 2024
<b>Exploration</b>	<b>58</b>
Mineral Exploration	42
Mineral rights	6
Sustaining (mine development)	10
<b>Project Evaluation</b>	<b>14</b>
<hr/>	
<b>Exploration &amp; Project Evaluation</b>	<b>72</b>
<b>Other</b>	<b>21</b>
Technology	4
Communities	17

Note: Exploration and project evaluation expenses consider several stages of development, from mineral potential definition, R&D, and subsequent scoping and pre-feasibility studies (FEL1 and FEL2).

## Earnings Release 4Q23 and 2023

This Earnings Release should be read in conjunction with the “Consolidated financial statements at December 31, 2023”. This document contains forward-looking statements.

### Table of contents

Consolidated performance	13
Business performance – Mining	19
Business performance – Smelting	31
Liquidity and Indebtedness	39
Cash flows	41
Others	42
Market scenario	44
Risks and Uncertainties	46
Use of Non-IFRS Financial Measures	47
Cautionary Statement on Forward-Looking Statements	49
Appendix	51

## UPCOMING EVENT

### Earnings Conference Call

Date: **Thursday, February 22, 2024** – 9:00am (EST)

#### Dial In

US: +1-833-816-1265

Canada: +1-647-484-8814

Brazil: +55 11 3181-8565

International: +1-412-317-5635

Conference ID: Nexa Resources

Live audio webcast with slide presentation will be available on:

<https://ir.nexaresources.com>

## Consolidated performance

## Selected financial information

US\$ million (except where otherwise indicated)	4Q23	3Q23	4Q22	2023	2022
<b>Net Revenues</b>	<b>630</b>	<b>649</b>	<b>780</b>	<b>2,573</b>	<b>3,034</b>
Mining	282	273	315	1,090	1,248
Smelting	454	484	606	1,947	2,467
Intersegment results   Adjustments	(106)	(107)	(142)	(464)	(681)
<b>Cost of Sales</b>	<b>(561)</b>	<b>(583)</b>	<b>(696)</b>	<b>(2,277)</b>	<b>(2,395)</b>
Mining	(283)	(246)	(303)	(1,028)	(905)
<i>Current Operations</i>	<i>(233)</i>	<i>(203)</i>	<i>(228)</i>	<i>(833)</i>	<i>(830)</i>
<i>Aripuanã</i>	<i>(51)</i>	<i>(43)</i>	<i>(75)</i>	<i>(195)</i>	<i>(75)</i>
Smelting	(404)	(439)	(543)	(1,727)	(2,191)
Intersegment results   Adjustments	126	102	150	478	701
<b>Selling, general and administrative</b>	<b>(33)</b>	<b>(33)</b>	<b>(41)</b>	<b>(127)</b>	<b>(146)</b>
Mining	(16)	(16)	(15)	(62)	(64)
Smelting	(15)	(15)	(16)	(61)	(60)
Intersegment results   Adjustments	(1)	(2)	(10)	(4)	(21)
<b>Depreciation and amortization</b>	<b>83</b>	<b>72</b>	<b>78</b>	<b>298</b>	<b>291</b>
Mining	63	51	59	220	205
Smelting	20	20	18	78	79
Intersegment results   Adjustments	(0)	0	1	1	8
<b>Adjusted EBITDA <sup>(1)</sup></b>	<b>105</b>	<b>82</b>	<b>120</b>	<b>391</b>	<b>760</b>
Mining	47	40	78	149	440
Smelting	58	49	46	247	326
Intersegment results   Adjustments	(1)	(7)	(4)	(5)	(6)
<i>Adj. EBITDA margin (%)</i>	<i>16.7%</i>	<i>12.6%</i>	<i>15.4%</i>	<i>15.2%</i>	<i>25.1%</i>
<b>Net income (loss)</b>	<b>(108)</b>	<b>(63)</b>	<b>(81)</b>	<b>(289)</b>	<b>76</b>
Attributable to Nexa's shareholders	(93)	(74)	(82)	(289)	49
Attributable to non-controlling interests	(14)	10	0	0	27
<b>Basic and diluted earnings (loss) per share</b>	<b>(0.71)</b>	<b>(0.56)</b>	<b>(0.62)</b>	<b>(2.18)</b>	<b>0.37</b>
<b>Adjusted net income (loss) <sup>(1)</sup></b>	<b>(7)</b>	<b>(49)</b>	<b>3</b>	<b>(41)</b>	<b>187</b>
Attributable to Nexa's shareholders	(1)	(57)	(6)	(54)	151
Attributable to non-controlling interests	(6)	8	9	13	35
<b>Adjusted basic and diluted earnings (loss) per share <sup>(1)</sup></b>	<b>(0.01)</b>	<b>(0.43)</b>	<b>(0.04)</b>	<b>(0.41)</b>	<b>1.14</b>

(1) Refer to "Use of Non-IFRS Financial Measures" for further information. Adjusted EBITDA, adjusted net income (loss) and adjusted EPS, exclude the items presented in the "Net income (loss) reconciliation to Adjusted EBITDA" section for further details on page 16 of this earnings release. For details on segment definition and accounting policy, please refer to explanatory note 2 - "Information by business segment" in the "Consolidated financial statements at December 31, 2023".

## Net revenues

In 4Q23, net revenues were US\$630 million, 19% lower year-over-year, primarily due to lower zinc prices and lower smelting sales volume. The LME average price for zinc was down by 17%, while copper and lead rose by 2% and 1%, respectively, compared to the same period in 2022 – for more information on metal prices, refer to the “Market Scenario” section.

Compared to 3Q23, net revenues decreased by 3%, mainly due to lower smelting sales volume, which was partially offset by higher zinc prices and higher mining production volumes.

In 2023, net revenues amounted to US\$2,573 million, down by 15% compared to 2022, as a result of lower zinc prices with a negative impact of US\$491 million based on our sales volumes of 590kt in 2023 and the average zinc price difference of US\$832/t between 2023 and 2022, lower copper prices of US\$11 million, and lower smelting sales volume of US\$92 million, which was partially offset by higher mining production volumes of US\$18 million due to higher copper and lead sales.

## Cost of Sales

In 4Q23, cost of sales amounted to US\$561 million, down by 19% year-over-year, mainly due to lower zinc prices, positively impacting our smelting raw material purchase, and lower smelting sales, which were partially offset by higher mining sales volumes driving overall higher cost of sales for the mining segment. Compared to 3Q23, cost of sales decreased by 4% explained by lower smelting sales volume, which was partially offset by higher zinc prices, impacting the purchase of the zinc concentrate in our smelting segment, and higher mining sales volumes.

In 2023, cost of sales amounted to US\$2,277 million, down by 5% compared to 2022, mainly due to lower smelting production and, consequently, sales, and zinc prices, positively impacting the purchase of the zinc concentrate in our smelting segment, partially offset by higher mining production volumes.

## Mineral exploration and project evaluation

In 4Q23, mineral exploration and project evaluation investments were US\$24 million, compared to US\$23 million in 4Q22. In 2023, mineral exploration and project evaluation investment amounted to US\$92 million.

For additional information about our exploration results in the fourth quarter and full year 2023, please refer to our 4Q23 and 2023 Exploration Report published on [February 08, 2024](#).

## SG&A

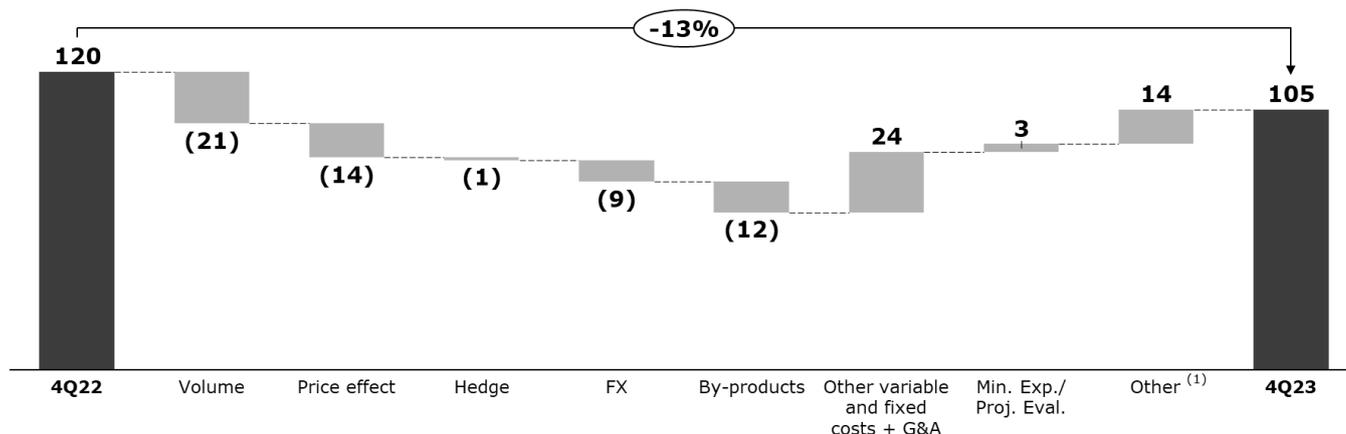
In 4Q23, SG&A expenses of US\$33 million were down by 20% compared to 4Q22, mainly driven by lower commercial expenses, partially offset by higher third-party services in support areas, and decreased by 1% when compared to 3Q23. In 2023, SG&A expenses amounted to US\$127 million, down by 13% compared to 2022, partially a result of our organizational redesign that occurred in 2022 and lower third-party services in support areas.

## Adjusted EBITDA

In 4Q23, Adjusted EBITDA was US\$105 million compared with US\$120 million in 4Q22. The main factors that contributed to this decrease were (i) lower smelting sales volume of US\$21 million; (ii) the negative net price effect of US\$14 million, primarily related to lower LME metal prices; (iii) lower by-products contribution of US\$12 million, primarily related to lower payable value of sulphuric acid, lower copper and lead prices, partially offset by higher copper and lead sales volumes, particularly in Aripuanã; and (iv) the negative impact of FX variation of US\$9 million, which was partially offset by (v) the positive net impact of US\$24 million in costs, mainly due to higher zinc concentrate volumes from our own mines, higher TCs applied to concentrate purchases from third-parties and a better smelting raw material mix consumption, partially offset by higher cost of sales expenses in Aripuanã in the quarter

compared to 4Q22; and (vi) lower community expenses in Peru and lower contingencies provisions in our Brazilian smelters.

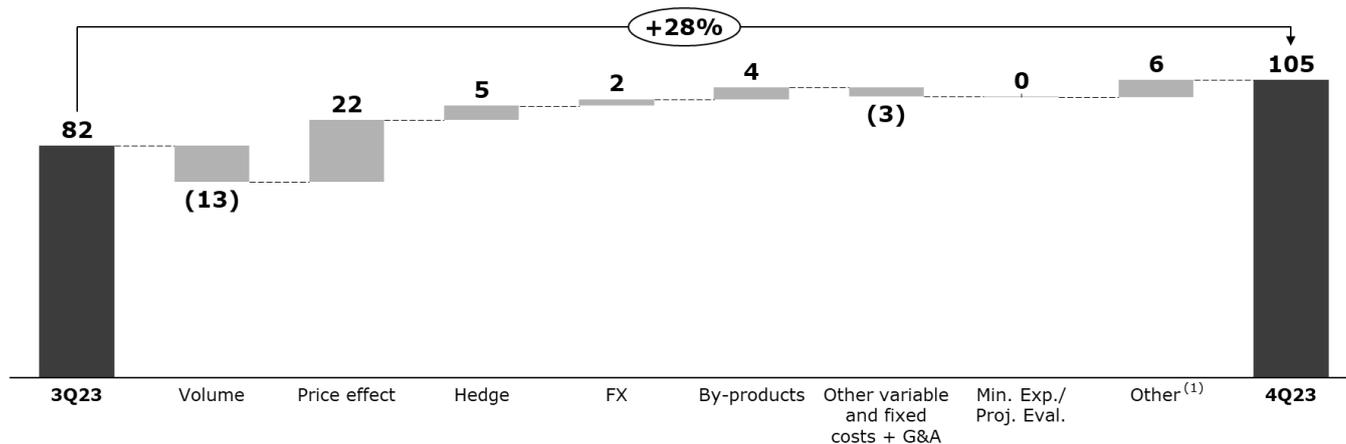
US\$ million



(1) Includes: Other income and expenses

Compared to 3Q23, Adjusted EBITDA increased by 28%. This increase was mainly driven by (i) the positive net price effect of US\$22 million due to higher zinc prices and positive raw material inventory effect; (ii) the positive hedge effect of US\$5 million; and (iii) higher by-products contribution of US\$4 million driven by higher copper and lead sales volume in Peru, which were partially offset by (iv) lower smelting sales volume due to lower production in Cajamarquilla and Três Marias.

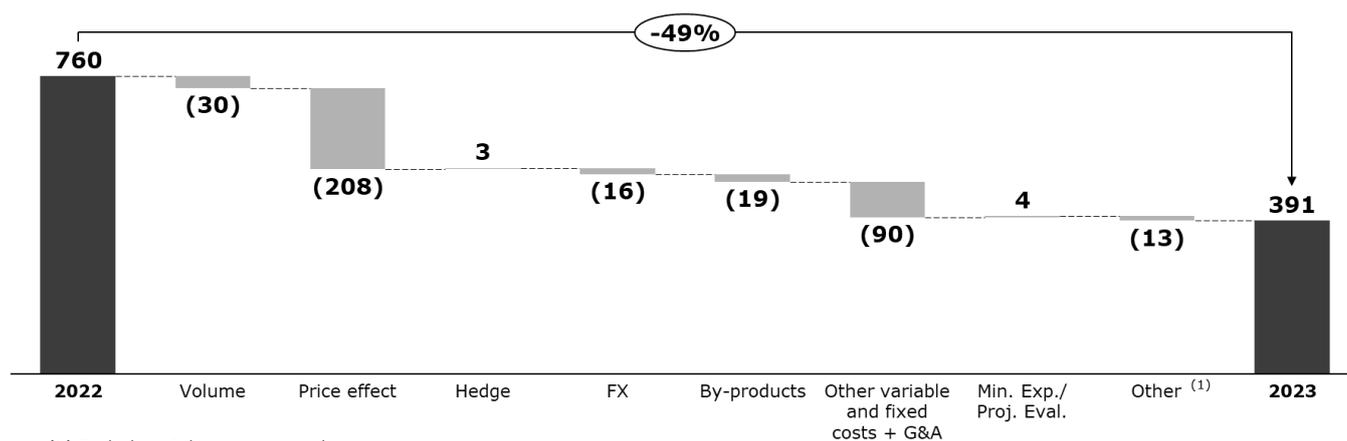
US\$ million



(1) Includes: Other income and expenses

In 2023, Adjusted EBITDA was US\$391 million compared with US\$760 million in 2022, primarily driven by (i) lower LME metal prices with a negative impact of US\$208 million; (ii) the negative impact in costs of US\$90 million, mainly due to higher operational costs mainly in Aripuanã, related to concentrate and stockpile costs due to the ramp-up phase, (iii) lower smelting sales volume with a negative impact of US\$30 million due to lower production, as result of unplanned roaster maintenance in Cajamarquilla and Três Marias, in addition to silicate circuit instabilities in Três Marias; (iv) the negative impact of US\$19 million due to lower by-products contribution; and (v) the negative impact of FX variation of US\$16 million.

US\$ million



## Net income (loss) reconciliation to Adjusted EBITDA

US\$ million	4Q23	3Q23	4Q22	2023	2022
<b>Net Income (loss)</b>	<b>(107.6)</b>	<b>(63.4)</b>	<b>(81.4)</b>	<b>(289.2)</b>	<b>76.4</b>
Depreciation, amortization and depletion	82.9	72.1	77.9	298.4	290.9
Share in the results of associates	(6.1)	(6.3)	(1.9)	(23.5)	(1.9)
Net financial results	31.5	64.4	17.9	161.6	133.7
Taxes on income	3.8	0.4	23.3	(4.3)	151.0
<b>EBITDA</b>	<b>4.4</b>	<b>67.1</b>	<b>35.8</b>	<b>143.0</b>	<b>650.2</b>
Fair value of offtake agreement <sup>(2)</sup>	(1.3)	(1.0)	(7.7)	(2.3)	(24.3)
Impairment loss of long-lived assets <sup>(3)</sup>	55.5	1.9	32.8	114.6	32.5
Pre-operating and ramp-up expenses during the commissioning and ramp-up of greenfield projects (Aripuanã) <sup>(4)</sup>	10.1	3.5	46.8	15.5	87.5
Impairment of other assets <sup>(5)</sup>	0.0	0.0	9.3	0.0	9.3
Loss on sale of property, plant and equipment <sup>(6)</sup>	2.6	(0.1)	0.2	3.7	0.7
Remeasurement in estimates of asset retirement obligations <sup>(7)</sup>	(0.4)	(2.6)	3.0	(3.1)	(6.2)
Remeasurement adjustment of streaming agreement <sup>(8)</sup>	7.8	2.3	0.0	10.1	10.6
Energy forward contracts – MTM <sup>(9)</sup>	8.2	(2.3)	0.0	15.7	0.0
Provisions – Value added tax ("VAT") discussions <sup>(10)</sup>	10.9	12.8	0.0	86.9	0.0
Dams obligations <sup>(11)</sup>	7.0	0.0	0.0	7.0	0.0
<b>Adjusted EBITDA <sup>(1)</sup></b>	<b>104.9</b>	<b>81.7</b>	<b>120.2</b>	<b>391.2</b>	<b>760.3</b>

(1) Adjusted EBITDA excludes the items presented above in the "Net income (loss) reconciliation to Adjusted EBITDA". For details on segment definition and accounting policy, please refer to explanatory note 2 – "Information by business segment" in the "Consolidated financial statements at December 31, 2023".

(2) Non-cash adjustment: Derivative financial instrument related to the "Offtake agreement" described on page 42 of this earnings release.

(3) Non-cash adjustment: Cash generating unit and individual PP&E assets impairment loss.

(4) Expenses related to pre-operating and ramp-up expenses incurred during the commissioning and ramp-up phases of greenfield projects which have not achieved their nameplate capacity are not indicative of the Company's normal operating activities. Once Aripuanã operation is stabilized and operational at its nameplate capacity, such effects will no longer be excluded.

(5) Non-cash adjustment: Value-added-taxes impairment loss.

(6) Non-cash adjustment: Results from sale and disposal of certain non-current assets.

(7) Non-cash adjustment: Asset retirement obligation remeasurement of discount rate and updated studies that are not subject to capitalization.

(8) Non-cash adjustment: Remeasurement of contractual obligation related to the forward sale contract of Cerro Lindo's Silver contained in the ore.

(9) Non-cash adjustment: The fair value adjustment of the energy surplus resulting from electric energy purchase contracts of the company's subsidiary, Pollarix.

(10) Expenses related to the impact of accruals related to VAT discussions.

(11) Expenses related to the impact of the provisions related to dams obligations.

## Net financial results

The net financial result in 4Q23 was US\$32 million in expenses compared to US\$64 million in expenses in 3Q23, mainly driven by FX rate gains, partially offset by higher financial expenses, including interests on provisions, accrued interest related to our two outstanding corporate bonds and other financial expenses<sup>4</sup>, and lower financial income (interest on financial investments and cash equivalents).

The foreign exchange variation had a positive impact of US\$17 million versus a negative impact of US\$27 million in 3Q23, mainly explained by the 3% appreciation of the Brazilian real against the U.S. dollar<sup>5</sup> in 3Q23 versus the previous quarter.

Excluding the effect of the foreign exchange variation, the net financial results in 4Q23 were an expense of US\$48 million compared to an expense of US\$37 million in the previous quarter.

US\$ thousand	4Q23	3Q23	4Q22
<b>Financial income</b>	<b>4,827</b>	<b>8,359</b>	<b>6,174</b>
<b>Financial expenses</b>	<b>(53,090)</b>	<b>(45,316)</b>	<b>(43,395)</b>
<b>Other financial items, net</b>	<b>16,718</b>	<b>(27,400)</b>	<b>19,368</b>
Foreign exchange gain (loss)	16,904	(26,882)	19,773
<b>Net financial result</b>	<b>(31,545)</b>	<b>(64,357)</b>	<b>(17,853)</b>
<b>Net financial result excluding FX</b>	<b>(48,449)</b>	<b>(37,475)</b>	<b>(37,626)</b>

## Net income (loss)

Net loss was US\$108 million in 4Q23 compared to net loss of US\$81 million in 4Q22 and net loss of US\$63 million in 3Q23, mainly driven by the decrease in operating income when compared to 3Q23, the recognition of an impairment loss<sup>6</sup> and provisions on VAT discussions in 4Q23. In 2023, net loss was US\$289 million compared to net income of US\$76 million in 2022.

Excluding the miscellaneous adjustments presented below and detailed above in the Net income (loss) reconciliation to Adjusted EBITDA section, adjusted net loss was US\$7 million in the quarter. In 2023, adjusted net loss totaled US\$41 million.

Adjusted net loss attributable to Nexa's shareholders was US\$1 million in 4Q23 and US\$54 million in 2023, resulting in adjusted loss per share of US\$0.01 and US\$0.41, respectively.

US\$ million (except where otherwise indicated)	4Q23	3Q23	4Q22	2023	2022
<b>Net Income (loss)</b>	<b>(107.6)</b>	<b>(63.4)</b>	<b>(81.4)</b>	<b>(289.2)</b>	<b>76.4</b>
Attributable to Nexa's shareholders	(93.4)	(73.7)	(81.7)	(289.4)	49.1
Attributable to non-controlling interests	(14.2)	10.4	0.3	0.2	27.3

<sup>4</sup> For details on other financial expenses, please refer to the Legal Matters section of this Earnings Release and explanatory note 9 (iv) in the "Consolidated financial statements at December 31, 2023".

<sup>5</sup> In 4Q23, the Brazilian real / U.S. dollar (end of period) exchange rate was R\$4.841/US\$1.00 compared to R\$5.007/US\$1.00 in 3Q23.

<sup>6</sup> Note: For details on Impairment Loss and Provisions on VAT Discussions, please refer to the "Consolidated financial statements at December 31, 2023".

US\$ million (except where otherwise indicated)	4Q23	3Q23	4Q22	2023	2022
<b>Basic and diluted earnings (loss) per share</b>	<b>(0.71)</b>	<b>(0.56)</b>	<b>(0.62)</b>	<b>(2.18)</b>	<b>0.37</b>
<b>Miscellaneous adjustments <sup>(1)</sup></b>	<b>100.5</b>	<b>14.6</b>	<b>84.4</b>	<b>248.1</b>	<b>110.2</b>
Attributable to Nexa's shareholders	92.0	16.6	75.8	235.1	102.3
Attributable to non-controlling interests	8.6	(2.0)	8.6	13.0	7.9
<b>Basic and diluted miscellaneous adjustments per share</b>	<b>0.69</b>	<b>0.13</b>	<b>0.57</b>	<b>1.78</b>	<b>0.77</b>
<b>Adjusted net income (loss)</b>	<b>(7.1)</b>	<b>(48.8)</b>	<b>2.9</b>	<b>(41.1)</b>	<b>186.6</b>
Attributable to Nexa's shareholders	(1.4)	(57.2)	(5.9)	(54.2)	151.4
Attributable to non-controlling interests	(5.7)	8.4	8.8	13.2	35.2
Weighted average number of outstanding shares - in thousand	132,439	132,439	132,439	132,439	132,439
<b>Adjusted basic and diluted earnings (loss) per share</b>	<b>(0.01)</b>	<b>(0.43)</b>	<b>(0.04)</b>	<b>(0.41)</b>	<b>1.14</b>

(1) Miscellaneous adjustments include: (i) Fair value of offtake agreement; (ii) Impairment loss of long-lived assets; (iii) Aripuanã pre-operating expenses and ramp-up impacts; (iv) Impairment of other assets; (v) Loss on sale of property, plant and equipment; (vi) Remeasurement in estimates of asset retirement obligations; (vii) Remeasurement adjustment of streaming agreement; and (viii) Other adjustments.

## Business Performance

### Mining segment

Consolidated		4Q23	3Q23	4Q22	4Q23 vs. 4Q22	2023	2022	2023 vs. 2022
Ore Mined	kt	3,522	3,284	3,173	11.0%	12,959	12,073	7.3%
Treated Ore	kt	3,700	3,470	3,281	12.8%	13,847	12,343	12.2%
<b>Grade</b>								
Zinc	%	2.90	3.03	2.68	22 bps	2.89	2.78	11 bps
Copper	%	0.35	0.37	0.35	(0 bps)	0.34	0.34	(0 bps)
Lead	%	0.65	0.67	0.63	2 bps	0.66	0.62	5 bps
Silver	oz/t	1.01	1.01	1.02	(1.8%)	1.02	1.07	(4.8%)
Gold	oz/t	0.005	0.005	0.005	2.7%	0.005	0.005	2.9%
<b>Production   metal contained</b>								
Zinc	kt	90.2	87.4	74.9	20.5%	333.2	296.4	12.4%
Copper	kt	9.4	9.3	9.3	0.6%	33.4	33.2	0.5%
Lead	kt	17.6	16.5	15.7	12.1%	65.2	57.4	13.5%
Silver	MMoz	2.7	2.6	2.6	7.5%	10.3	10.0	3.3%
Gold	koz	7.7	6.6	6.9	12.0%	27.6	27.2	1.5%
Zinc Equivalent <sup>(1)</sup>	kt	165.3	160.8	145.9	13.4%	611.1	564.7	8.2%

Note: Until 3Q23 the reference price used for conversion was 2022 LME average prices. All numbers were updated to reflect the 2023 LME average prices.

(1) Consolidated mining production in kt of zinc equivalent is calculated by converting copper, lead, silver, and gold contents to a zinc equivalent grade, assuming 2023 LME average prices: Zn: US\$1.20/lb; Cu: US\$3.85/lb; Pb: US\$0.97/lb; Ag: US\$23.4/oz; Au: US\$1,943/oz.

In 4Q23, treated ore volume was 3,700kt up 13% year-over-year, explained by higher ore mined and better plant performance in Cerro Lindo, El Porvenir, Vazante, Morro Agudo and Aripuanã, except in Atacocha, which was relatively flat.

Compared to 3Q23, treated ore volume increased by 7%, mainly driven by the Cerro Lindo, Atacocha, Morro Agudo and Aripuanã mines.

The ore throughput, year-over-year, increased at Cerro Lindo (+3%), El Porvenir (+2%), Vazante (+3%) and Morro Agudo (+37%), while Atacocha remained at the same levels compared to 4Q22.

Zinc production of 90kt in the quarter rose by 21% from 4Q22, mainly explained by the increase in treated ore volume, average zinc and lead grades and the start-up of the Aripuanã mine. Compared with 3Q23, zinc production rose by 3%, mainly due to the higher volumes from Cerro Lindo, Atacocha and Morro Agudo, in addition to further production from the Aripuanã ramp-up phase.

Copper production of 9kt increased by 1% from 4Q22 and 3Q23, as a result of the Aripuanã ramp-up.

Lead production increased by 12% year-over-year and 7% quarter-over-quarter, mainly driven by Cerro Lindo and Aripuanã.

In 2023, treated ore volume increased by 12% year-over-year to 13,847kt, mainly explained by the higher ore throughput in all mines, except Cerro Lindo. Zinc average grade was up 11bps to 2.89%. Zinc production totaled 333kt, 12% higher than in 2022. Copper production was 0.5% higher and lead production increased by 13% to 65kt.

**Cerro Lindo**

Cerro Lindo (100% basis)		4Q23	3Q23	2Q23	1Q23	2023	4Q22	3Q22	2Q22	1Q22	2022
Ore Mined	kt	<b>1,617</b>	1,515	1,595	1,254	5,981	1,581	1,558	1,698	1,425	6,262
Treated Ore	kt	<b>1,644</b>	1,540	1,530	1,277	5,991	1,589	1,594	1,661	1,392	6,236

**Grade**

Zinc	%	<b>1.70</b>	1.63	1.31	1.38	1.51	1.49	1.42	1.58	1.71	1.55
Copper	%	<b>0.58</b>	0.63	0.57	0.48	0.57	0.65	0.55	0.66	0.57	0.61
Lead	%	<b>0.32</b>	0.32	0.33	0.25	0.31	0.28	0.37	0.35	0.34	0.33
Silver	oz/t	<b>0.83</b>	0.81	0.83	0.72	0.80	0.70	0.94	0.99	0.92	0.89
Gold	oz/t	<b>0.003</b>	0.002	0.002	0.002	0.002	0.003	0.002	0.003	0.003	0.002

**Production | metal contained**

Zinc	kt	<b>24.6</b>	21.7	16.9	15.0	78.2	20.7	19.9	22.7	21.1	84.4
Copper	kt	<b>7.9</b>	8.1	7.4	5.2	28.6	9.1	7.4	9.5	6.8	32.8
Lead	kt	<b>3.8</b>	3.6	3.6	2.1	13.0	3.2	4.7	4.4	3.4	15.6
Silver	MMoz	<b>1.0</b>	0.9	0.9	0.6	3.5	0.8	1.1	1.2	1.0	4.1
Gold	koz	<b>1.2</b>	0.7	0.8	0.7	3.4	0.9	1.0	1.1	1.1	4.1

<b>Zinc sales</b>	kt	<b>25.3</b>	20.8	17.5	14.8	78.4	19.9	19.7	22.9	23.4	85.9
-------------------	----	-------------	------	------	------	------	------	------	------	------	------

**Costs**

Cost of sales	US\$ mm	<b>98.1</b>	88.6	86.5	81.6	354.8	99.0	94.6	105.9	97.0	396.5
Cost ROM <sup>(2)</sup>	US\$/t	<b>41.5</b>	41.3	39.8	39.6	40.6	42.2	40.1	38.2	41.0	40.3
Cash cost <sup>(1)</sup>	US\$/lb	<b>0.06</b>	(0.18)	(0.13)	(0.02)	(0.06)	(0.38)	0.37	(0.59)	(0.34)	(0.25)
Sustaining cash cost <sup>(1)</sup>	US\$/lb	<b>0.29</b>	0.07	0.15	0.23	0.19	(0.04)	0.59	(0.39)	(0.19)	(0.03)

**CAPEX** US\$ mm

Sustaining	<b>11.2</b>	9.1	9.4	8.0	37.7	12.8	8.6	9.4	7.3	38.1
Other	<b>1.7</b>	2.0	1.5	0.4	5.6	2.1	1.0	0.8	0.5	4.3

(1) Our cash cost and sustaining cash cost are net of by-products credits, measured with respect to zinc sold per mine. For a cash cost reconciliation to COGS, please refer to Appendix – All in Sustaining Cash Cost | Mining.

(2) Our cost per ROM is measured with respect to treated ore volume. Refer to "Use of Non-IFRS Financial Measures" for further information.

Zinc production of 25kt increased 19% year-over-year and 14% quarter-over-quarter, mainly due to higher treated ore. Additionally, in 4Q23, areas with better zinc grades were prioritized (according to the mine sequencing plan), which resulted in higher zinc production.

Zinc head grade averaged 1.70% in the quarter, up 20bps and 7bps compared to 4Q22 and 3Q23, respectively.

Copper production of 8kt decreased by 13% and 3% compared to 4Q22 and 3Q23, respectively, mainly explained by lower copper grades.

Copper average grade was 0.58%, down 7bps and 5bps from 4Q22 and 3Q23, respectively.

Lead production was 3.8kt, up 19% year-over-year and 6% quarter-over-quarter, driven by higher treated ore and higher average grade in the period.

In 2023, zinc production totaled 78kt, down 7% compared to 2022, mainly due to the performance of the 1H23 impacted by the cyclone Yaku. Copper and lead production were down 13% and 17%, to 29kt and 13kt, respectively, as daily production for all metals was significantly reduced in 1Q23.

## Cost

Cost of sales was US\$98 million in 4Q23 compared to US\$99 million in the same period last year, mainly due to lower depreciation and amortization, which was partially offset by higher operational costs, such as third-party services. Compared to 3Q23, cost of sales increased by 11%, mainly driven by higher sales and produced volumes, which contributed to higher variable costs in the period, in addition to higher depreciation and amortization.

Run-of-mine mining cost was US\$41.5/t in the quarter, down 2% year-over-year mainly explained by higher treated ore volumes. Compared to 3Q23, cost ROM was relatively flat.

Cash cost net of by-products in 4Q23 increased to US\$0.06/lb compared with US\$(0.38)/lb in 4Q22 and US\$(0.18)/lb in 3Q23. The performance year-over-year was mainly explained by lower by-products contribution. Compared to 3Q23, cash cost was higher due to higher zinc volumes and lower by-products contribution.

## CAPEX

In 4Q23, sustaining capital expenditures amounted to US\$11 million, mainly related to mining development, tailings deposit, maintenance, and other mining infrastructure expenses, totaling US\$38 million in 2023.

## El Porvenir

El Porvenir (100% basis)		4Q23	3Q23	2Q23	1Q23	2023	4Q22	3Q22	2Q22	1Q22	2022
Ore Mined	kt	<b>562</b>	568	546	544	2,220	551	529	520	513	2,114
Treated Ore	kt	<b>562</b>	568	546	544	2,220	550	527	521	514	2,112

## Grade

Zinc	%	<b>2.83</b>	2.89	2.89	2.82	2.86	2.61	2.77	2.86	2.96	2.80
Copper	%	<b>0.16</b>	0.16	0.17	0.15	0.16	0.13	0.16	0.17	0.18	0.16
Lead	%	<b>1.39</b>	1.36	1.35	1.38	1.37	1.38	1.34	1.34	1.31	1.34
Silver	oz/t	<b>2.20</b>	2.22	2.42	2.55	2.34	2.64	2.45	2.35	2.41	2.46
Gold	oz/t	<b>0.010</b>	0.010	0.011	0.011	0.011	0.012	0.011	0.011	0.013	0.012

## Production | metal contained

Zinc	kt	<b>13.9</b>	14.4	13.8	13.6	55.8	12.6	12.7	13.0	13.2	51.6
Copper	kt	<b>0.1</b>	0.1	0.1	0.1	0.4	0.0	0.1	0.1	0.1	0.3
Lead	kt	<b>6.5</b>	6.3	6.0	6.2	24.9	6.3	5.8	5.7	5.4	23.2
Silver	MMoz	<b>1.0</b>	1.0	1.1	1.2	4.3	1.2	1.0	1.0	1.0	4.2
Gold	koz	<b>2.1</b>	2.0	2.2	2.3	8.7	2.5	2.4	2.1	2.2	9.2
<b>Zinc sales</b>	kt	<b>14.2</b>	14.5	14.5	14.4	57.7	12.1	12.4	14.0	13.5	52.0

## Costs

El Porvenir (100% basis)		4Q23	3Q23	2Q23	1Q23	2023	4Q22	3Q22	2Q22	1Q22	2022
Cost of sales	US\$ mm	<b>57.4</b>	47.8	48.1	51.8	205.1	39.2	40.1	45.6	42.9	167.9
Cost ROM <sup>(2)</sup>	US\$/t	<b>70.6</b>	57.5	63.1	60.1	62.8	58.6	58.5	60.1	62.1	59.8
Cash cost <sup>(1)</sup>	US\$/lb	<b>0.37</b>	0.20	0.35	0.22	0.29	(0.00)	0.63	0.31	0.37	0.33
Sustaining cash cost <sup>(1)</sup>	US\$/lb	<b>1.30</b>	0.73	0.65	0.64	0.83	0.63	0.98	0.48	0.54	0.65
<b>CAPEX</b>		US\$ mm									
Sustaining		<b>28.8</b>	16.7	9.7	13.4	68.7	16.6	9.4	5.1	4.7	35.7
Other		<b>0.0</b>	-	(0.0)	(0.0)	(0.0)	0.3	0.1	0.2	0.4	1.0

(1) Our cash cost and sustaining cash cost are net of by-products credits, measured with respect to zinc sold per mine. For a cash cost reconciliation to COGS, please refer to Appendix – All in Sustaining Cash Cost | Mining.

(2) Our cost per ROM is measured with respect to treated ore volume. Refer to "Use of Non-IFRS Financial Measures" for further information.

In 4Q23, zinc production of 14kt increased by 11% compared to 4Q22 due to higher treated ore and higher zinc grades. Compared to 3Q23, zinc production decreased by 4%, mainly driven by lower treated ore.

Zinc grade increased to 2.83% in the quarter from 2.61% in 4Q22. Compared to 3Q23, zinc average grade decreased by 7bps.

Lead production in 4Q23 increased by 3% from 4Q22 and 3Q23, while silver production decreased by 15% compared to 4Q22, as a result of lower grades in the period, and was relatively flat compared to 3Q23.

In 2023, zinc production totaled 56kt, up 8% compared to 2022. Lead and silver production were up 8% to 25kt and 2% to 4MMoz, respectively.

### Cost

Cost of sales was US\$57 million in 4Q23 compared to US\$39 million in 4Q22 and US\$48 million in 3Q23. In both periods, the increase was explained by higher variable costs and higher depreciation and amortization.

Run-of-mine mining cost was US\$71/t in the quarter, up 20% from 4Q22 and 23% from 3Q23, mainly driven by higher operational costs (a one-off expense related to environmental and mine operation consultancy), mine development, infrastructure expenses and depreciation.

Cash cost net of by-products in 4Q23 increased to US\$0.37/lb compared to 4Q22, mainly driven by higher operating costs and lower by-products contribution, which were partially offset by higher zinc volumes. Compared to 3Q23, cash cost increased US\$0.17/lb due to higher fixed and variable costs, in addition to lower by-products prices, which were partially offset by higher lead volumes.

### CAPEX

In 4Q23, sustaining capital expenditures amounted to US\$29 million, mainly related to mine development and the tailings dam project, totaling US\$69 million in 2023.

### Atacocha

Atacocha (100% basis)		4Q23	3Q23	2Q23	1Q23	2023	4Q22	3Q22	2Q22	1Q22	2022
Ore Mined	kt	<b>399</b>	290	363	342	1,394	394	339	325	296	1,354
Treated Ore	kt	<b>393</b>	290	373	342	1,397	394	339	325	296	1,354

Atacocha (100% basis)		4Q23	3Q23	2Q23	1Q23	2023	4Q22	3Q22	2Q22	1Q22	2022
<b>Grade</b>											
Zinc	%	<b>0.87</b>	0.58	0.67	0.94	0.77	0.87	0.90	0.82	1.00	0.89
Lead	%	<b>0.86</b>	0.84	0.80	1.23	0.93	1.20	0.96	0.83	0.82	0.97
Silver	oz/t	<b>1.20</b>	1.33	1.11	1.24	1.21	1.26	0.99	0.99	0.94	1.05
Gold	oz/t	<b>0.007</b>	0.009	0.010	0.012	0.010	0.013	0.016	0.015	0.015	0.015
<b>Production   metal contained</b>											
Zinc	kt	<b>2.6</b>	1.2	1.9	2.5	8.2	2.6	2.4	2.1	2.4	9.6
Lead	kt	<b>2.9</b>	2.1	2.6	3.6	11.1	4.1	2.8	2.3	2.1	11.2
Silver	MMoz	<b>0.4</b>	0.3	0.3	0.4	1.4	0.4	0.3	0.3	0.2	1.2
Gold	koz	<b>1.4</b>	1.4	2.2	2.6	7.6	3.1	3.8	3.6	3.1	13.6
<b>Zinc sales</b>	kt	<b>2.7</b>	1.1	2.4	2.3	8.5	2.9	2.3	2.3	2.1	9.6
<b>Costs</b>											
Cost of sales	US\$ mm	<b>20.4</b>	13.1	19.8	16.5	69.9	23.3	15.7	21.1	15.3	75.4
Cost ROM <sup>(2)</sup>	US\$/t	<b>32.4</b>	30.7	31.7	36.6	32.9	35.7	37.7	35.5	38.0	36.7
Cash cost <sup>(1)</sup>	US\$/lb	<b>0.17</b>	(1.22)	(1.05)	(0.12)	(0.44)	(1.54)	0.54	(1.28)	(0.30)	(0.71)
Sustaining cash cost <sup>(1)</sup>	US\$/lb	<b>1.25</b>	(0.19)	(0.58)	0.81	0.43	(1.36)	0.64	(1.14)	0.14	(0.50)
<b>CAPEX</b> US\$ mm											
Sustaining		<b>6.4</b>	2.6	2.5	4.7	16.1	1.1	0.5	0.8	2.0	4.4
Other		<b>0.1</b>	0.0	0.0	(0.0)	0.1	0.1	-	(0.0)	0.0	0.1

(1) Our cash cost and sustaining cash cost are net of by-products credits, measured with respect to zinc sold per mine. For a cash cost reconciliation to COGS, please refer to Appendix – All in Sustaining Cash Cost | Mining.

(2) Our cost per ROM is measured with respect to treated ore volume. Refer to "Use of Non-IFRS Financial Measures" for further information.

As previously disclosed, Atacocha mine production was temporarily suspended at the end of June 2023 due to illegal protest activities by local communities and operations were resumed at the end of July. As a result, production in 3Q23 was significantly reduced.

During the quarter, treated ore volume was relatively flat compared to 4Q22 and increased by 36% compared to 3Q23.

Zinc production of 2.6kt in 4Q23 increased 1% year-over-year and was up 1.5kt quarter-over-quarter. Zinc average grade was 0.87%, relatively flat year-over-year and up 29bps quarter-over-quarter.

Lead production decreased by 29% to 2.9kt compared to 4Q22, mainly due to lower grades, while silver production decreased to 375koz following the same trend. Compared to 3Q23, lead and silver production increased by 38% and 17%, respectively.

In 2023, treated ore volume totaled 1,397kt, up 3% from 2022. On the other hand, zinc production was down from 9.6kt to 8.2kt, while lead was relatively flat at 11.1kt and silver increased by 21% to 1.4MMoz.

#### Cost

Cost of sales was US\$20 million in 4Q23 compared to US\$23 million in the same period last year due to lower operational costs and lower lead production and sales volumes. Compared to 3Q23, cost of sales increased by 55%, mainly driven by higher volumes in all metals.

Run-of-mine mining cost was US\$32/t in the quarter, down 9% and up 6% from 4Q22 and 3Q23, respectively, mainly explained by the above-mentioned reasons.

Cash cost net of by-products was US\$0.17/lb in 4Q23 compared with US\$(1.54)/lb in 4Q22 due to lower by-products contribution, particularly lead, driven by lower volumes. Compared to 3Q23, cash cost net of by-products was up by US\$1.39/lb, explained by higher operational costs and lower by-products credits due to lower lead prices.

## CAPEX

In 4Q23, sustaining capital expenditures amounted to US\$6.4 million, mainly related to the tailings dam deposit area and system, totaling US\$16 million in 2023.

## Vazante

Vazante (100% basis)		4Q23	3Q23	2Q23	1Q23	2023	4Q22	3Q22	2Q22	1Q22	2022
Ore Mined	kt	<b>382</b>	384	366	385	1,516	372	376	381	264	1,393
Treated Ore	kt	<b>407</b>	427	405	394	1,633	395	416	408	305	1,525

## Grade

Zinc	%	<b>9.86</b>	10.22	10.25	10.44	10.19	9.87	10.06	10.29	9.57	9.97
Lead	%	<b>0.29</b>	0.35	0.35	0.34	0.33	0.36	0.31	0.32	0.35	0.33
Silver	oz/t	<b>0.66</b>	0.70	0.66	0.69	0.67	0.63	0.62	0.65	0.61	0.63

## Production | metal contained

Zinc	kt	<b>34.9</b>	38.4	36.6	35.8	145.7	33.7	36.4	36.5	24.9	131.5
Lead	kt	<b>0.3</b>	0.4	0.4	0.4	1.4	0.4	0.3	0.3	0.2	1.2
Silver	MMoz	<b>0.1</b>	0.2	0.2	0.1	0.6	0.1	0.1	0.1	0.1	0.5
<b>Zinc sales</b>	kt	<b>34.9</b>	38.4	36.6	35.8	145.7	33.7	36.4	36.5	24.9	131.5

## Costs

Cost of sales	US\$ mm	<b>29.4</b>	33.5	32.0	29.8	124.7	30.1	30.0	29.4	26.5	116.0
Cost ROM <sup>(2)</sup>	US\$/t	<b>58.1</b>	57.7	57.0	55.4	57.1	53.6	47.1	45.5	43.7	47.6
Cash cost <sup>(1)</sup>	US\$/lb	<b>0.57</b>	0.63	0.61	0.63	0.61	0.58	0.59	0.57	0.46	0.56
Sustaining cash cost <sup>(1)</sup>	US\$/lb	<b>0.65</b>	0.72	0.72	0.71	0.70	0.76	0.72	0.68	0.62	0.70

## CAPEX

CAPEX		US\$ mm									
Sustaining		<b>5.9</b>	7.2	8.8	6.2	28.0	13.4	9.9	8.6	7.7	39.5
Other		<b>0.8</b>	1.7	0.8	0.2	3.6	7.2	6.6	1.0	1.4	16.1

(1) Our cash cost and sustaining cash cost are net of by-products credits, measured with respect to zinc sold per mine. For a cash cost reconciliation to COGS, please refer to Appendix – All in Sustaining Cash Cost | Mining.

(2) Our cost per ROM is measured with respect to treated ore volume. Refer to "Use of Non-IFRS Financial Measures" for further information.

Zinc production of 35kt in 4Q23 increased by 4% compared to 4Q22, mainly explained by higher treated ore. Compared to 3Q23, zinc production decreased by 9%, mainly due to lower treated ore and lower grades in the period.

Zinc head grade averaged 9.86% (relatively flat from 4Q22 and down 36bps from 3Q23) in line with the mine sequencing for the period.

In 2023, treated ore volume totaled 1,633kt, up 7% from the same period of last year. As a result, zinc production increased by 11% to 146kt from 2022.

## Cost

Cost of sales was US\$29 million in 4Q23 compared to US\$30 million in 4Q22, primarily explained by lower operating costs. Compared to 3Q23, cost of sales decreased by 12%, mainly related to lower variable costs.

Run-of-mine mining cost was US\$58/t in 4Q23 compared to US\$54/t in 4Q22, mainly due to higher maintenance and personnel costs and compared to 3Q23, was relatively flat.

Cash cost net of by-products decreased to US\$0.57/lb compared with US\$0.58/lb in 4Q22, mainly explained by lower operating costs, which were partially offset by higher TCs and FX effects. Compared to 3Q23, cash cost decreased by 9% due to lower operating costs and lower TCs.

## CAPEX

In 4Q23, sustaining capital expenditures amounted to US\$5.9 million, mainly related to mine development and other mining infrastructure upgrades, totaling US\$28 million in 2023.

## Morro Agudo

Morro Agudo (100% basis)		4Q23	3Q23	2Q23	1Q23	2023	4Q22	3Q22	2Q22	1Q22	2022
Ore Mined	kt	<b>288</b>	291	283	265	1,127	233	226	240	208	908
Treated Ore	kt	<b>348</b>	330	320	296	1,293	254	259	259	245	1,017

## Grade

Zinc	%	<b>2.12</b>	2.03	1.79	2.02	1.99	1.99	1.91	2.09	2.26	2.06
Lead	%	<b>0.75</b>	0.98	0.81	0.91	0.86	0.94	0.81	0.76	0.88	0.85

## Production | metal contained

Zinc	kt	<b>6.8</b>	6.0	5.1	5.3	23.2	4.6	4.6	4.7	4.7	18.7
Lead	kt	<b>1.9</b>	2.6	1.9	1.9	8.3	1.8	1.7	1.5	1.3	6.2
<b>Zinc sales</b>	kt	<b>6.8</b>	6.0	5.1	5.3	23.2	4.6	4.6	4.7	4.7	18.7

## Costs

Cost of sales	US\$ mm	<b>15.3</b>	16.6	17.6	15.5	65.0	18.0	15.1	17.7	13.0	63.8
Cost ROM <sup>(2)</sup>	US\$/t	<b>44.9</b>	22.9	31.7	36.9	37.9	54.4	31.6	41.2	43.4	42.6
Cash cost <sup>(1)</sup>	US\$/lb	<b>0.77</b>	0.61	0.87	1.05	0.82	1.26	1.00	0.74	0.93	0.98
Sustaining cash cost <sup>(1)</sup>	US\$/lb	<b>0.82</b>	0.67	0.97	1.07	0.87	1.46	1.09	0.97	1.06	1.14

## CAPEX

	US\$ mm	4Q23	3Q23	2Q23	1Q23	2023	4Q22	3Q22	2Q22	1Q22	2022
Sustaining		<b>0.8</b>	0.8	1.0	0.2	2.8	1.9	0.9	2.3	1.1	6.3

Morro Agudo (100% basis)	4Q23	3Q23	2Q23	1Q23	2023	4Q22	3Q22	2Q22	1Q22	2022
Other	<b>0.0</b>	0.0	0.1	0.0	0.1	0.2	0.1	0.1	0.2	0.5

(1) Our cash cost and sustaining cash cost are net of by-products credits, measured with respect to zinc sold per mine. For a cash cost reconciliation to COGS, please refer to Appendix – All in Sustaining Cash Cost | Mining.

(2) Our cost per ROM is measured with respect to treated ore volume. Refer to “Use of Non-IFRS Financial Measures” for further information.

Zinc production of 6.8kt in 4Q23 increased by 47% year-over-year and 13% quarter-over-quarter, mainly explained by higher treated ore and higher grades. Zinc head grade averaged 2.12%, up 13bps and 8bps compared to 4Q22 and 3Q23, respectively.

In 2023, zinc production totaled 23kt, up 24% compared to 2022. As previously disclosed, several initiatives related to the prioritization of the mine deepening development to increase underground production and mining flexibility were implemented last year, which are supporting the positive zinc production results that we achieved throughout 2023. Nonetheless, as previously disclosed, we are constantly reviewing our assets always focusing on initiatives to optimize our portfolio and we are currently assessing risk-return alternatives for Morro Agudo.

## Cost

Cost of sales was US\$15 million in 4Q23 and was down 15% compared to the same period last year, following lower operating costs (raw materials and third-party services) and lower depreciation and amortization. Compared to 3Q23, cost of sales decreased by 8%, mainly explained by lower variable costs.

Run-of-mine mining cost was US\$45/t in the quarter, down 18% from 4Q22 due to higher limestone sales and by-products contribution and up 96% from 3Q23, mainly explained by lower limestone sales.

In 4Q23, cash cost net of by-products was US\$0.77/lb compared with US\$1.26/lb in 4Q22 due to lower operating costs and higher by-products contribution. Compared to 3Q23, cash cost increased by US\$0.16/lb due to higher operational costs due to lower limestone credits.

## CAPEX

In 4Q23, sustaining capital expenditures amounted to US\$0.8 million, mainly related to mine development and structural upgrade, totaling US\$2.8 million in 2023.

## Aripuanã

Aripuanã (100% basis)		4Q23	3Q23	2Q23	1Q23	2023	4Q22	3Q22	2Q22	1Q22	2022
Ore Mined	kt	<b>276</b>	237	61	157	722	42	-	-	-	42
Treated Ore	kt	<b>347</b>	315	372	277	1,311	100	-	-	-	100
<b>Grade</b>											
Zinc	%	<b>3.66</b>	3.66	2.92	2.98	3.31	2.44	-	-	-	2.44
Copper	%	<b>0.75</b>	0.65	0.74	0.57	0.68	0.49	-	-	-	0.49
Lead	%	<b>1.12</b>	1.14	0.94	1.04	1.05	-	-	-	-	-
Silver	oz/t	<b>1.09</b>	0.97	0.89	0.86	0.96	0.61	-	-	-	0.61
Gold	oz/t	<b>0.016</b>	0.017	0.013	0.013	0.015	0.011	-	-	-	0.011

## Production | metal contained

Zinc	kt	<b>7.4</b>	5.8	6.5	2.5	22.1	0.7	-	-	-	0.7
Copper	kt	<b>1.4</b>	1.0	1.2	0.9	4.4	0.2	-	-	-	0.2

Aripuanã (100% basis)		4Q23	3Q23	2Q23	1Q23	2023	4Q22	3Q22	2Q22	1Q22	2022
Lead	kt	<b>2.3</b>	1.5	1.5	1.1	6.3	-	-	-	-	-
Silver	MMoz	<b>0.2</b>	0.1	0.1	0.1	0.5	0.0	-	-	-	0.0
Gold	koz	<b>3.0</b>	2.4	1.7	0.9	8.0	0.3	-	-	-	0.3
<b>CAPEX</b>											
	US\$ mm										
Sustaining		<b>28.4</b>	19.9	15.9	15.2	79.4	-	-	-	-	-
Other <sup>(1)</sup>		<b>0.1</b>	3.1	(19.3)	(2.8)	(19.0)	-	-	-	-	-

(1) The negative amounts are mainly related to reclassifications between Aripuanã and Corporate, and capitalization of interest net of advanced payments for imported materials and tax credits.

In 4Q23, treated ore volume amounted to 347kt compared to 100kt (+246%) in 4Q22 and 315kt (+10%) in 3Q23.

Zinc production was 7.4kt (vs. 0.7kt in 4Q22 and 5.8kt in 3Q23), mainly explained by higher treated ore and better recoveries (+16% vs 3Q23 and +95% vs 4Q22), while zinc average grade was 3.66%.

Copper production was 1.4kt (copper average grade was 0.75%) and followed the same trend as zinc production.

During the 4Q23, the plant underwent some process and equipment adjustments, and several improvements were noted, indicating a positive trend in the stabilization of the plant, mainly due to the enhancement in the pump's capacity and metallurgical process (e.g. talc flotation to clean the concentrate for the following stages). As a result, the plant performance averaged 61% of utilization rate, while nameplate capacity is expected to be reached by mid-2024. As we previously disclosed, the permanent replacement of the pumps to support capacity increase, in line with the revised design of the flotation pumping system is expected to be concluded in 1Q24. In 4Q23, zinc recovery reached 66% at the end of the period versus 59% in 3Q23, while copper and lead recovery averaged 53% and 59%, respectively, versus 51% and 43% in 3Q23.

We continue with mine development activities at both the Arex and Link mines. At the end of 4Q23, approximately 106kt of ore was available in stockpiles (versus 132kt in 3Q23), which is aligned with our strategy to reduce intermediate ore stocks and increase mine production to directly feed the plant.

ROM production in 4Q23 reached 276kt compared to 237kt in 3Q23 (up 16%), mainly explained by the start of production of the VRM method (Vertical Retreat Mining), which will contribute positively to increase mine productivity and efficiency.

Horizontal mine development reached a cumulated amount of 2,082 meters developed for both the Arex and Link mines in 4Q23 compared to 1,299 meters in 3Q23, following the current plan to transition from outsourced development to an insourced team. We expect the insource team to achieve 3,000 meters in 2Q24.

#### CAPEX

In 4Q23, sustaining capital expenditures amounted to US\$28 million, mainly related to mining development, mining infrastructure (tailing deposits and wetlands), task force and other sustaining activities, totaling US\$79 million in 2023.

#### Financial performance

US\$ million	4Q23	3Q23	4Q22	4Q23 vs. 4Q22	2023	2022	2023 vs. 2022
<b>Net Revenues</b>	<b>281.8</b>	<b>272.6</b>	<b>315.2</b>	<b>(10.6%)</b>	<b>1,090.3</b>	<b>1,248.0</b>	<b>(12.6%)</b>
Cost of Sales <sup>(1)</sup>	(283.3)	(245.9)	(303.0)	(6.5%)	(1,028.3)	(905.2)	13.6%

US\$ million	4Q23	3Q23	4Q22	4Q23 vs. 4Q22	2023	2022	2023 vs. 2022
<b>Gross Profit</b>	<b>(1.5)</b>	<b>26.6</b>	<b>12.2</b>	<b>-</b>	<b>62.0</b>	<b>342.8</b>	<b>(81.9%)</b>
<b>Adjusted EBITDA</b>	<b>47.2</b>	<b>40.4</b>	<b>78.0</b>	<b>(39.5%)</b>	<b>149.1</b>	<b>439.8</b>	<b>(66.1%)</b>
<i>Adjusted EBITDA Mrg.</i>	<i>16.7%</i>	<i>14.8%</i>	<i>24.7%</i>	<i>(8.0pp)</i>	<i>13.7%</i>	<i>35.2%</i>	<i>(21.6pp)</i>

Note: Financial performance pre intersegment eliminations. <sup>(1)</sup> Includes the cost of sales of Aripuanã of US\$51 million in 4Q23, US\$43 million in 3Q23 and US\$75 million in 4Q22, totaling US\$195 million in 2023 and US\$75 million in 2022.

**Net revenues** for the mining segment totaled US\$282 million in 4Q23, down 11% versus 4Q22. This performance was mainly driven by the decrease in zinc prices and higher TCs, which were partially offset by higher zinc and lead production. Compared to 3Q23, net revenues increased by 3%, mainly due to the increase in production across all base metals and higher zinc prices.

In 2023, net revenues amounted to US\$1,090 million, 13% lower when compared to the same period a year ago due to lower LME metal prices, partially offset by higher zinc and lead volumes.

**Cost of sales** in 4Q23 was US\$283 million, including US\$51 million from Aripuanã with a higher unit cost (ramp-up phase). Excluding the effect of Aripuanã, cost of sales slightly increased to US\$233 million from US\$228 million in 4Q22 and US\$203 million in 3Q23 due to higher sales volume.

In 2022, cost of sales was US\$1,028 million compared to US\$905 million, mainly due to the effect of the Aripuanã ramp-up year-over-year. Excluding the effect of Aripuanã's ramp-up, cost of sales remained relatively stable to US\$833 million, when compared to US\$830 million in 2022.

#### Reconciliation of realized prices

Revenues are recorded at provisional prices and, typically, an adjustment is then made after delivery, based on the pricing terms under the relevant contract. In addition, the difference between the provisional and the final price received is recognized by adjusting the price in the period in which the sale is concluded.

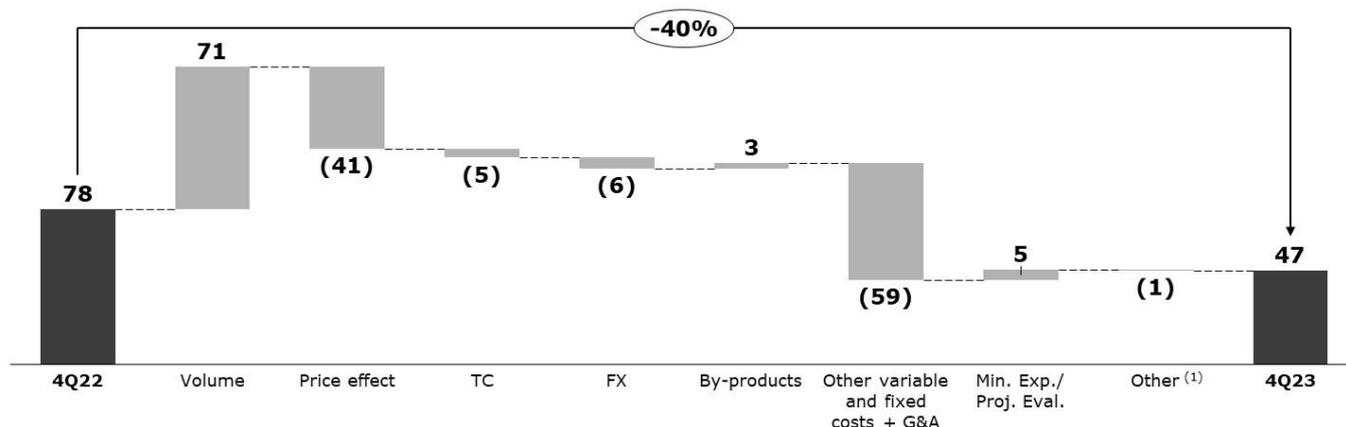
US\$ million	4Q23				3Q23			
	Zinc	Copper	Lead	Total	Zinc	Copper	Lead	Total
Current period sales	127.3	81.5	85.2	293.9	112.5	78.6	79.7	270.9
Price adjustments (MTM)	0.5	2.2	2.1	4.8	0.0	0.4	0.5	1.0
	<b>127.8</b>	<b>83.7</b>	<b>87.2</b>	<b>298.7</b>	<b>112.6</b>	<b>79.1</b>	<b>80.2</b>	<b>271.9</b>
Final adjustments				(3.3)				(0.9)
Silver stream				(18.4)				(6.4)
Other by-products <sup>1</sup>				3.6				8.0
Energy				1.1				(0.1)
Others <sup>2</sup>				0.0				0.0
<b>Total Revenue</b>				<b>281.8</b>				<b>272.6</b>

<sup>1</sup> Limestone and stone

<sup>2</sup> LC 160

**Adjusted EBITDA** for the mining segment in 4Q23 was US\$47 million compared to US\$78 million in 4Q22. This decrease was primarily explained by (i) the negative net impact of US\$59 million in costs, mainly related to Aripuanã's cost of sales in the quarter as per the ramp-up phase; (ii) the negative net price effect of US\$41 million, mainly due to lower zinc prices of US\$35 million and the negative effect of variation in mark-to-market ("MTM") of US\$12 million; and (iii) higher TCs of US\$6 million, partially offset by (iv) the positive impact of US\$71 million due to the increase in volumes, mainly from Aripuanã, as well as higher sales volumes in Cerro Lindo, Vazante and Morro Agudo.

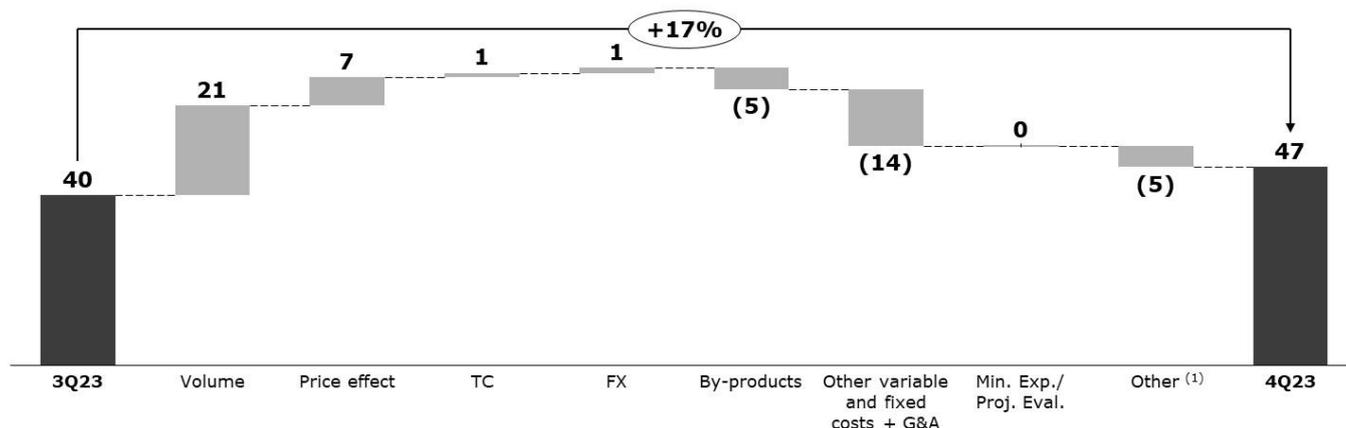
US\$ million



(1) Includes: Other income and expenses

Compared to 3Q23, Adjusted EBITDA increased by 17%. This performance was mainly driven by (i) the positive impact of US\$21 million, mainly due to higher sales volumes in Aripuanã and Cerro Lindo; (ii) the positive net price effect of US\$7 million due to higher zinc prices, which were partially offset by (iii) the negative impact of US\$14 million in costs, mainly due to higher operational costs in El Porvenir related to higher mine development and infrastructure expenses; and (iv) lower by-products contribution of US\$5 million due to lower volume of limestone sales.

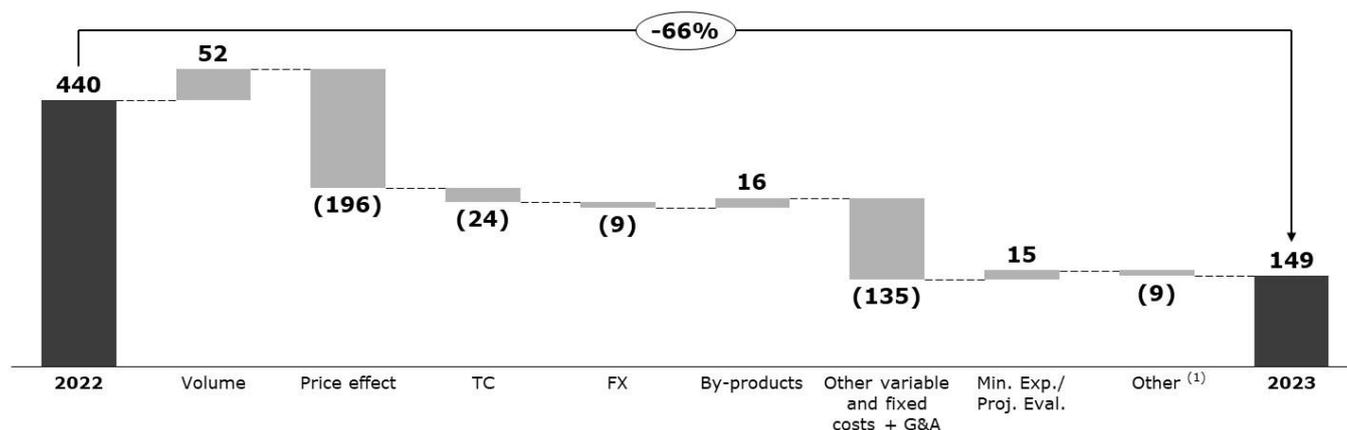
US\$ million



(1) Includes: Other income and expenses

In 2023, Adjusted EBITDA was US\$149 million compared with US\$440 million in 2022, this decrease was mainly driven by (i) negative net price effect of US\$196 million, due to lower LME metal prices of US\$230 million, partially offset by the positive effect of variation in MTM of US\$19 million; (ii) higher TCs of US\$24 million; and (iii) the negative impact of US\$135 million in costs, mainly due to operational costs in Aripuanã, related to concentrate and stockpile costs due to the ramp-up phase, which were partially offset by (iv) the positive impact of US\$52 million due to the increase in sales volumes, particularly from Aripuanã, as well as better operational performance in Vazante and higher treated ore volumes in Morro Agudo; and (v) higher by-products contribution of US\$16 million.

US\$ million



(1) Includes: Other income and expenses

## Cash cost and AISC <sup>7,8</sup>

Consolidated cash cost		4Q23	3Q23	4Q22	4Q23 vs. 4Q22	2023	2022	2023 vs. 2022
Run-of-mine mining cost	US\$/t	48.0	43.6	46.6	2.9%	45.2	44.4	1.9%
Cash cost net of by-products	US\$/t	987	769	448	120.4%	881	626	40.7%
AISC net of by-products	US\$/t	2,157	1,712	1,743	23.8%	1,791	1,598	12.1%
Cash cost net of by-products	US\$/lb	0.45	0.35	0.20	120.4%	0.40	0.28	40.7%
AISC net of by-products	US\$/lb	0.98	0.78	0.79	23.8%	0.81	0.72	12.1%

Note: Cash cost and AISC per ton sold does not include the impact of the cost of idleness capacity of US\$5.2 million in Cerro Lindo and US\$2.6 million in Atacocha in 2023, and US\$4.4 million in Vazante and US\$2.1 million in Atacocha in 2022.

**Cash cost net of by-products** for the mining segment in 4Q23 increased to US\$0.45/lb compared to US\$0.20/lb in 4Q22. This increase was primarily due to lower by-products credits from our Peruvian mines with a negative impact of US\$0.25/lb, higher operational costs explained by mine development in Cerro Lindo and El Porvenir and higher TCs.

Compared to 3Q23, cash cost was up US\$0.10/lb due to lower by-products credits from Cerro Lindo, and higher third-party services and variable costs.

Run-of-mine mining cost was US\$48/t in the quarter, up 3% from 4Q22 explained by higher operational costs and higher variable costs. Compared to 3Q23, run-of-mine mining cost was up 10%, mainly due to higher variable costs.

In 2023, cash cost net of by-products increased to US\$0.40/lb (or US\$881/t) compared to US\$0.28/lb (or US\$626/t) in 2022, mainly driven by higher operational costs related to mine development, higher TCs and lower by-products credits.

AISC net of by-products in 4Q23 was US\$0.98/lb, up 24% and 26% compared to US\$0.79/lb in 4Q22 and US\$0.78/lb in 3Q23, respectively.

AISC in 2023 was US\$0.81/lb (or US\$1,791/t), up 12% compared to US\$0.72/lb in 2022 due to (i) higher cash costs; and (ii) the increase in sustaining investments; which were partially offset by (iii) lower workers participation and (iv) lower royalties.

For a reconciliation of cash cost and AISC net of by-products, please refer to the appendix section "All in Sustaining Cash Cost | Mining".

<sup>7</sup> Our cash cost and AISC are net of by-products credits, measured with respect to zinc sold.

<sup>8</sup> AISC does not include Aripuanã.

## Smelting segment

Consolidated		4Q23	3Q23	4Q22	4Q23 vs. 4Q22	2023	2022	2023 vs. 2022
<b>Production</b>								
Zinc metal	kt	136.4	140.1	148.8	(8.3%)	553.6	566.6	(2.3%)
<i>Global Recovery</i>	%	93.7	91.5	93.8	(6bps)	92.7	93.6	(83bps)
Zinc oxide	kt	7.8	9.6	8.1	(3.9%)	34.0	40.3	(15.8%)
<b>Total</b>	<b>kt</b>	<b>144.2</b>	<b>149.7</b>	<b>156.9</b>	<b>(8.1%)</b>	<b>587.5</b>	<b>606.9</b>	<b>(3.2%)</b>
<b>Sales</b>								
Zinc metal	kt	135.4	144.5	158.9	(14.8%)	556.0	575.9	(3.5%)
Zinc oxide	kt	7.9	9.4	8.5	(6.9%)	33.9	40.3	(15.9%)
<b>Total</b>	<b>kt</b>	<b>143.3</b>	<b>153.9</b>	<b>167.4</b>	<b>(14.4%)</b>	<b>589.8</b>	<b>616.2</b>	<b>(4.3%)</b>

In 4Q23, total production was 144kt, down 8% year-over-year driven by lower volumes in the Cajamarquilla and Três Marias units, mainly explained by operational instabilities in the roasters and unplanned maintenance in the period. Compared to 3Q23, production was down 4%, also impacted by lower volumes from these two smelters units.

In 4Q23, zinc metal and oxide sales were 143kt, down by 14% from 4Q22 following lower production volumes, in addition to a slowdown in demand, particularly for zinc oxide in the period. Compared to 3Q23, metal sales were down 7% as explained above.

In 2023, total production amounted to 588kt and was down 3% compared to 2022. Total sales decreased by 4% to 590kt, including 34kt from zinc oxide.

## Peru

Cajamarquilla (100% basis)		4Q23	3Q23	2Q23	1Q23	2023	4Q22	3Q22	2Q22	1Q22	2022
Zinc metal production	kt	<b>78.2</b>	80.8	82.7	81.3	323.1	86.4	85.6	84.1	76.7	332.8
Zinc metal sales	kt	<b>79.4</b>	87.1	81.2	78.8	326.4	93.0	92.1	81.0	74.3	340.4
Zinc content in products	kt	<b>79.3</b>	87.0	81.1	78.6	325.9	92.7	91.5	78.5	71.4	334.1
Cost of sales <sup>(2)</sup>	US\$ mm	<b>221</b>	261	218	261	960	317	337	287	278	1,219
(-) Raw material		<b>(128)</b>	(147)	(156)	(199)	(630)	(214)	(238)	(236)	(235)	(923)
(+) By-product		<b>(8.4)</b>	(9.1)	(7.6)	(6.7)	(31.9)	(7.9)	(6.5)	(8.1)	(5.1)	(27.6)
(+/-) Consolidation effects		<b>(34.3)</b>	(48.5)	(8.5)	(6.4)	(97.7)	(50.9)	(40.5)	17.6	5.5	(68.4)
(+) Others		<b>(5.1)</b>	(5.5)	7.7	2.2	(0.7)	4.8	1.5	(6.4)	(0.6)	(0.6)
(=) Conversion cost	US\$ mm	<b>45.1</b>	50.8	53.4	50.4	199.6	49.2	52.9	54.2	43.2	199.6
Conversion cost	US\$/lb	<b>0.26</b>	0.26	0.30	0.29	0.28	0.24	0.26	0.31	0.27	0.27
Cash cost <sup>(1)</sup>	US\$/lb	<b>0.94</b>	0.97	1.06	1.17	1.03	1.18	1.34	1.32	1.28	1.28
Sustaining cash cost <sup>(1)</sup>	US\$/lb	<b>1.05</b>	1.01	1.09	1.20	1.08	1.25	1.40	1.41	1.32	1.34
<b>CAPEX</b>											
	US\$ mm										
Sustaining		<b>16.4</b>	6.2	3.2	4.0	29.8	10.2	10.0	13.1	5.2	38.5

Cajamarquilla (100% basis)	4Q23	3Q23	2Q23	1Q23	2023	4Q22	3Q22	2Q22	1Q22	2022
Other	2.4	1.1	1.3	0.5	5.3	2.7	2.2	1.4	0.6	6.8

(1) Our cash cost and sustaining cash cost are net of by-products credits, measured with respect to zinc sold per smelter. For a cash cost reconciliation to COGS, please refer to Appendix - Conversion and All in Sustaining Cash Cost | Smelting.

(2) Cost of sales does not include resale operations from third parties.

In 4Q23, Cajamarquilla smelter production was 78kt, down 10% and 3% compared to 4Q22 and 3Q23, respectively, mainly explained by operational instabilities in the roaster (caused by issues in the boiler system), which required unplanned maintenance, in addition to the reduction in calcine availability. During the period, maintenance totaled 27 days, restricting production, and consequently impacting the unit's performance.

Recovery rates improved and averaged 95.2% during the quarter compared to 92.6% in 4Q22 and 94.9% in 3Q23.

Metal sales totaled 79kt in 4Q23 and were down 15% year-over-year and 9% quarter-over-quarter, following lower production volumes, in addition to a slowdown in demand in the period.

In 2023, smelter production totaled 323kt, down 3% compared to 2022.

### Costs

Cost of sales was US\$221 million in 4Q23 compared to US\$317 million in the same period last year, mainly explained by lower raw material costs due to lower zinc prices. Compared to 3Q23, cost of sales decreased by 15%, primarily due to lower operational costs.

In 4Q23, conversion cost was US\$0.26/lb, up US\$0.02/lb compared to 4Q22. Compared to 3Q23, conversion cost was relatively flat.

Cash cost net of by-products in 4Q23 was US\$0.94/lb compared to US\$1.18/lb in 4Q22, mainly due to lower zinc prices, higher TCs and lower operating costs. Compared to 3Q23, cash cost decreased by US\$0.03/lb, mainly explained by lower variable costs.

### CAPEX

In 4Q23, sustaining capital expenditures amounted to US\$16.4 million, mainly due to the acquisition, replacement and repairs of equipment, as well as disbursements related to the roaster maintenance, totaling US\$30 million in 2023.

### Brazil

In 4Q23, smelter production amounted to 66kt, down 6% compared to the same period last year. Compared to 3Q23, smelter production was down 4%, mainly explained by lower production in the Três Marias.

Total sales volume (zinc metal + zinc oxide) amounted to 64kt and decreased by 14% and 4% from 4Q22 and 3Q23, respectively, mainly driven by lower production volumes at Três Marias, in addition to lower demand in our domestic market for zinc oxide.

In 2023, smelter production was 264kt, 3% lower compared to 2022. Metal sales decreased by 4% to 230kt, while total sales volume (zinc metal + oxide) decreased by 4% to 263kt.

### Três Marias

Três Marias (100% basis)		4Q23	3Q23	2Q23	1Q23	2023	4Q22	3Q22	2Q22	1Q22	2022
Zinc metal production	kt	35.8	39.0	35.7	37.9	148.4	40.5	39.6	40.2	29.3	149.6
Zinc oxide production	kt	7.8	9.6	8.4	8.2	34.0	8.1	11.1	11.2	9.9	40.3

Três Marias (100% basis)		4Q23	3Q23	2Q23	1Q23	2023	4Q22	3Q22	2Q22	1Q22	2022
Zinc metal sales	kt	<b>33.4</b>	38.0	38.9	36.8	147.1	44.1	37.3	39.9	30.5	151.8
Zinc content in products	kt	<b>40.7</b>	45.4	45.6	43.1	174.8	50.5	45.2	46.5	37.9	180.0
Cost of sales <sup>(2)</sup>	US\$ mm	<b>119</b>	113	132	138	502	146	153	185	138	621
(-) Raw material		<b>(52)</b>	(43)	(61)	(85)	(240)	(90)	(110)	(133)	(99)	(431)
(+) By-product		<b>(17.3)</b>	(17.5)	(19.7)	(12.9)	(67.3)	(14.3)	(14.0)	(17.0)	(12.1)	(57.4)
(+/-) Consolidation effects		<b>(5.5)</b>	(5.6)	2.1	0.9	(8.0)	(2.1)	1.8	(0.6)	(2.6)	(3.5)
(+) Others		<b>(22.2)</b>	(21.3)	(22.3)	(18.8)	(84.6)	(14.4)	(12.0)	(14.8)	(11.2)	(52.4)
(=) Conversion cost	US\$ mm	<b>22.5</b>	26.2	30.8	22.6	102.1	24.5	19.3	19.9	13.1	76.9
Conversion cost	US\$/lb	<b>0.25</b>	0.26	0.31	0.24	0.26	0.22	0.19	0.19	0.16	0.19
Cash cost <sup>(1)</sup>	US\$/lb	<b>1.13</b>	0.97	1.18	1.36	1.16	1.17	1.37	1.67	1.47	1.41
Sustaining cash cost <sup>(1)</sup>	US\$/lb	<b>1.20</b>	1.01	1.25	1.40	1.21	1.28	1.49	1.78	1.54	1.52
<b>CAPEX</b>	US\$ mm										
Sustaining		<b>5.0</b>	3.5	5.2	2.4	16.1	2.8	2.8	5.5	2.6	13.7
Other		<b>1.4</b>	1.2	2.1	1.4	6.1	9.5	9.1	6.4	3.5	28.5

(1) Our cash cost and sustaining cash cost are net of by-products credits, measured with respect to zinc sold per smelter. For a cash cost reconciliation to COGS, please refer to Appendix – Conversion and All in Sustaining Cash Cost | Smelting.

(2) Cost of sales does not include resale operations from third parties.

In Três Marias total production (zinc metal + oxide) decreased by 10% compared to 4Q22 and 3Q23, respectively, mainly explained by operational instabilities in the roaster, which required unplanned maintenance, in addition to the reduction in calcine availability. During the period, maintenance totaled 19 days, restricting production, and consequently impacting the unit's performance.

Corrective actions have already been implemented throughout 4Q23 and will contribute to improve the performance of the roaster in 1Q24. In addition, actions to mitigate the impact of calcine availability will be implemented and are connected to Três Marias' 2024 maintenance and investment plan.

Metallic zinc production was down 12% from 4Q22 and 8% from 3Q23. Metallic zinc sales amounted to 33kt, down 24% year-over-year and 12% quarter-over-quarter, mainly due to lower volumes in the period. In 4Q23, zinc oxide sales amounted to 7.8kt and decreased by 4% year-over-year and 19%, respectively, mainly explained by a lower demand in our domestic market.

In 2023, Três Marias total production amounted to 182kt, down 4% compared to 2022. Zinc metal sales decreased by 3% to 147kt and zinc oxide sales decreased by 16% to 34kt.

### Costs

Cost of sales of US\$119 million in 4Q23 decreased by 18% from 4Q22, mainly explained by lower raw materials costs, following lower zinc prices, and lower variable costs. Compared to 3Q23, cost of sales increased by 5%, mainly explained by higher raw material costs and higher fixed costs due to the maintenance in the period.

In 4Q23, conversion cost increased to US\$0.25/lb, compared to US\$0.22/lb in 4Q22, mainly explained by higher energy costs and FX impact. Compared to 3Q23, conversion cost was down by US\$0.01/lb.

Cash cost net of by-products in 4Q23 decreased to US\$1.13/lb compared to US\$1.17/lb in 4Q22, mainly explained by lower zinc prices, which was partially offset by lower zinc volumes. Compared to 3Q23, cash cost was up US\$0.16/lb due to higher zinc prices and higher operating costs.

CAPEX

In 4Q23, sustaining capital expenditures amounted to US\$5.0 million, mainly due to the acquisition and repairs of equipment, as well as disbursements related to the roaster maintenance, totaling US\$16 million in 2023.

*Juiz de Fora*

<b>Juiz de Fora</b> (100% basis)		<b>4Q23</b>	<b>3Q23</b>	<b>2Q23</b>	<b>1Q23</b>	<b>2023</b>	<b>4Q22</b>	<b>3Q22</b>	<b>2Q22</b>	<b>1Q22</b>	<b>2022</b>
Zinc metal production	kt	<b>22.4</b>	20.3	20.7	18.7	82.1	21.9	22.2	20.7	19.4	84.2
Zinc metal sales	kt	<b>22.6</b>	19.4	20.3	20.2	82.5	21.7	22.3	20.5	19.2	83.7
Zinc content in products	kt	<b>22.5</b>	19.2	20.2	20.0	81.9	21.6	22.1	20.3	19.0	83.1
Cost of sales	US\$ mm	<b>65</b>	66	67	71	269	79	88	83	75	325
(-) Raw material		<b>(35)</b>	(36)	(47)	(43)	(160)	(57)	(61)	(66)	(50)	(234)
(+) By-product		<b>(0.5)</b>	(0.1)	(0.4)	(1.0)	(2.1)	(1.4)	(0.6)	(1.1)	(1.0)	(4.2)
(+/-) Consolidation effects		<b>3.0</b>	2.0	5.1	1.2	11.3	2.5	0.3	2.4	(1.8)	3.4
(+) Others		<b>(9.2)</b>	(9.9)	(4.2)	(4.4)	(27.6)	(6.4)	(9.3)	(0.4)	(7.7)	(23.7)
(=) Conversion cost	US\$ mm	<b>24.1</b>	21.5	20.4	24.0	89.9	16.0	18.2	17.8	15.0	67.1
Conversion cost	US\$/lb	<b>0.49</b>	0.51	0.46	0.54	0.50	0.34	0.37	0.40	0.36	0.37
Cash cost <sup>(1)</sup>	US\$/lb	<b>1.01</b>	1.27	1.24	1.35	1.21	1.35	1.45	1.50	1.35	1.41
Sustaining cash cost <sup>(1)</sup>	US\$/lb	<b>1.09</b>	1.39	1.30	1.40	1.29	1.47	1.59	1.65	1.44	1.54
<b>CAPEX</b>	US\$ mm										
Sustaining		<b>4.1</b>	4.5	2.5	1.5	12.6	3.7	5.4	5.2	2.0	16.3
Other		<b>0.3</b>	0.3	0.4	0.8	1.8	1.8	1.1	1.6	1.6	6.1

(1) Our cash cost and sustaining cash cost are net of by-products credits, measured with respect to zinc sold per smelter. For a cash cost reconciliation to COGS, please refer to Appendix - Conversion and All in Sustaining Cash Cost | Smelting.

In 4Q23, Juiz de Fora production reached 22kt, up 3% year-over-year and 10% quarter-over-quarter, primarily explained by a better performance and production stability.

Recoveries rates averaged 94.6% during the quarter, compared to 93.8% in 4Q22 and 93.5% in 3Q23. Zinc metal sales totaled 23kt in 4Q23, up 4% and 17% compared to 4Q22 and 3Q23, respectively, explained by higher production volumes in the period.

In 2023, zinc metal production decreased by 2% to 82kt, and sales of 82kt were 1% lower compared to 2022.

Costs

Cost of sales was US\$65 million in 4Q23 compared to US\$79 million in the same period last year, primarily driven by lower raw materials costs, which was positively affected by lower zinc prices. Compared to 3Q23, cost of sales decreased by 1%.

In 4Q23, conversion cost increased to US\$0.49/lb compared to US\$0.34/lb in 4Q22 due to higher maintenance, energy, and variable costs, which were partially offset by lower personnel costs. Compared to 3Q23, conversion cost decreased by US\$0.02/lb following lower variable costs due to price of material costs.

Cash cost net of by-products in 4Q23 was US\$1.01/lb compared to US\$1.35/lb in 4Q22. This decrease was mainly due to lower zinc prices and lower operating cost. Compared to 3Q23, cash cost net of by-products decreased by 21% due to lower operating costs related to lower raw materials costs.

## CAPEX

In 4Q23, sustaining capital expenditures amounted to US\$4.1 million, mainly driven by the replacement and repairs of equipment, totaling US\$13 million in 2023.

## Financial performance

US\$ million	4Q23	3Q23	4Q22	4Q23 vs. 4Q22	2023	2022	2023 vs. 2022
<b>Net Revenues</b>	<b>454.1</b>	<b>484.2</b>	<b>606.3</b>	<b>(25.1%)</b>	<b>1,946.7</b>	<b>2,467.0</b>	<b>(21.1%)</b>
Cost of Sales	(404.0)	(438.9)	(542.9)	(25.6%)	(1,726.6)	(2,190.9)	(21.2%)
<b>Gross Profit</b>	<b>50.0</b>	<b>45.3</b>	<b>63.4</b>	<b>(21.1%)</b>	<b>220.1</b>	<b>276.1</b>	<b>(20.3%)</b>
<b>Adjusted EBITDA</b>	<b>58.4</b>	<b>48.7</b>	<b>45.9</b>	<b>27.3%</b>	<b>247.0</b>	<b>326.4</b>	<b>(24.3%)</b>
<i>Adjusted EBITDA Mrg.</i>	<i>12.9%</i>	<i>10.1%</i>	<i>7.6%</i>	<i>5.3pp</i>	<i>12.7%</i>	<i>13.2%</i>	<i>(0.5pp)</i>

Note: Financial performance pre intersegment eliminations.

**Net revenues** were US\$454 million in 4Q23, down by 25% compared to US\$606 million in 4Q22, mainly due to lower metal prices and sales volume. Compared to 3Q23, net revenues decreased by 6% due to lower sales volumes, which was partially offset by higher zinc prices.

In 2023, net revenues amounted to US\$1,947 million, 21% lower compared to 2022, primarily explained by lower zinc prices and lower sales volume, which was partially offset by higher metal premium.

**Cost of sales** decreased by 26% in 4Q23, totaling US\$404 million compared to US\$543 million in 4Q22, mainly explained by lower volumes, in addition to lower zinc prices and higher TCs, which positively impacted the raw material (concentrate) purchase. Compared to 3Q23, cost of sales decreased by 8%, mainly due to lower sales volumes.

In 2023, cost of sales decreased by 21% year-over-year to US\$1,727 million, mainly driven by lower sales volume, the decrease in metal prices and higher zinc TCs, positively impacting the zinc concentrate purchase price.

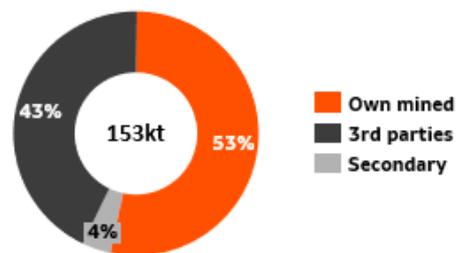
## Reconciliation of realized prices

Purchases of zinc in concentrate are recorded at provisional prices and, typically, an adjustment is made after delivery, which is based on the pricing terms provided for under the respective contract. In addition, the difference between the provisional and the final price received is recognized by adjusting the price in the period in which the purchase is concluded.

	4Q23	3Q23
<b>US\$ million</b>	<b>Zinc</b>	<b>Zinc</b>
Current period concentrate purchase	221.9	223.0
Price adjustments (MTM)	0.7	17.6
	<b>222.6</b>	<b>240.6</b>
Final adjustments	1.0	(13.6)
Other Variable and Fixed Cost	160.7	195.5
Energy	0.2	(3.6)
Depreciation	19.5	20.0
<b>Total Cost of sales</b>	<b>404.0</b>	<b>438.9</b>

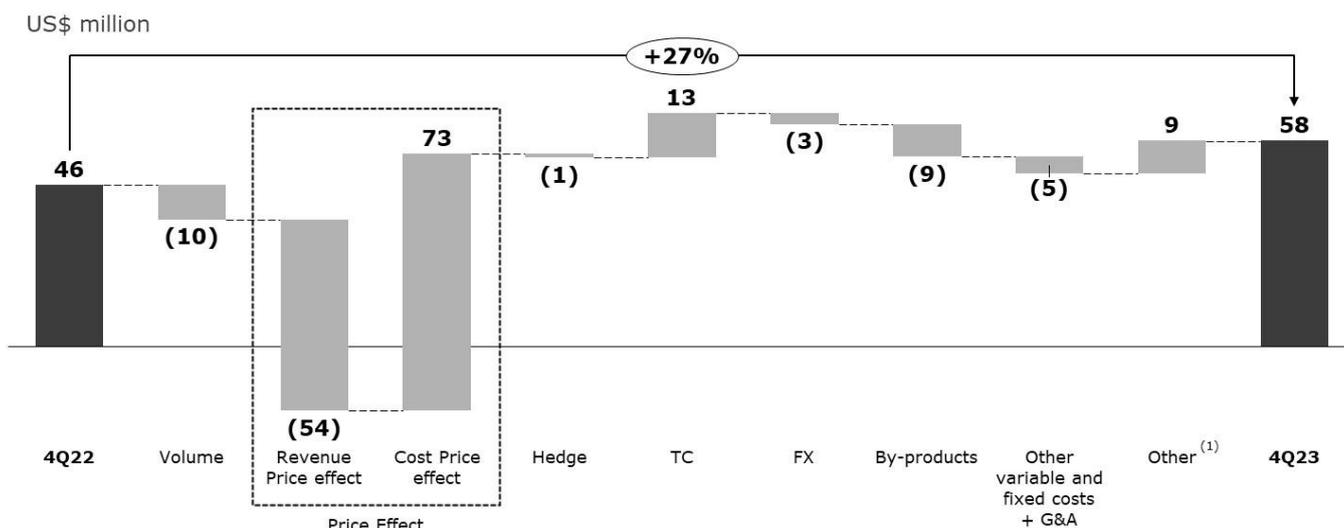
## Sources of Zinc Concentrate to Nexa Smelters (kt) – 4Q23

In 4Q23, Nexa acquired 53% of zinc concentrate from our own mines, with the remainder supplied by third parties. The smelters use zinc concentrate as feedstock, which is supplied from our mines, and we apply a benchmark TC for our operations. From third-party suppliers, the treatment charge is based on the benchmark TC, spot TCs, or TCs negotiated annually, which remained relatively flat throughout the year.



The 2023 benchmark TC, negotiated in April 2023, was US\$274/t concentrate, up 19% from 2022 (US\$230/t). To reduce volatility, for the majority of our third-party contracts, which are renewed during different periods throughout the year, we consider the 3-year benchmark TC. The reference benchmark for TC 2023, 2022 and 2021 is US\$274/t concentrate, US\$230/t concentrate, and US\$159/t concentrate, respectively.

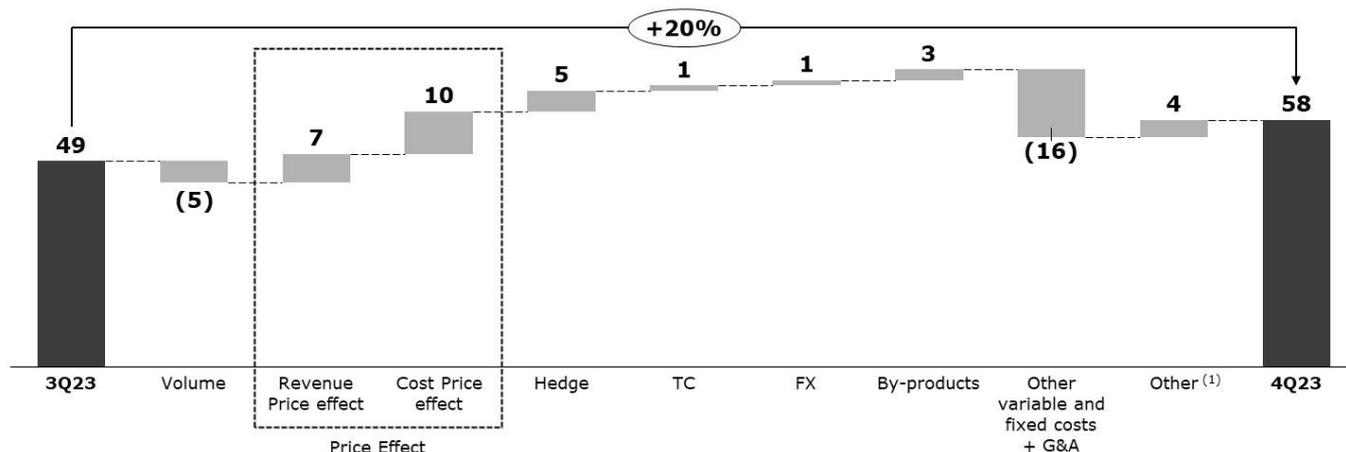
**Adjusted EBITDA** for the smelting segment totaled US\$58 million in 4Q23 compared to US\$46 million reported in 4Q22. This increase was mainly explained by (i) the positive net price effect of US\$19 million, mainly due to lower zinc prices positively impacting the purchase of zinc concentrate; and (ii) higher TCs of US\$13 million; which were partially offset by (iii) lower sales volume of US\$10 million; (iv) lower by-products contribution of US\$9 million, primarily related to lower payable value of sulphuric acid; and (v) the negative hedge variation of US\$1 million.



(1) Includes: Other Income and expenses and Project Evaluation

Compared to 3Q23, Adjusted EBITDA increased by 20%, mainly driven by (i) the positive net price effect of US\$17 million mainly due to higher zinc prices and positive raw material inventory effect (higher inventory consumption in addition to lower raw material costs); (ii) the positive hedge variation of US\$5 million; and (iii) higher by-products contribution of US\$3 million due to higher copper cement sales; which were partially offset by (iv) the negative impact of US\$16 million in costs, mainly due to lower recoveries in Três Marias as result of operational instabilities in the roaster, resulting in higher inputs consumption and costs; and (v) lower zinc metal sales volume of US\$5 million.

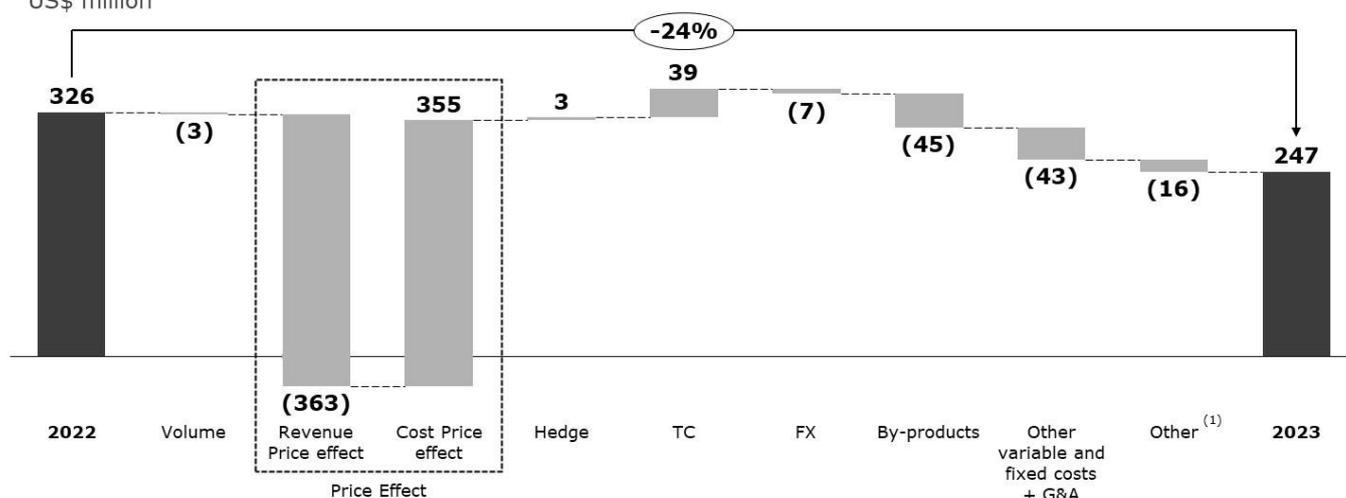
US\$ million



(1) Includes: Other income and expenses and Project Evaluation

In 2023, Adjusted EBITDA was US\$247 million compared with US\$326 million in 2022, primarily driven by (i) lower by-products contribution of US\$45 million, as a result of lower sulphuric acid prices; (ii) the negative impact of US\$43 million in costs, mainly related to higher energy prices, freight, sales and third-party expenses; (iii) the negative impact of US\$16 million mainly related to the accounting effect regarding Enercan's deconsolidation; (iv) the negative net price effect of US\$8 million, mainly due to changes in market prices resulting in quotation period adjustments, partially offset by higher metal premium; and (v) the negative impact of FX variation of US\$7 million, which were partially offset by (vi) higher TCs of US\$39 million.

US\$ million



(1) Includes: Other income and expenses and Project Evaluation

## Conversion cost, Cash cost and AISC <sup>9</sup>

Consolidated		4Q23	3Q23	4Q22	4Q23 vs. 4Q22	2023	2022	2023 vs. 2022
Smelting conversion cost	US\$/t	644	649	545	18.3%	672	575	16.8%
Cash cost net of by-products	US\$/t	2,214	2,224	2,650	(16.5%)	2,415	2,950	(18.1%)
AISC net of by-products	US\$/t	2,494	2,410	2,879	(13.4%)	2,633	3,183	(17.3%)
Smelting conversion cost	US\$/lb	0.29	0.29	0.25	18.3%	0.30	0.26	16.8%
Cash cost net of by-products	US\$/lb	1.00	1.01	1.20	(16.5%)	1.10	1.34	(18.1%)

<sup>9</sup> Our conversion cost, cash cost and AISC net of by-products credits are measured with respect to zinc sold.

Consolidated		4Q23	3Q23	4Q22	4Q23 vs. 4Q22	2023	2022	2023 vs. 2022
AISC net of by-products	US\$/lb	1.13	1.09	1.31	(13.4%)	1.19	1.44	(17.3%)

Note: Cash cost and AISC per ton sold does not include the impact of the cost of idleness capacity of US\$3.2 million in Cajamarquilla in 4Q23 and 2023, and US\$2.3 million in Três Marias in 2022.

**Cash cost net of by-products** for the smelting segment decreased to US\$1.00/lb in 4Q23 compared to US\$1.20/lb in 4Q22. This decrease was driven by lower cost of raw materials explained by lower zinc prices, which was partially offset by lower by-products contribution. Compared to 3Q23, cash cost decreased by US\$0.01/lb.

In 2023, cash cost was US\$1.10/lb (or US\$2,415/t) compared to US\$1.34/lb (or US\$2,950/t) in 2022. This decrease was mainly driven by lower zinc prices, with a positive impact in our raw material costs, which was partially offset by lower zinc volumes.

AISC net of by-products in 4Q23 was US\$1.13/lb, down 13% and up 4% from US\$1.31/lb in 4Q22 and US\$1.09/lb in 3Q23, respectively.

AISC in 2023 was US\$1.19/lb (or US\$2,633/t), down 17% compared to 2022 explained by lower cash costs, reduction in sustaining investments and a decrease in workers participation provision.

**Conversion cost** for the smelting segment in 4Q23 was US\$0.29/lb compared to US\$0.25/lb in 4Q22 explained by maintenance, higher energy costs and FX impact, which were partially offset by lower personnel costs. Compared to 3Q23, conversion cost was relatively flat.

In 2023, conversion cost increased to US\$0.30/lb compared to US\$0.26/lb in 2022, due to higher maintenance and energy costs.

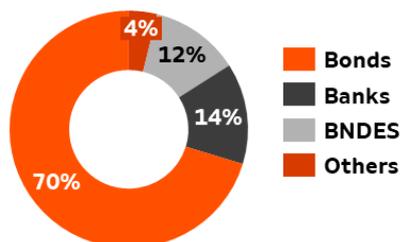
For a reconciliation of conversion cost, cash cost and AISC, please refer to the appendix section "Conversion and All in Sustaining Cash Cost | Smelting".

## Liquidity and Indebtedness

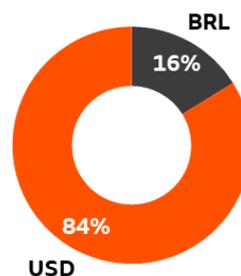
On December 31, 2023, Nexa’s consolidated gross debt<sup>10</sup> amounted to US\$1,726 million, 4% higher compared to the balance at September 30, 2023, mainly due to a new US\$50 million export financing line and the 7% appreciation of the Brazilian real (end of period) against the U.S. dollar.

At the end of the period, 84% (or US\$1,446 million) of the gross debt was denominated in U.S. dollars and 16% (or US\$279 million) in Brazilian reais. The following charts show Nexa’s gross debt by category and currency.

Gross debt by Category



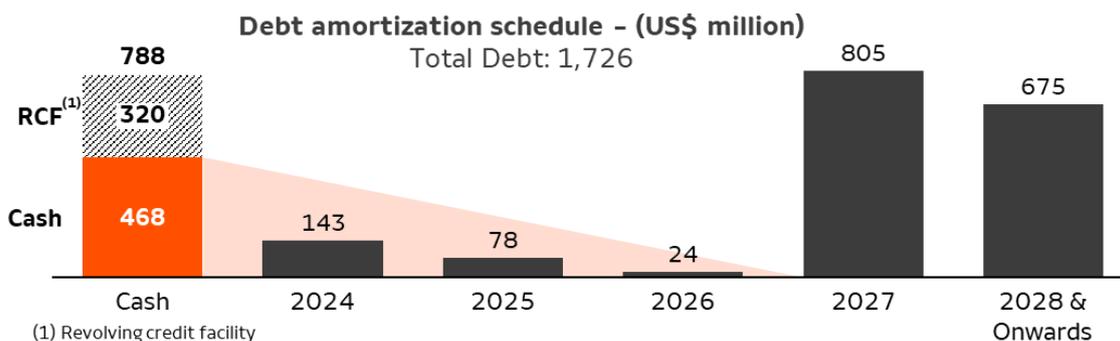
Gross debt by Currency



Cash and cash equivalents and financial investments (“total cash”) amounted to US\$468 million on December 31, 2023, 11% higher compared to September 30, 2023, mainly due to positive operating cash flows and the new export financing line effective in the quarter.

In December 2023, Nexa entered a 5-year Bank Export Credit Note “financing line” agreement in the principal amount of US\$50 million, in addition to an 8-year financing agreement with a Brazilian agency for promoting innovation and research in the principal amount of US\$6 million.

Total cash at the end of 4Q23 is sufficient to cover the payment of all obligations maturing over the next 3 years. The average maturity of the total debt was 3.8 years at an average interest rate of 6.11% per year. Only 8% (US\$143 million) of the total debt matures in 2024, 6% (US\$102 million) matures between 2025 and 2026, while 86% (US\$1,480 million) of the total debt matures in and after 2027.



On December 31, 2023, Nexa’s net debt<sup>11</sup> was US\$1,269 million compared with US\$1,242 million at the end of 3Q23. As of December 31, 2023, Nexa was in compliance with all of its financial covenants.

US\$ million	Dec 31, 2023	Sep 30, 2023
Net debt	1,269.1	1,242.4
LTM Adj. EBITDA	391.2	406.4
Net debt/LTM Adj. EBITDA	3.24x	3.06x

<sup>10</sup> Loans and financings (“gross debt”)

<sup>11</sup> Gross debt (US\$1,726 million) minus cash and cash equivalents (US\$457 million), minus financial investments (US\$11 million), plus derivatives (US\$3 million), plus Lease Liabilities (US\$9 million). It does not include the financial instrument related to the offtake agreement.

In addition to continuing to assess short-term and mid-term commodities prices, management continuously review Nexa’s capital structure, financial position, and the maturity profile of our debt. Actions to improve the profile of outstanding debt, focusing on extending maturity and assessing financing alternatives are constantly being evaluated.

## Credit Ratings

In September 2023, Fitch Ratings has affirmed Nexa Resources S.A.'s (Nexa) Long-Term Foreign and Local Currency Issuer Default Ratings at 'BBB-'. Fitch has also affirmed Nexa's national scale long-term rating at 'AAA(bra)'. The Rating outlook for Nexa remains stable, reflecting its ultimate parent, Votorantim S.A. (VSA; BBB-/Positive), while Nexa's stable outlook reflects the assessment of Fitch's Top Down -1 rating approach, and Nexa's stand-alone credit profile reflects its reasonable cost position in both mining and smelting, integrated zinc operations and moderate leverage. Nexa's ratings are constrained by the company's moderate size, asset concentration and relatively short mine life compared with Fitch’s Mining Navigator rating factor.

In December 2023, S&P raised its global scale long-term sovereign rating on Brazil to 'BB' (from 'BB-') and affirmed the 'brAAA' national scale ratings due to the recent approval of tax reform in the country, which is a significant overhaul of the tax system and is expected to translate into long-term productivity gains. As a result, Nexa’s rating and outlook changed from 'BB+' 'positive' to 'BBB-' 'stable', upgrading the company to investment grade level. In January 2024, S&P has affirmed its 'BBB-' rating and 'stable' outlook for Nexa, reflecting the completion of the ramp-up process at the Aripuanã mine in mid-2024, which is expected to contribute to higher treated ore volumes and better margins. S&P also expects positive free cash flow in 2024, as a result of improvement in working capital amid lower costs and inventory prices, in addition to strong liquidity with a smooth debt amortization profile. At the same time, adjusted net debt to EBITDA is forecasted to gradually fall to 1.5x-2.0x in coming years.

In January 2024, Moody’s has affirmed Nexa Resources S.A.'s (Nexa) 'Ba2' ratings and changed the outlook to 'negative' from 'stable'. The rating action reflects the unexpected deterioration in credit metrics during 2023, caused primarily by a delay in the Aripuanã ramp-up, combined with weaker zinc prices than in 2021-2022.

Rating agencies	Rating	Outlook
<b>S&amp;P</b>	BBB-	Stable
<b>Fitch</b>	BBB-	Stable
<b>Moody’s</b>	Ba2	Negative

## Cash flows

US\$ million	4Q23	2023
<b>Cash provided by operating activities before working capital</b>	<b>96.4</b>	<b>315.4</b>
Variations in operating assets and liabilities ("Working Capital")	49.6	101.2
<b>Net cash flows provided by (used in):</b>		
Operating activities	110.6	246.8
Investing activities	(105.4)	(270.4)
Financing activities	35.6	(25.3)
<b>Increase (decrease) in cash and cash eq.</b>	<b>42.9</b>	<b>(40.6)</b>
Cash and cash eq. at the beginning of the period	414.3	497.8
Cash and cash eq. at the end of the period <sup>(1)</sup>	457.3	457.3

<sup>(1)</sup> Does not include financial investments totaling US\$11 million at December 31, 2023.

Note: For details on Cash flows, please refer to the "Consolidated financial statements at December 31, 2023".

In 4Q23, the cash provided by operating activities before working capital variations was US\$96 million. Working capital variations had a positive impact of US\$50 million, primarily due to (i) the increase in trade payables of US\$92 million; and (ii) the reduction in inventories of US\$12 million, partially offset by (iii) the decrease in other liabilities of US\$32 million, related to the payment of asset retirement obligations and VAT discussions; and (iv) the decrease in confirming payables of US\$26 million. In 4Q23, we paid US\$25 million in interest and US\$10 million in taxes. Consequently, net cash from operating activities was US\$111 million.

We used US\$105 million of net cash flows for investing activities in 4Q23, impacted primarily by US\$112 million of CAPEX, partially offset by dividends received of US\$6 million.

Cash from financing activities in the quarter was US\$36 million due to US\$56 million related to new loans and financings, which was partially offset by dividends paid to non-controlling interests (Pollarix) of US\$10 million and payments of loans and financings, and lease liabilities of US\$10 million.

Foreign exchange effects on cash and cash equivalents had a positive impact of US\$2 million in the quarter, totaling US\$8 million in 2023.

In 2023, cash provided by operating activities before working capital was US\$315 million. Working capital changes had a positive impact of US\$101 million, primarily due to (i) a decrease in inventories of US\$127 million; (ii) a decrease in trade accounts receivables of US\$58 million; (iii) an increase in confirming payables of US\$17 million; and (iv) a decrease in derivative financial instruments of US\$13 million, which were partially offset by (v) an increase in other assets of US\$71 million, related to VAT tax credits from purchase of supplies and services; and (vi) a decrease in other liabilities of US\$43 million, related to the payment of asset retirement obligations and VAT discussions.

We paid US\$113 million in interest and US\$56 million in taxes, resulting in US\$247 million in net cash provided by operating activities in 2023.

We used US\$270 million, which includes investment in Aripuanã, to maintain the sustainability of our business and invest in our growth.

We used US\$25 million of cash in financing activities, primarily due to (i) the payment of share premium to shareholders and contractual dividends paid to non-controlling interests (Pollarix) totaling US\$49 million; and (ii) the payments of loans and financings of US\$27 million, partially offset by US\$56 million related to new loans and financings.

As a result, cash and cash equivalents excluding financial investments decreased by US\$41 million to US\$457 million at the end of 2023.

## Others

### Offtake agreement

As previously disclosed, in January 2022 Nexa signed an offtake agreement with a third-party international player ("Offtaker"), in which it agreed to sell 100% of the copper concentrate produced by Aripuanã for a 5-year period starting in February 2023 up to a total of 30,810 tons, at the lower of current market prices or an agreed price cap.

The offtake agreement resulted from negotiations with the Offtaker to sell the copper concentrate in lieu of paying future royalties related to the previous acquisition of the Aripuanã project mining rights from the Offtaker. The Company opted to voluntarily and irrevocably designate the entire offtake agreement at fair value through profit and loss within the scope of IFRS 9, rather than separate the value of the embedded derivative associated with the price cap, recognizing a non-cash accumulated gain of US\$2.3 million in the income statement for year ended on December 31, 2023.

For further information, please refer to explanatory note 16 (e) – "Financial instruments in offtake agreement: fair value" in the "Consolidated financial statements at December 31, 2023".

### Legal Matters

As previously reported throughout 2023, Nexa cooperated with the investigation carried out by the Fiscal Office of the State of Minas Gerais and the Public Ministry of Minas Gerais (the "MG Authorities") of the practices of certain of Nexa's former customers with respect to commercial transactions and related value-added tax ("VAT"), as well as Nexa's relationship with such former customers.

In the 3Q23, Nexa and the MG Authorities reached a resolution (the "Tax Resolution") whereby, without admitting primary responsibility for the resolved claims, the Company agreed to make tax payments, including interest and penalties, to the State of Minas Gerais on behalf of certain customers that allegedly failed to properly comply with their tax obligations ("tax portion"), and subsequently on October 20, 2023 entered into a related additional agreement (the "Related Agreement", and together with the Tax Resolution, the "Agreements") to make a contribution to the State of Minas Gerais to support its ESG-related efforts ("ESG portion"), recognizing a total amount of US\$75.8 million in "Other liabilities", comprised of US\$65.5 million as "Other Income and Expenses, net" and US\$10.3 million as "Financial Expenses" related to the interest charged in connection with the VAT-related practices of its former customers. In funding this agreement, the Company applied an offset of US\$25.0 million of VAT accumulated credits, paid a portion of US\$1.5 million in cash up front, offset an amount of US\$6.4 million which was classified as a judicial deposit, and will pay the remainder in up to 46 monthly installments, to be adjusted by the Brazilian federal funds rate ("SELIC") interest rate.

On February 8, 2024, a second and final Tax Resolution was filed with the MG Authorities whereby Nexa, without admitting primary responsibility for the resolved claims, agreed to make tax payments on behalf of certain customers, including interest and penalties, to the State of Minas Gerais, recognizing a total amount of US\$27.1 million in "Other liabilities", comprised of US\$21.4 million as "Other Income and Expenses, net" and US\$5.7 million as "Financial Expenses" related to the interest charged in connection with the VAT-related practices of this former customers. In funding this agreement, the Company will apply an offset of US\$10.8 million of VAT accumulated credits, will pay US\$0.8 million in cash up front, and will pay the remainder in up to 59 monthly installments, to be adjusted by the Brazilian federal funds rate ("SELIC") interest rate.

This resolution concludes the MG Authorities' investigation with respect to the Company, and the Company does not expect any further developments or provisions with respect to these matters, although reserves its legal right to recover from certain customers the amounts that it has paid, or will pay, on their behalf in connection with the tax portion of the Agreements. These amounts will only be recognized upon recovery.

There is a new legislation enacted by Minas Gerais State that establishes an obligation for mining companies to present guarantees for their tailing dam facilities. In addition, there are ongoing tax-related discussions with the Peruvian tax authorities related to the Stability Agreement of Cerro Lindo operations, that may evolve in 2024 depending on ongoing legal proceedings<sup>12</sup>. Both of these events may impact the Company's results and cash flow and, ultimately, the Company's liquidity.

## Impairment

In 2023, Nexa recorded a non-cash, pre-tax net impairment loss of US\$115 million (after-tax US\$93 million), comprised of (i) an impairment loss of US\$59 million (in 2Q23) in the Morro Agudo cash-generating unit ("CGU") associated with the current and projected, negative macroeconomic and price scenarios, as well as on possible future operational scenarios, concluding that the implied value of processing zinc concentrate from Morro Agudo in the Três Marias smelter could no longer continue to be recognized; (ii) an impairment loss of US\$43 million (in 4Q23) in goodwill in the Mining Peru Group of CGUs; and (iii) individual assets impairment in the amount of US\$13 million (in 4Q23), mainly within Assets and projects under construction.

For further information, please refer to note 31 – Impairment of long-lived assets in the "Consolidated financial statements at December 31, 2023".

<sup>12</sup> For broader information, please refer to explanatory note 11 (d) – "Summary of uncertain tax positions on income tax" in the "Consolidated financial statements at December 31, 2023".

## Market Scenario

### 4Q23

LME Prices		4Q23	3Q23	4Q22	4Q23 vs. 4Q22	2023	2022	2023 vs. 2022
Zinc	US\$/t	2,498	2,428	3,001	(16.7%)	2,647	3,478	(23.9%)
Copper	US\$/t	8,159	8,356	8,001	2.0%	8,478	8,797	(3.6%)
Lead	US\$/t	2,123	2,170	2,098	1.2%	2,138	2,150	(0.6%)
Silver	US\$/oz	23.20	23.57	21.17	9.6%	23.35	21.73	7.5%
Gold	US\$/oz	1,971	1,928	1,726	14.2%	1,941	1,800	7.8%

Source: Bloomberg

In 4Q23, the LME zinc price averaged US\$2,498/t (or US\$1.13/lb), down 17% and up 3% compared to 4Q22 and 3Q23, respectively.

Compared to 4Q22, zinc prices dropped significantly. The bullish scenario in 2022, which was mainly driven by the end of the Zero-Covid policy in China and Chinese stimulus, in addition to metal production cuts related to high energy costs in Europe and the appreciation of the U.S. dollar against other major currencies, resulted in high prices with expectations of a quick recovery in demand. On the other hand, compared to 3Q23, prices in 4Q23 slightly increased, primarily due to the expectations of the Federal Reserve rates' cuts in 2024 and expected better demand in China. In 4Q23, several mines were put on care and maintenance, such as Colquijirca's Tajo Norte (Peru), Middle Tennessee (U.S.), Rasp Zinc Mine (Australia), and Myra Falls (Canada). In addition to this reduction in concentrate availability, two operations expected to place new volumes of concentrate on the market were delayed, as Vares Mine (Bosnia & Herzegovina) and Ozernoye (Russia). This contributed to a further reduction in concentrate availability and supported slightly higher prices during the quarter.

The LME zinc price in 2023 averaged US\$2,647/t (or US\$1.20/lb), down 24% from US\$3,478/t (or US\$1.58/lb) in 2022.

During the quarter, the LME copper price averaged US\$8,159/t (or US\$3.70/lb), up 2% and down 2% compared to 4Q22 and 3Q23, respectively.

Copper prices, like other metals, showed a high sensitivity to the Chinese economy throughout the year, presenting its highest prices when new stimulus was announced, and falling when the key data did not meet expectations (e.g. property sector). However, demand for copper in sectors related to the energy transition, such as solar power and electric vehicles remained strong, positively supporting prices in the period. At the end of November 2023, the Cobre Panama mine (responsible for 1.5% of world copper production) was shut down due to issues with the Panamanian government following local protests, which blocked the port of Punta Rincon, affecting the delivery of essential supplies for the mine. The market reacted quickly with revisions to concentrate balance and TCs forecasts.

The LME copper price in 2023 averaged US\$8,478/t (or US\$3.85/lb), down 4% from US\$8,797/t (or US\$3.99/lb) in 2022.

Looking ahead, metal prices in the next months of 2024 are expected to be supported by easing monetary policy in the U.S. and macro-economic stimulus in China. After the release of the U.S. economic data in December 2023, the main expectations for 2024 revolve around the Federal Reserve interest rate cuts, while Chinese efforts are focused on supporting the country's economy with stimulus, mainly in the construction and infrastructure sectors, along with electric vehicle sales.

Demand for zinc metal in our Home Market (Latin America, excluding Mexico) decreased by 6% quarter-over-quarter and 7% year-over-year, mainly explained by the economic downturn in Peru and

Colombia. The prospects for zinc demand in Latin America are expected to perform slightly better than in 2023. This outlook is expected amid falling interest rates in Brazil, expectations of GDP expansion in civil construction and increase in production of light vehicles in 2024, also in Brazil.

### Foreign Exchange

FX	4Q23	3Q23	4Q22	4Q23 vs. 4Q22	2023	2022	2023 vs. 2022
BRL/USD (Average)	4.955	4.880	5.255	(5.7%)	4.995	5.165	(3.3%)
<i>BRL/USD (End of period)</i>	<i>4.841</i>	<i>5.007</i>	<i>5.217</i>	<i>(7.2%)</i>	<i>4.841</i>	<i>5.217</i>	<i>(7.2%)</i>
PEN/USD (Average)	3.782	3.678	3.894	(2.9%)	3.744	3.834	(2.4%)
<i>PEN/USD (End of period)</i>	<i>3.704</i>	<i>3.785</i>	<i>3.806</i>	<i>(2.7%)</i>	<i>3.704</i>	<i>3.806</i>	<i>(2.7%)</i>

Source: Bloomberg

The U.S. dollar performed relatively stable in 4Q23, reflecting the interest rates that were maintained by the Federal Reserve in the period. However, compared to other major currencies, the U.S. dollar stood out in 2023.

The average exchange rate for the Brazilian real in 4Q23 was 4.955/US\$ compared to 4.880/US\$ in 3Q23 and compared to 5.255/US\$ in 4Q22.

This performance was mainly explained by the uncertainties related to the fiscal policy and long-term impacts of the tax reform in Brazil. At the end of December, the Brazilian real/US\$ exchange rate was 4.841.

The average exchange rate for the Peruvian soles in 4Q23 was 3.782/US\$ compared to 3.678/US\$ in 3Q23 and compared to 3.894/US\$ in 4Q22. At the end of December, the Peruvian soles/US\$ exchange rate was 3.704.

## Risks and Uncertainties

Risk management is one of the key points in our business strategy and contributes to value creation and increasing the level of confidence in the Company held by its main stakeholders, including shareholders, employees, customers, suppliers and the local communities.

As a result, we have adopted an Enterprise Risk Management (“ERM”) Policy that describes Nexa’s Risk Management Model. The ERM forms an integral part of the processes in our operational units, corporate departments and projects, and provides support for decision-making by our Executive Officers and Board of Directors.

The risk assessment cycle is performed annually focusing on our strategy, operations and key projects. We seek to identify material risks, which are then assessed with consideration of the potential health, safety, environmental, social, reputational, legal and financial impacts. By embedding risk management into our work processes and critical business systems, we work to ensure we make decisions based on relevant inputs and valid data. The material risks identified during the risk management process are monitored and reported to the Executive Team, Audit Committee and Board of Directors.

Our operations are exposed to a number of inherent risks and uncertainties, and our results may be influenced by the following factors, including, among others:

- the cyclical and volatile prices of commodities;
- the changes in the expected level of supply and demand for commodities;
- foreign exchange rates and inflation;
- the risks and uncertainties relating to economic and political conditions in the countries in which we operate;
- changes in global market conditions;
- the impact of expanded regional or global conflict, including the conflict between Russia and Ukraine, as well as Israel-Hamas conflict, and the resulting potential impacts on supply and demand for commodities, global security concerns, and market volatility;
- outbreaks of contagious diseases or health crises impacting overall economic activity regionally or globally, including the COVID-19 pandemic, and the potential impact thereof on commodity prices, our business and operating sites, and the global economy;
- increasing demand and evolving expectations from stakeholders with respect to our environmental, social and governance (“ESG”) practices, performance and disclosures, including the ability to meet energy requirements while complying with greenhouse gas emissions regulations and other energy transition policy changes and laws in the countries in which we operate;
- the impact of climate change on our operations, workforce and value chain;
- environmental, safety and engineering challenges and risks inherent to mining;
- the ability to meet energy requirements while complying with greenhouse gas emissions regulations and other energy transition policy changes and laws in the countries in which we operate;
- severe natural disasters, such as storms and earthquakes, disrupting our operations;
- operational risks, such as operator errors, mechanical failures and other accidents;
- the availability of materials, supplies, insurance coverage, equipment, required permits or approvals and financing;
- supply-chain and logistic related interruptions, including impacts to international freight and transportation networks;
- the implementation of our growth strategy and risks associated with related capital expenditures;

- failure to obtain financial assurance to meet closure and remediation obligations;
- the possible material differences between our estimates of mineral reserves and mineral resources and the mineral quantities we actually recover;
- the possibility that our concessions may be terminated or not renewed by governmental authorities in the countries in which we operate;
- the impact of political and government changes in the countries in which we operate, and the effects of potential new legislation, changes in taxation or positions formerly adopted by authorities or courts;
- legal and regulatory risks, including ongoing or future investigations by local authorities with respect to our business and operations, as well as the conduct of our customers, as well as the impact to our financial statements regarding the resolution of any such matters;
- labor disputes or disagreements with local communities or unions in the countries in which we operate;
- loss of reputation due to unanticipated operational failures or significant occupational incidents;
- failure or outage of our digital infrastructure or information and operating technology systems;
- cyber events or attacks (including ransomware, state-sponsored and other cyberattacks) due to negligence or IT security failures;
- the future impact of competition and changes in domestic and international governmental and regulatory policies that apply to our operations;
- currency exchange rate and interest rate fluctuations; and
- other factors.

For a broader discussion of risks please refer to our annual report on form 20-F filed with the SEC ([www.sec.gov](http://www.sec.gov)), on SEDAR ([www.sedarplus.com](http://www.sedarplus.com)) and available on the Company's website ([ir.nexaresources.com](http://ir.nexaresources.com)).

### Use of Non-IFRS Financial Measures

Nexa's management uses Consolidated Adjusted EBITDA as an additional performance measure on a consolidated basis, in addition to, and not as a substitute for, net income. We believe this measure provides useful information about the performance of our operations as it facilitates consistent comparisons between periods, planning and forecasting of future operating results reflecting the operational performance of our existing business without the impact of interest, taxes, amortization, depreciation, non-cash items that do not reflect our operational performance for the specific reporting period and the impact of pre-operating and ramp-up expenses during the commissioning and ramp-up phases of greenfield projects (currently, only Aripuanã has reached these stages). Pre-operating and ramp-up expenses incurred during the commissioning and ramp-up of phases of Aripuanã are not considered infrequent, unusual or non-recurring expenses, as they have recurred in prior years with respect to Aripuanã and may recur in the future with respect to Aripuanã or any other projects that may reach the commissioning or ramp-up phases. Our management believes this adjustment is helpful because it shows our performance without the impact of specific expenses relating to a greenfield project that has reached the commissioning or ramp-up phases, with no connection with the performance of our other existing operations.

When applicable, Adjusted EBITDA also excludes the impact of (i) events that are non-recurring, unusual or infrequent, and (ii) other specific events that, by their nature and scope, do not reflect our operational performance for the specific period in our management's view. These events did not impact our Adjusted EBITDA in 2022 and 2021 but may impact future periods.

In addition, management may adjust the effect of certain types of transactions that in management's judgment are not indicative of the Company's normal operating activities, or do not necessarily occur on a regular basis.

In this report, we present Consolidated Adjusted EBITDA, which we define as net income (loss) for the year, adjusted by (i) share in the results of associates, depreciation and amortization, net financial results and income tax; (ii) non-cash events and non-cash gains or losses that do not specifically reflect our operational performance for the specific period (including: (loss) gain on sale of investments; impairment and impairment reversals; (loss) gain on sale of long-lived assets; write-offs of long-lived assets; and remeasurement in estimates of asset retirement obligations); and (iii) pre-operating and ramp-up expenses incurred during the commissioning and ramp-up phases of greenfield projects (currently, Aripuanã).

Our calculation of Adjusted EBITDA may be different from the calculation used by other companies, including our competitors in the mining industry, so our measures may not be comparable to those of other companies.

Mining segment | Cash cost net of by-products credits: for our mining operations, cash cost after by-products credits includes all direct costs associated with mining, concentrating, leaching, solvent extraction, on-site administration and general expenses, any off-site services essential to the operation, concentrate freight costs, marketing costs and property and severance taxes paid to state or federal agencies that are not profit-related. Treatment and refining charges on metal sales, which are typically recognized as a deduction component of sales revenues, are added to cash cost. Cash cost net of by-products credits is measured with respect to zinc sold per mine.

Mining segment | Cost ROM: includes all direct production costs for mining, concentrating, leaching, on-site mineral transportation, and other on-site administration expenses, excluding royalties and workers' participation costs. Cost ROM is measured with respect to total treated ore volume and non-metallic products revenue (such as limestone and stones) are considered as cost-reduction for our mining operations.

Smelting segment | Cash cost net of by-products credits: for our smelting operations, cash cost, after by-products credits includes all the costs of smelting, including costs associated with labor, net energy, maintenance, materials, consumables and other on-site costs, as well as raw material costs. Cash cost net of by-products credits is measured with respect to zinc sold per smelter.

Smelting segment | Conversion cost: costs incurred to convert zinc concentrate (feed) into final products measured with respect to contained zinc sold per smelter, including energy, consumables, and other fixed and on-site expenses. Conversion cost does not include raw material, alloys, and by-products related cost.

Sustaining cost net of by-products credits is defined as the cash cost, net of by-product credits plus non-expansion capital expenditure, including sustaining, health, safety and environment, modernization and other non-expansion-related capital expenditures. Sustaining cash cost net of by-products credits is measured with respect to zinc sold.

All in sustaining cost ("AISC") net of by-products credits is defined as sustaining cash cost, net of by-products credits plus corporate general and administrative expenses, royalties and workers' participation. AISC net of by-products credits is measured with respect to zinc sold.

Net debt: defined as (i) loans and financing (the most comparable IFRS measure), less (ii) cash and cash equivalents, less (iii) financial investments, plus or less (iv) the fair value of derivative financial instruments, plus (v) leases liabilities. Our management believes that net debt is an important figure because it indicates our ability to repay outstanding debts that become due simultaneously using available cash and highly liquid assets.

All forward-looking non-IFRS financial measures in this release, including cash cost guidance, are provided only on a non-IFRS basis. This is due to the inherent difficulty of forecasting the timing or

amount of items that would be included in the most directly comparable forward-looking IFRS financial measures. As a result, reconciliation of the forward-looking non-IFRS financial measures to IFRS financial measures is not available without unreasonable effort and the Company is unable to assess the probable significance of the unavailable information.

See "Cautionary Statement on Forward-Looking Statements" below.

### Technical information

Jose Antonio Lopes, MausIMM (Geo): 224829, a mineral resources manager, a qualified person for purposes of National Instrument 43-101 and a Nexa employee, has approved the scientific and technical information contained in this Earnings Release. Please note that the mineral reserves included in this Earnings Release were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") 2014 Definition Standards For Mineral Resources and Mineral Reserves, whose definitions are incorporated by reference in National Instrument 43-101. Accordingly, such information may not be comparable to similar information prepared in accordance with Subpart 1300 of Regulation S-K ("S-K 1300"). For a discussion of the differences between the requirements under S-K 1300 and NI 43-101, please see our annual report on Form 20-F. Our estimates of mineral reserves may be materially different from mineral quantities we actually recover, and market price fluctuations and changes in operating capital costs may render certain mineral reserves uneconomical to mine.

### CAUTIONARY STATEMENT ON FORWARD-LOOKING STATEMENTS

This Earnings Release contains certain forward-looking information and forward-looking statements as defined in applicable securities laws (collectively referred to in this Earnings Release as "forward-looking statements"). All statements other than statements of historical fact are forward-looking statements. The words "believe," "will," "may," "may have," "would," "estimate," "continues," "anticipates," "intends," "plans," "expects," "budget," "scheduled," "forecasts" and similar words are intended to identify estimates and forward-looking statements. Forward-looking statements are not guarantees and involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of NEXA to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Actual results and developments may be substantially different from the expectations described in the forward-looking statements for a number of reasons, many of which are not under our control, among them, the activities of our competition, the future global economic situation, weather conditions, market prices and conditions, exchange rates, and operational and financial risks. The unexpected occurrence of one or more of the abovementioned events may significantly change the results of our operations on which we have based our estimates and forward-looking statements. Our estimates and forward-looking statements may also be influenced by, among others, legal, political, environmental or other risks that could materially affect the potential development of our projects, including risks related to outbreaks of contagious diseases or health crises impacting overall economic activity regionally or globally, as well as risks relating to ongoing or future investigations by local authorities with respect to our business and operations and the conduct of our customers, including the impact to our financial statements regarding the resolution of any such matters.

These forward-looking statements related to future events or future performance and include current estimates, predictions, forecasts, beliefs and statements as to management's expectations with respect to, but not limited to, the business and operations of the Company and mining production our growth strategy, the impact of applicable laws and regulations, future zinc and other metal prices, smelting sales, CAPEX, expenses related to exploration and project evaluation, estimation of mineral reserves and mineral resources, mine life and our financial liquidity.

Forward-looking statements are necessarily based upon a number of factors and assumptions that, while considered reasonable and appropriate by management, are inherently subject to significant business, economic and competitive uncertainties and contingencies and may prove to be incorrect. Statements concerning future production costs or volumes are based on numerous assumptions of

management regarding operating matters and on assumptions that demand for products develops as anticipated, that customers and other counterparties perform their contractual obligations, full integration of mining and smelting operations, that operating and capital plans will not be disrupted by issues such as mechanical failure, unavailability of parts and supplies, labor disturbances, interruption in transportation or utilities, adverse weather conditions, and other COVID-19 related impacts, and that there are no material unanticipated variations in metal prices, exchange rates, or the cost of energy, supplies or transportation, among other assumptions.

We assume no obligation to update forward-looking statements except as required under securities laws. Estimates and forward-looking statements refer only to the date when they were made, and we do not undertake any obligation to update or revise any estimate or forward-looking statement due to new information, future events or otherwise, except as required by law. Estimates and forward-looking statements involve risks and uncertainties and do not guarantee future performance, as actual results or developments may be substantially different from the expectations described in the forward-looking statements. Further information concerning risks and uncertainties associated with these forward-looking statements and our business can be found in our annual report on Form 20-F and in our other public disclosures available on our website and filed under our profile on SEDAR ([www.sedarplus.com](http://www.sedarplus.com)) and on EDGAR ([www.sec.gov](http://www.sec.gov)).

## Appendix

Income Statement	52
Net cash flows from operating activities excluding working capital variations and free cash flow - Reconciliation	53
CAPEX	54
All in Sustaining Cash Cost   Mining	55
Conversion and All in Sustaining Cash Cost   Smelting	59

## Income Statement

US\$ million	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23
Net Revenues	722.1	829.4	702.6	779.8	667.3	626.7	649.3	629.9
Cost of sales	(524.8)	(556.3)	(617.8)	(696.2)	(567.8)	(565.0)	(582.5)	(561.4)
<b>Gross Profit</b>	<b>197.4</b>	<b>273.1</b>	<b>84.8</b>	<b>83.6</b>	<b>99.5</b>	<b>61.7</b>	<b>66.8</b>	<b>68.5</b>
SG&A	(36.0)	(37.1)	(31.6)	(40.8)	(28.5)	(32.6)	(33.1)	(32.7)
Mineral Exploration and Project Evaluation	(17.2)	(26.8)	(27.4)	(27.4)	(22.0)	(21.3)	(29.6)	(26.8)
Impairment of long-lived assets	-	-	-	(32.5)	-	(57.2)	(1.9)	(55.5)
Other income and expenses, net	(20.9)	30.4	12.8	(25.0)	(5.5)	(66.1)	(7.2)	(31.8)
<b>Operating income (loss)</b>	<b>123.2</b>	<b>239.6</b>	<b>38.6</b>	<b>(42.1)</b>	<b>43.5</b>	<b>(115.5)</b>	<b>(5.0)</b>	<b>(78.4)</b>
Share in the results of associates	-	-	-	1.9	5.4	5.7	6.3	6.1
<b>Net Financial Results</b>	<b>10.7</b>	<b>(74.2)</b>	<b>(52.3)</b>	<b>(17.9)</b>	<b>(39.2)</b>	<b>(26.5)</b>	<b>(64.4)</b>	<b>(31.5)</b>
Financial income	3.7	8.4	6.7	6.2	5.6	6.7	8.4	4.8
Financial expenses	(43.4)	(40.3)	(41.6)	(43.4)	(46.4)	(59.4)	(45.3)	(53.1)
Other financial items, net	50.3	(42.3)	(17.4)	19.4	1.6	26.1	(27.4)	16.7
<b>Depreciation, amortization and depletion</b>	<b>(65.9)</b>	<b>(74.4)</b>	<b>(72.8)</b>	<b>(77.9)</b>	<b>(71.7)</b>	<b>(71.7)</b>	<b>(72.1)</b>	<b>(82.9)</b>
<b>Adjusted EBITDA</b>	<b>216.7</b>	<b>302.4</b>	<b>121.1</b>	<b>120.2</b>	<b>133.0</b>	<b>71.5</b>	<b>81.7</b>	<b>104.9</b>
Adj. EBITDA margin	30.0%	36.5%	17.2%	15.4%	19.9%	11.4%	12.6%	16.7%
<b>Income Tax</b>	<b>(59.6)</b>	<b>(41.8)</b>	<b>(26.2)</b>	<b>(23.3)</b>	<b>(25.1)</b>	<b>33.5</b>	<b>(0.4)</b>	<b>(3.8)</b>
<b>Net Income (loss)</b>	<b>74.2</b>	<b>123.5</b>	<b>(39.9)</b>	<b>(81.4)</b>	<b>(15.4)</b>	<b>(102.8)</b>	<b>(63.4)</b>	<b>(107.6)</b>
Attributable to Nexa's shareholders	63.0	109.0	(41.2)	(81.7)	(19.7)	(102.5)	(73.7)	(93.4)
Attributable to non-controlling interests	11.2	14.5	1.4	0.3	4.3	(0.3)	10.4	(14.2)
Weighted average number of outstanding shares - in thousand	132,439	132,439	132,439	132,439	132,439	132,439	132,439	132,439
<b>Basic and diluted earnings (loss) per share - (in US\$)</b>	<b>0.48</b>	<b>0.82</b>	<b>(0.31)</b>	<b>(0.62)</b>	<b>(0.15)</b>	<b>(0.77)</b>	<b>(0.56)</b>	<b>(0.71)</b>
<b>Adjusted Net Income (loss)</b>	<b>101.9</b>	<b>111.9</b>	<b>(30.2)</b>	<b>2.9</b>	<b>2.4</b>	<b>12.5</b>	<b>(48.8)</b>	<b>(7.1)</b>
<b>Adjusted Basic and diluted earnings (loss) per share - (in US\$)</b>	<b>0.69</b>	<b>0.74</b>	<b>(0.24)</b>	<b>(0.04)</b>	<b>(0.01)</b>	<b>0.04</b>	<b>(0.43)</b>	<b>(0.01)</b>

## Net cash flows from operating activities excluding working capital variations and free cash flow - Reconciliation

Nexa manages and reports cash flows from operating activities excluding variations in working capital. Working capital can be volatile due to several factors, including prices and a build-up or reduction of inventories.

Furthermore, we also exclude from the analysis interest and income tax payments. Management believes excluding these measures provides investors a better visibility of the operating cash flow performance and our capital allocation strategy.

The following table provides a reconciliation of the cash from operating activities before variations in working capital to free cash flow.

US\$ million	4Q23	2023
<b>Cash provided by operating activities</b>	<b>146</b>	<b>417</b>
(-) Working capital variations	50	101
Trade accounts receivables	4	58
Inventory	12	127
Other assets	0	(58)
Payables	66	17
Other liabilities	(32)	(43)
<b>Cash flows from operations excluding working capital variations</b>	<b>96</b>	<b>315</b>
Interest paid	(25)	(114)
Income tax	(10)	(56)
Sustaining CAPEX <sup>(1)</sup>	(112)	(309)
<b>Net cash flows from operations excluding working capital variations</b>	<b>(51)</b>	<b>(163)</b>
Other investments <sup>(2)</sup>	(1)	(5)
Loans and investments <sup>(3)</sup>	53	66
Dividends and share premium	(10)	(49)
Foreign exchange effects	2	8
Working capital changes	50	101
<b>Free cash flow</b>	<b>43</b>	<b>(41)</b>

(1) Non expansion investments related to sustaining and HS&E.

(2) Other non-expansion investments. Refer to page 7 of this earnings release for CAPEX breakdown.

(3) Loans and financing, bonds repurchase and net sales of financial investments.

For details on cash flows, please refer to the "Consolidated financial statements at December 31, 2023".

## CAPEX

US\$ million	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22	2023	2022
<b>Mining</b>	<b>84.1</b>	<b>63.1</b>	<b>30.4</b>	<b>45.4</b>	<b>55.6</b>	<b>37.1</b>	<b>28.2</b>	<b>25.2</b>	<b>223.1</b>	<b>146.1</b>
Cerro Lindo	12.9	11.1	10.9	8.3	14.9	9.6	10.1	7.8	43.3	42.5
El Porvenir	28.8	16.7	9.7	13.4	16.9	9.5	5.3	5.0	68.6	36.7
Atacocha	6.5	2.6	2.5	4.7	1.1	0.5	0.7	2.0	16.2	4.5
Vazante	6.7	8.9	9.6	6.4	20.6	16.4	9.6	9.0	31.6	55.6
Morro Agudo	0.8	0.8	1.1	0.2	2.1	1.0	2.4	1.3	3.0	6.8
Aripuanã <sup>(1)</sup>	28.4	23.0	(3.4)	12.4	-	-	-	-	60.4	0.0
<b>Smelting</b>	<b>29.6</b>	<b>16.7</b>	<b>14.7</b>	<b>10.7</b>	<b>30.7</b>	<b>30.7</b>	<b>33.2</b>	<b>15.4</b>	<b>71.7</b>	<b>109.9</b>
Cajamarquilla	18.8	7.3	4.5	4.5	12.9	12.2	14.5	5.7	35.0	45.3
Três Marias	6.4	4.6	7.3	3.9	12.2	11.9	11.9	6.0	22.2	42.1
Juiz de Fora	4.4	4.8	2.9	2.3	5.5	6.5	6.8	3.6	14.4	22.4
<b>Other</b>	<b>(3.1)</b>	<b>2.5</b>	<b>14.8</b>	<b>0.1</b>	<b>29.5</b>	<b>17.2</b>	<b>36.5</b>	<b>42.0</b>	<b>14.3</b>	<b>125.3</b>
<b>Total</b>	<b>110.5</b>	<b>82.4</b>	<b>59.9</b>	<b>56.2</b>	<b>115.8</b>	<b>85.0</b>	<b>97.9</b>	<b>82.5</b>	<b>309.0</b>	<b>381.2</b>

Sustaining (US\$ million)	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22	2023	2022
<b>Mining</b>	<b>81.4</b>	<b>56.3</b>	<b>47.3</b>	<b>47.7</b>	<b>45.8</b>	<b>29.3</b>	<b>26.1</b>	<b>22.8</b>	<b>232.7</b>	<b>124.1</b>
Cerro Lindo	11.2	9.1	9.4	8.0	12.8	8.6	9.4	7.3	37.7	38.1
El Porvenir	28.8	16.7	9.7	13.4	16.6	9.4	5.1	4.7	68.7	35.7
Atacocha	6.4	2.6	2.5	4.7	1.1	0.5	0.8	2.0	16.1	4.4
Vazante	5.9	7.2	8.8	6.2	13.4	9.9	8.6	7.7	28.0	39.5
Morro Agudo	0.8	0.8	1.0	0.2	1.9	0.9	2.3	1.1	2.8	6.3
Aripuanã	28.4	19.9	15.9	15.2	-	-	-	-	79.4	0.0
<b>Smelting</b>	<b>25.5</b>	<b>14.2</b>	<b>10.9</b>	<b>7.9</b>	<b>16.7</b>	<b>18.3</b>	<b>23.8</b>	<b>9.7</b>	<b>58.5</b>	<b>68.5</b>
Cajamarquilla	16.4	6.2	3.2	4.0	10.2	10.0	13.1	5.2	29.8	38.5
Três Marias	5.0	3.5	5.2	2.4	2.8	2.8	5.5	2.6	16.1	13.7
Juiz de Fora	4.1	4.5	2.5	1.5	3.7	5.4	5.2	2.0	12.6	16.3
<b>Total Operations Sustaining</b>	<b>106.9</b>	<b>70.5</b>	<b>58.2</b>	<b>55.6</b>	<b>62.5</b>	<b>47.6</b>	<b>49.9</b>	<b>32.5</b>	<b>291.2</b>	<b>192.5</b>
Corporate Sustaining <sup>(2)</sup>	0.5	0.3	0.3	0.4	17.6	11.1	11.0	7.4	1.6	47.2
<b>Total Sustaining</b>	<b>107.4</b>	<b>70.8</b>	<b>58.5</b>	<b>56.0</b>	<b>80.1</b>	<b>58.7</b>	<b>61.0</b>	<b>39.9</b>	<b>292.8</b>	<b>239.7</b>

(1) The negative amounts are mainly related to reclassifications between Aripuanã and Corporate, and capitalization of interest net of advanced payments for imported materials and tax credits.

(2) Until 4Q22, Aripuanã sustaining expenses were included in Corporate Sustaining.

## All in Sustaining Cash Cost | Mining <sup>(1)</sup>

### 4Q23

US\$ million (excepted indicated otherwise)		Vazante	Morro Agudo	Cerro Lindo	El Porvenir	Atacocha	Consolidation of Operations	Corporate & Others	Mining
	Sales Volume (Zinc content in Products) Tonnes	34,909	6,763	25,254	14,199	2,712	83,837		83,837
(+)	COGS	29.4	15.3	98.1	57.4	20.4	220.7	0.6	221.2
(+)	On-site G&A	0.1	0.2	0.4	1.1	0.8	2.6		2.6
(-)	By-products revenue	(4.6)	(7.4)	(85.2)	(40.1)	(16.8)	(154.2)	11.1	(143.0)
(+)	Treatment Charges	27.0	4.3	13.8	8.5	1.7	55.4		55.4
(+)	Selling Expenses	0.1	0.1	0.3	0.1	0.0	0.7		0.7
(-)	Depreciation, amortization and depletion	(6.6)	(0.2)	(23.6)	(15.6)	(5.8)	(51.8)		(51.8)
(-)	Royalties	(0.5)	(0.4)	(1.3)	(0.6)	(0.2)	(3.0)		(3.0)
(-)	Workers participation & Bonus	(0.4)	(0.2)	(1.1)	0.5	(0.2)	(1.4)		(1.4)
(+)	Others	(0.8)	(0.2)	1.7	0.3	1.1	2.0		2.0
(=)	Cash Cost (Sold)	43.7	11.5	3.1	11.7	1.0	71.0	11.7	82.7
	<b>Cash Cost (Sold) (per ton)</b>	<b>1,253.0</b>	<b>1,699.0</b>	<b>121.3</b>	<b>825.6</b>	<b>374.3</b>	<b>847.3</b>	<b>0.0</b>	<b>986.7</b>
(+)	Sustaining Capital Expenditure	5.9	0.8	12.9	28.8	6.5	54.9	27.9	82.8
(=)	Sustaining Cash Cost (Sold)	49.7	12.3	16.0	40.5	7.5	125.9	39.6	165.6
	<b>Sustaining Cash Cost (Sold) (per ton)</b>	<b>1,422.6</b>	<b>1,814.4</b>	<b>632.6</b>	<b>2,855.1</b>	<b>2,758.7</b>	<b>1,502.1</b>	<b>0.0</b>	<b>1,974.8</b>
(+)	Workers participation & Bonus	0.4	0.2	1.1	(0.5)	0.2	1.4		1.4
(+)	Royalties	0.5	0.4	1.3	0.6	0.2	3.0		3.0
(+)	Corporate G&A							10.9	10.9
(=)	AISC (Sold)								180.9
(=)	<b>AISC (Sold) (per ton)</b>								<b>2,157.4</b>
(=)	<b>AISC (Sold) in US\$/lb</b>								<b>0.98</b>

(1) Our cash cost, sustaining cash cost and AISC are net of by-products credits, measured with respect to zinc sold.

## 4Q22

US\$ million (excepted indicated otherwise)		Vazante	Morro Agudo	Cerro Lindo	El Porvenir	Atacocha	Consolidation of Operations	Corporate & Others	Mining
	Sales Volume (Zinc content in Products) Tonnes	33,669	4,614	19,903	12,126	2,874	73,187		73,187
(+)	COGS	30.1	18.0	99.0	39.2	23.3	209.6	5.9	215.5
(+)	On-site G&A	0.2	0.1	0.1	0.2	0.1	0.8		0.8
(-)	By-products revenue	(4.7)	(5.5)	(95.8)	(40.5)	(26.1)	(172.6)	(2.3)	(174.8)
(+)	Treatment Charges	24.6	2.5	9.6	6.6	1.6	44.9		44.9
(+)	Selling Expenses	0.2	0.5	(0.1)	(0.2)	0.1	0.5		0.5
(-)	Depreciation, amortization and depletion	(5.5)	(2.0)	(27.3)	(8.2)	(3.9)	(47.0)		(47.0)
(-)	Royalties	(0.5)	(0.3)	(1.2)	(0.9)	(0.3)	(3.3)		(3.3)
(-)	Workers participation & Bonus	(0.4)	(0.2)	(1.0)	(0.8)	(0.2)	(2.6)		(2.6)
(+)	Others	(1.0)	(0.3)	0.0	4.5	(4.3)	(1.1)		(1.1)
(=)	Cash Cost (Sold)	42.9	12.8	(16.7)	(0.1)	(9.8)	29.2	3.6	32.8
	<b>Cash Cost (Sold) (per ton)</b>	<b>1,275.1</b>	<b>2,776.9</b>	<b>(840.4)</b>	<b>(6.5)</b>	<b>(3,395.9)</b>	<b>398.7</b>	<b>0.0</b>	<b>447.7</b>
(+)	Sustaining Capital Expenditure	13.6	2.1	14.9	16.9	1.1	48.6	27.4	76.1
(=)	Sustaining Cash Cost (Sold)	56.5	14.9	(1.8)	16.8	(8.6)	77.8	31.0	108.8
	<b>Sustaining Cash Cost (Sold) (per ton)</b>	<b>1,679.3</b>	<b>3,228.6</b>	<b>(92.2)</b>	<b>1,388.2</b>	<b>(2,996.2)</b>	<b>1,063.4</b>	<b>0.0</b>	<b>1,487.0</b>
(+)	Workers participation & Bonus	0.4	0.2	1.0	0.8	0.2	2.6		2.6
(+)	Royalties	0.5	0.3	1.2	0.9	0.3	3.3		3.3
(+)	Corporate G&A							12.8	12.8
(=)	AISC (Sold)								127.6
(=)	<b>AISC (Sold) (per ton)</b>								<b>1,743.2</b>
(=)	<b>AISC (Sold) in US\$/lb</b>								<b>0.79</b>

## 2023

US\$ million (excepted indicated otherwise)		Vazante	Morro Agudo	Cerro Lindo	El Porvenir	Atacocha	Consolidation of Operations	Corporate & Others	Mining
	Sales Volume (Zinc content in Products) Tonnes	145,662	23,167	78,388	57,673	8,486	313,376		313,376
(+)	COGS	124.7	65.0	354.8	205.1	69.9	819.5	(3.2)	816.3
(+)	On-site G&A	0.5	0.5	0.7	1.5	1.0	4.2		4.2
(-)	By-products revenue	(16.2)	(32.0)	(310.1)	(148.3)	(64.1)	(570.6)	24.5	(546.1)
(+)	Treatment Charges	114.2	14.9	41.6	34.9	5.2	210.8		210.8
(+)	Selling Expenses	0.3	(0.1)	2.0	0.6	0.2	3.0		3.0
(-)	Depreciation, amortization and depletion	(24.1)	(4.5)	(86.2)	(45.7)	(17.3)	(177.8)	(0.1)	(177.8)
(-)	Royalties	(2.2)	(1.4)	(2.0)	(2.5)	(0.4)	(8.4)		(8.4)
(-)	Workers participation & Bonus	(1.9)	(1.0)	(5.2)	(2.8)	(0.9)	(11.7)		(11.7)
(+)	Others	0.5	0.1	(6.6)	(6.5)	(1.8)	(14.3)		(14.3)
(=)	Cash Cost (Sold)	195.7	41.6	(10.9)	36.4	(8.1)	254.7	21.3	276.0
	<b>Cash Cost (Sold) (per ton)</b>	<b>1,343.5</b>	<b>1,796.8</b>	<b>(138.6)</b>	<b>630.6</b>	<b>(959.7)</b>	<b>812.7</b>	<b>0.0</b>	<b>880.6</b>
(+)	Sustaining Capital Expenditure	29.1	3.0	43.3	68.6	16.2	160.2	59.7	219.9
(=)	Sustaining Cash Cost (Sold)	224.8	44.6	32.4	105.0	8.1	414.8	81.0	495.8
	<b>Sustaining Cash Cost (Sold) (per ton)</b>	<b>1,543.2</b>	<b>1,925.1</b>	<b>413.1</b>	<b>1,820.8</b>	<b>949.4</b>	<b>1,323.8</b>	<b>0.0</b>	<b>1,582.2</b>
(+)	Workers participation & Bonus	1.9	1.0	5.2	2.8	0.9	11.7		11.7
(+)	Royalties	2.2	1.4	2.0	2.5	0.4	8.4		8.4
(+)	Corporate G&A							45.3	45.3
(=)	AISC (Sold)								561.2
(=)	<b>AISC (Sold) (per ton)</b>								<b>1,790.7</b>
(=)	<b>AISC (Sold) in US\$/lb</b>								<b>0.81</b>

Note: Cash cost and AISC per ton sold does not include the impact of the cost of idleness capacity of US\$5.2 million in Cerro Lindo and US\$2.6 million in Atacocha in 2023.

(1) Our cash cost, sustaining cash cost and AISC are net of by-products credits, measured with respect to zinc sold.

## 2022

US\$ million (excepted indicated otherwise)		Vazante	Morro Agudo	Cerro Lindo	El Porvenir	Atacocha	Consolidation of Operations	Corporate & Others	Mining
	Sales Volume (Zinc content in Products) Tonnes	131,527	18,700	85,910	52,001	9,560	297,699		297,699
(+)	COGS	116.0	63.8	396.5	167.9	75.4	819.6	(1.8)	817.8
(+)	On-site G&A	1.2	0.8	0.5	0.7	0.3	3.4		3.4
(-)	By-products revenue	(10.3)	(22.6)	(351.2)	(123.3)	(72.2)	(579.7)	11.7	(568.0)
(+)	Treatment Charges	91.3	9.6	39.9	27.6	5.1	173.5		173.5
(+)	Selling Expenses	0.4	1.4	1.8	0.6	0.5	4.7		4.7
(-)	Depreciation, amortization and depletion	(24.0)	(9.1)	(117.0)	(27.2)	(14.9)	(192.1)	(0.0)	(192.2)
(-)	Royalties	(2.1)	(1.4)	(5.6)	(3.8)	(0.9)	(13.8)		(13.8)
(-)	Workers participation & Bonus	(1.6)	(0.9)	(13.3)	(5.2)	(0.8)	(21.8)		(21.8)
(+)	Others	(9.5)	(1.2)	0.2	0.6	(7.3)	(17.3)		(17.3)
(=)	Cash Cost (Sold)	161.4	40.4	(48.2)	37.8	(15.0)	176.5	9.9	186.4
	<b>Cash Cost (Sold) (per ton)</b>	<b>1,227.5</b>	<b>2,160.5</b>	<b>(561.4)</b>	<b>727.7</b>	<b>(1,566.2)</b>	<b>592.8</b>	<b>0.0</b>	<b>626.0</b>
(+)	Sustaining Capital Expenditure	41.9	6.8	42.5	36.7	4.5	132.4	69.4	201.8
(=)	Sustaining Cash Cost (Sold)	203.4	47.2	(5.8)	74.5	(10.5)	308.9	79.3	388.2
	<b>Sustaining Cash Cost (Sold) (per ton)</b>	<b>1,546.2</b>	<b>2,523.8</b>	<b>(67.1)</b>	<b>1,433.6</b>	<b>(1,096.6)</b>	<b>1,037.5</b>	<b>0.0</b>	<b>1,304.0</b>
(+)	Workers participation & Bonus	1.6	0.9	13.3	5.2	0.8	21.8		21.8
(+)	Royalties	2.1	1.4	5.6	3.8	0.9	13.8		13.8
(+)	Corporate G&A							52.0	52.0
(=)	AISC (Sold)								475.8
(=)	<b>AISC (Sold) (per ton)</b>								<b>1,598.1</b>
(=)	<b>AISC (Sold) in US\$/lb</b>								<b>0.72</b>

Note: Cash cost and AISC per ton sold does not include the impact of the cost of idleness capacity of US\$4.4 million in Vazante and US\$2.1 million in Atacocha in 2022.

## Conversion and All in Sustaining Cash Cost | Smelting <sup>(2)</sup>

### 4Q23

US\$ million (excepted indicated otherwise)		Três Marias	Juiz de Fora	Cajamarquilla	Consolidation of Operations	Corporate	Smelting
Sales Volume (Zinc content in Products)							
	Tonnes	40,678	22,483	79,254	142,416		142,416
(+)	COGS	119.0	65.4	221.0	405.4	(1.7)	403.7
(-)	Cost of freight	(6.0)	(2.7)	(10.3)	(19.1)		(19.1)
(+)	On-site G&A	0.3	0.1	1.5	1.9		1.9
(-)	Depreciation, amortization and depletion	(5.7)	(3.5)	(10.5)	(19.7)		(19.7)
(-)	By-products revenue	(3.4)	(7.6)	(34.3)	(45.4)	1.7	(43.7)
(-)	Workers participation & Bonus	(0.4)	(0.3)	(4.6)	(5.3)		(5.3)
(+)	Others	(2.4)	(1.5)	1.3	(2.7)		(2.7)
(=)	Cash Cost (Sold)	101.4	49.8	164.1	315.2	0.0	315.2
	<b>Cash Cost (Sold) (per ton)</b>	<b>2,491.7</b>	<b>2,215.7</b>	<b>2,070.2</b>	<b>2,213.5</b>		<b>2,213.5</b>
(+)	Sustaining Capital Expenditure	6.4	4.4	18.7	29.5	(3.0)	26.5
(=)	Sustaining Cash Cost (Sold)	107.8	54.2	182.8	344.7	(3.0)	341.7
	<b>Sustaining Cash Cost (Sold) (per ton)</b>	<b>2,649.0</b>	<b>2,410.7</b>	<b>2,306.0</b>	<b>2,420.5</b>		<b>2,399.4</b>
(+)	Workers participation & Bonus	0.4	0.3	4.6	5.3		5.3
(+)	Corporate G&A					8.2	8.2
(=)	AISC (Sold)						355.2
(=)	<b>AISC (Sold) (per ton)</b>						<b>2,494.3</b>
(=)	<b>AISC (Sold) in US\$/lb</b>						<b>1.13</b>

Note: Cash cost and AISC per ton sold does not include the impact of the cost of metal purchased for resale and the cost of idleness capacity of US\$3.2 million in Cajamarquilla in 4Q23.

Note: Cash cost and AISC per ton sold does not include the impact of the cost of metal purchased for resale.

US\$ million (excepted indicated otherwise)		Três Marias	Juiz de Fora	Cajamarquilla	Smelting
Contained Zinc Sales					
	Tonnes	40,678	22,483	79,254	142,416
	COGS	119.0	65.4	221.0	405.4
(-)	Raw Material	(51.5)	(34.6)	(128.1)	(214.1)
(+)	By product cost	(17.3)	(0.5)	(8.4)	(26.2)
(+/-)	Consolidation effects	(5.5)	3.0	(34.3)	(36.8)
(+)	Others	(22.2)	(9.2)	(5.1)	(36.5)
(=)	Conversion Cost	22.5	24.1	45.1	91.7
(=)	<b>Conversion Cost in US\$/t</b>	<b>553.8</b>	<b>1,071.6</b>	<b>569.1</b>	<b>644.0</b>
(=)	<b>Conversion Cost in US\$/lb</b>	<b>0.25</b>	<b>0.49</b>	<b>0.26</b>	<b>0.29</b>

(2) Our conversion cost, cash cost, sustaining cash cost and AISC net of by-products credits are measured with respect to zinc sold.

## 4Q22

US\$ million (excepted indicated otherwise)		Três Marias	Juiz de Fora	Cajamarquilla	Consolidation of Operations	Corporate	Smelting
	Sales Volume (Zinc content in Products)						
	Tonnes	50,489	21,620	92,744	164,853		164,853
(+)	COGS	145.7	78.6	317.1	541.4	(1.7)	539.6
(-)	Cost of freight	(5.2)	(2.2)	(15.0)	(22.4)		(22.4)
(+)	On-site G&A	0.4	0.3	1.1	1.8		1.8
(-)	Depreciation, amortization and depletion	(4.4)	(3.1)	(10.2)	(17.7)		(17.7)
(-)	By-products revenue	(2.8)	(7.3)	(52.8)	(62.9)	1.7	(61.1)
(-)	Workers participation & Bonus	(0.5)	(0.4)	(2.9)	(3.8)		(3.8)
(+)	Others	(2.5)	(1.5)	4.5	0.5		0.5
(=)	Cash Cost (Sold)	130.7	64.5	241.7	436.9	0.0	436.9
	<b>Cash Cost (Sold) (per ton)</b>	<b>2,588.2</b>	<b>2,981.6</b>	<b>2,606.5</b>	<b>2,650.1</b>		<b>2,650.1</b>
(+)	Sustaining Capital Expenditure	12.2	5.5	12.9	30.7	(5.2)	25.5
(=)	Sustaining Cash Cost (Sold)	142.9	70.0	254.7	467.6	(5.2)	462.4
	<b>Sustaining Cash Cost (Sold) (per ton)</b>	<b>2,830.7</b>	<b>3,237.0</b>	<b>2,745.7</b>	<b>2,836.2</b>		<b>2,804.9</b>
(+)	Workers participation & Bonus	0.5	0.4	2.9	3.8		3.8
(+)	Corporate G&A					8.4	8.4
(=)	AISC (Sold)						474.6
(=)	<b>AISC (Sold) (per ton)</b>						<b>2,878.8</b>
(=)	<b>AISC (Sold) in US\$/lb</b>						<b>1.31</b>

Note: Cash cost and AISC per ton sold does not include the impact of the cost of metal purchased for resale.

US\$ million (excepted indicated otherwise)		Três Marias	Juiz de Fora	Cajamarquilla	Smelting
	Contained Zinc Sales				
	Tonnes	50,489	21,620	92,744	164,853
	COGS	145.7	78.6	317.1	541.4
(-)	Raw Material	(90.3)	(57.3)	(213.8)	(361.4)
(+)	By product cost	(14.3)	(1.4)	(7.9)	(23.7)
(+/-)	Consolidation effects	(2.1)	2.5	(50.9)	(50.5)
(+)	Others	(14.4)	(6.4)	4.8	(16.0)
(=)	Conversion Cost	24.5	16.0	49.2	89.8
(=)	<b>Conversion Cost in US\$/t</b>	<b>486.1</b>	<b>740.4</b>	<b>530.8</b>	<b>544.6</b>
(=)	<b>Conversion Cost in US\$/lb</b>	<b>0.22</b>	<b>0.34</b>	<b>0.24</b>	<b>0.25</b>

## 2023

US\$ million (excepted indicated otherwise)	Três Marias	Juiz de Fora	Cajamarquilla	Consolidation of Operations	Corporate	Smelting
Sales Volume (Zinc content in Products)						
Tonnes	174,790	81,939	325,927	582,656		582,656
(+) COGS	502.2	268.8	960.3	1,731.4	(5.3)	1,726.1
(-) Cost of freight	(22.4)	(9.5)	(43.5)	(75.4)		(75.4)
(+) On-site G&A	1.4	0.7	5.5	7.5		7.5
(-) Depreciation, amortization and depletion	(21.2)	(13.1)	(43.1)	(77.3)		(77.3)
(-) By-products revenue	(14.2)	(26.9)	(135.6)	(176.7)	5.3	(171.4)
(-) Workers participation & Bonus	(1.5)	(1.6)	(10.8)	(13.9)		(13.9)
(+) Others	0.8	0.1	10.9	11.8		11.8
(=) Cash Cost (Sold)	445.2	218.5	743.7	1,407.3	0.0	1,407.3
<b>Cash Cost (Sold) (per ton)</b>	<b>2,546.9</b>	<b>2,666.3</b>	<b>2,281.7</b>	<b>2,415.4</b>		<b>2,415.4</b>
(+) Sustaining Capital Expenditure	22.2	14.4	34.5	71.1	13.9	85.0
(=) Sustaining Cash Cost (Sold)	467.4	232.9	778.1	1,478.4	13.9	1,492.3
<b>Sustaining Cash Cost (Sold) (per ton)</b>	<b>2,673.9</b>	<b>2,842.6</b>	<b>2,387.5</b>	<b>2,537.4</b>		<b>2,561.3</b>
(+) Workers participation & Bonus	1.5	1.6	10.8	13.9		13.9
(+) Corporate G&A					27.9	27.9
(=) AISC (Sold)						1,534.1
<b>(=) AISC (Sold) (per ton)</b>						<b>2,632.9</b>
<b>(=) AISC (Sold) in US\$/lb</b>						<b>1.19</b>

Note: Cash cost and AISC per ton sold does not include the impact of the cost of metal purchased for resale and the cost of idleness capacity of US\$3.2 million in Cajamarquilla in 2023.

Note: Cash cost and AISC per ton sold does not include the impact of the cost of metal purchased for resale.

US\$ million (excepted indicated otherwise)	Três Marias	Juiz de Fora	Cajamarquilla	Smelting
Contained Zinc Sales				
Tonnes	174,790	81,939	325,927	582,656
COGS	502.3	268.7	960.3	1,731.3
(-) Raw Material	(240.2)	(160.4)	(630.4)	(1,031.0)
(+) By product cost	(67.3)	(2.1)	(31.9)	(101.3)
(+/-) Consolidation effects	(8.0)	11.3	(97.7)	(94.4)
(+) Others	(84.6)	(27.6)	(0.7)	(112.9)
(=) Conversion Cost	102.1	89.9	199.6	391.6
<b>(=) Conversion Cost in US\$/t</b>	<b>584.2</b>	<b>1,097.5</b>	<b>612.4</b>	<b>672.1</b>
<b>(=) Conversion Cost in US\$/lb</b>	<b>0.26</b>	<b>0.50</b>	<b>0.28</b>	<b>0.30</b>

(2) Our conversion cost, cash cost, sustaining cash cost and AISC net of by-products credits are measured with respect to zinc sold.

## 2022

US\$ million (excepted indicated otherwise)		Três Marias	Juiz de Fora	Cajamarquilla	Consolidation of Operations	Corporate	Smelting
	Sales Volume (Zinc content in Products)						
	Tonnes	180,029	83,084	334,076	597,189		597,189
(+)	COGS	621.4	325.2	1,219.4	2,166.1	(6.1)	2,159.9
(-)	Cost of freight	(19.5)	(9.9)	(57.0)	(86.4)		(86.4)
(+)	On-site G&A	2.0	1.1	6.1	9.2		9.2
(-)	Depreciation, amortization and depletion	(18.4)	(13.1)	(47.2)	(78.7)		(78.7)
(-)	By-products revenue	(9.5)	(36.8)	(180.4)	(226.7)	6.1	(220.5)
(-)	Workers participation & Bonus	(1.6)	(1.3)	(13.7)	(16.6)		(16.6)
(+)	Others	(13.5)	(6.0)	14.7	(4.8)		(4.8)
(=)	Cash Cost (Sold)	561.0	259.1	941.9	1,761.9		1,761.9
	<b>Cash Cost (Sold) (per ton)</b>	<b>3,116.0</b>	<b>3,118.1</b>	<b>2,819.5</b>	<b>2,950.4</b>		<b>2,950.4</b>
(+)	Sustaining Capital Expenditure	42.1	22.4	45.3	109.9	(18.9)	90.9
(=)	Sustaining Cash Cost (Sold)	603.1	281.5	987.2	1,871.8	(18.9)	1,852.9
	<b>Sustaining Cash Cost (Sold) (per ton)</b>	<b>3,350.1</b>	<b>3,387.9</b>	<b>2,955.1</b>	<b>3,134.4</b>		<b>3,102.7</b>
(+)	Workers participation & Bonus	1.6	1.3	13.7	16.6		16.6
(+)	Corporate G&A					31.0	31.0
(=)	AISC (Sold)						1,900.6
(=)	<b>AISC (Sold) (per ton)</b>						<b>3,182.5</b>
(=)	<b>AISC (Sold) in US\$/lb</b>						<b>1.44</b>

Note: Cash cost and AISC per ton sold does not include the impact of the cost of metal purchased for resale and the cost of idleness capacity of US\$2.3 million in Três Marias in 2022.

US\$ million (excepted indicated otherwise)		Três Marias	Juiz de Fora	Cajamarquilla	Smelting
	Contained Zinc Sales				
	Tonnes	180,032	83,084	334,076	597,191
	COGS	621.4	325.2	1,219.4	2,166.1
(-)	Raw Material	(431.2)	(233.6)	(923.1)	(1,588.0)
(+)	By product cost	(57.4)	(4.2)	(27.6)	(89.2)
(+/-)	Consolidation effects	(3.5)	3.4	(68.4)	(68.5)
(+)	Others	(52.4)	(23.7)	(0.6)	(76.8)
(=)	Conversion Cost	76.9	67.1	199.6	343.6
(=)	<b>Conversion Cost in US\$/t</b>	<b>427.2</b>	<b>807.2</b>	<b>597.4</b>	<b>575.3</b>
(=)	<b>Conversion Cost in US\$/lb</b>	<b>0.19</b>	<b>0.37</b>	<b>0.27</b>	<b>0.26</b>