

## Q4 2021 PRODUCTION REPORT

### FULL YEAR GUIDANCE ACHIEVED

**Antofagasta plc CEO, Iván Arriagada said:** *“Despite external pressures, such as the ongoing drought in Chile, higher input costs and global supply chain challenges, the Company has successfully achieved its production and cost guidance for the year with copper production at 721,500 tonnes and net cash costs of \$1.20/lb.*

*“In 2022 we expect copper production to be 660-690,000 tonnes at a net cash cost of \$1.55/lb as grades decrease at Centinela Concentrates and the drought continues to impact Los Pelambres. However, we have a long-term solution to the water shortage which will come in the second half of the year when our desalination plant is commissioned.*

*“Our unit costs will be temporarily affected by the decrease in production in 2022 combined with increases in input prices, particularly acid. However, through our Cost and Competitiveness Programme, improving operational effectiveness and innovation we will continue to control costs tightly in the short-, medium- and long-term.*

*“In the meantime, the demand picture for copper continues to be strong as copper is essential to economic activity and green investment initiatives such as electric vehicles, infrastructure and renewable energy.”*

## HIGHLIGHTS

### PRODUCTION

- **Group copper production for the full year was 721,500 tonnes**, within the guidance range and 1.7% lower than last year mainly on expected higher grades at Centinela Concentrates, offset by expected lower grades and lower throughput at Los Pelambres
- **Group copper production in Q4 2021 was 178,900 tonnes**, 1.2% lower than in the previous quarter as lower water availability impacted throughput at Los Pelambres by 13.6%, mainly as a result of the previously advised drought
- **Gold production for the full year was 252,200 ounces**, 23.6% higher than in 2020 on higher grades at Centinela. Quarterly production decreased by 2.8% to 64,900 ounces on lower throughput at Los Pelambres
- **Molybdenum production in the quarter was 2,100 tonnes**, 500 tonnes lower than in the previous quarter on lower throughput at Los Pelambres. For the full year, production was 10,500 tonnes, 16.7% lower than in 2020 on lower grades at Los Pelambres and Centinela

### CASH COSTS

- **Cash costs before by-product credits in 2021 were \$1.79/lb**, 14.7% higher than last year due the stronger Chilean peso (4%), higher energy and diesel prices, and lower production
- **Cash costs before by-product credits in Q4 2021 were \$1.92/lb**, 13c/lb higher than in Q3 2021 due to higher input prices and the lower production at Los Pelambres
- **Net cash costs for the full year were \$1.20/lb**, below guidance and 5.3% higher than in 2020 due to higher cash costs before by-product credits partially offset by the 17c/lb increase in by-products credits on increased gold production and realised molybdenum price
- **Net cash costs in Q4 2021 were \$1.35/lb**, 19c/lb higher than in the previous quarter, reflecting the higher cash costs before by-products credits and the decrease in by-products credits

## 2022 GUIDANCE

- Group production in 2022 is expected to be 660-690,000 tonnes of copper (as previously announced), 170-190,000 ounces of gold and 8,500-10,000 tonnes of molybdenum. The copper and gold production reflect lower expected grades at Centinela Concentrates and the temporarily reduced throughput at Los Pelambres because of the continued drought. It assumes there is no precipitation until the rainy season and the desalination plant starts operating in H2 2022. Copper production is expected to increase quarter on quarter throughout the year
- Group cash costs in 2022 before and after by-product credits are expected to be \$2.00/lb and \$1.55/lb respectively, reflecting increased input costs, especially sulphuric acid (up 125%) at our cathode operations, and lower production at the Group's two lowest cost operations, namely Los Pelambres and Centinela Concentrates. By-product credits are also expected to decrease as gold and molybdenum production falls
- Capital expenditure in 2022 is expected to be \$1.7–1.9 billion, as sustaining and mine development expenditure increase for the year to approximately \$1.0 billion, and development expenditure continues on the Los Pelambres Expansion project and at Centinela, including the ongoing study and review work on the second concentrator. The final estimated capital expenditure to complete the Los Pelambres Expansion remains under review due primarily to COVID-19 impacts.

## GROWTH PROJECTS UPDATE

- As at the end of 2021 the Los Pelambres Expansion project was 68% complete (design, procurement and construction). The final estimated project costs are under review, considering the impact of COVID-19, higher input and logistics costs and project workers absenteeism. The completion schedule for the water supply system remains unchanged and is expected in H2 2022. For the concentrator plant expansion, which has the highest number of workers and was most affected by absenteeism, completion is now planned for the beginning of 2023
- At Zaldívar construction of the Chloride Leach project was completed during January 2022 and is now being commissioned

## SUSTAINABILITY

- In December, the Company released its inaugural [Climate Change Report](#) which set out its progress and plans for fulfilling its Climate Change Strategy. This included its approach to achieving the previously announced emission reduction targets, as well as the Group's adaption initiatives, the evaluation of the physical risks of climate change, transition risks and the management of critical resources such as water and energy, all with full regard of the impact on the Group's stakeholders. Climate change considerations are integrated into the Group's business decision making processes including using an internal carbon price
- The Company also released a [Social Management Report](#) in December

## OTHER

- A three-year labour agreement was agreed with one of the workers unions at Centinela in December, six months earlier than originally scheduled. During 2022 negotiations are scheduled with the supervisors' unions at Zaldívar (August), Los Pelambres (October) and Antucoya (November), and with the workers' union at Antucoya (September).

GROUP PRODUCTION AND CASH COSTS		Year to Date			Q4	Q3	
		2021	2020	%	2021	2021	%
Copper production	kt	721.5	733.9	(1.7)	178.9	181.1	(1.2)
Copper sales	kt	725.6	738.5	(1.7)	197.2	182.3	8.2
Gold production	koz	252.2	204.1	23.6	64.9	66.8	(2.8)
Molybdenum production	kt	10.5	12.6	(16.7)	2.1	2.6	(19.2)
Cash costs before by-product credits <sup>(1)</sup>	\$/lb	1.79	1.56	14.7	1.92	1.79	7.3
Net cash costs <sup>(1)</sup>	\$/lb	1.20	1.14	5.3	1.35	1.16	16.4

(1) Cash cost is a non-GAAP measure used by the mining industry to express the cost of production in US dollars per pound of copper produced.

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## MINING OPERATIONS

### Los Pelambres

Copper production at Los Pelambres during the quarter was 74,300 tonnes, 8.4% lower than in the previous quarter as throughput reduced by 13.6%. This was primarily due to decreased plant run-time because of operational measures taken to optimise the use of water and major maintenance during the quarter.

For the full year, copper production was 324,700 tonnes, 9.7% lower than last year. This decrease was mainly due to the lower throughput due to water optimisation and expected lower copper grade.

Molybdenum production was 1,800 tonnes in Q4 2021, 600 tonnes lower than in the previous quarter, and for the full year was 9,200 tonnes, 15.6% lower than in 2020 because of lower throughput, grades and recoveries.

Cash costs before by-product credits in Q4 were \$1.74/lb, 8.7% higher than in previous quarter. For the full year cash costs before by-product credits were \$1.59/lb, 25.2% higher than 2020. This was due to the lower production due to water restrictions, the stronger Chilean peso, higher input prices and the payment of a one-off signing bonus following the successful completion of a new 3-year labour agreement.

Net cash costs for the quarter were \$1.12/lb, 31c/lb higher than Q3 as molybdenum production fell by 25.0%. For the full year net cash costs were \$0.89/lb, 8c/lb higher than in 2020, due to higher by-product credits driven by higher realised prices offset by higher cash costs before by-product credits.

The labour agreement with the supervisors' union expires in October 2022.

Major maintenance scheduled in Q1 and Q2 2022 is included in full year guidance.

LOS PELAMBRES		Year to Date			Q4	Q3	
		2021	2020	%	2021	2021	%
Daily ore throughput	kt	155.5	161.9	(3.9)	136.6	158.0	(13.6)
Copper grade	%	0.66	0.70	(5.9)	0.67	0.64	4.1
Copper recovery	%	90.3	90.0	0.3	91.8	90.3	1.6
Copper production	kt	324.7	359.6	(9.7)	74.3	81.1	(8.4)
Copper sales	kt	324.5	366.0	(11.3)	89.9	69.1	30.1
Molybdenum grade	%	0.019	0.021	(7.9)	0.018	0.018	0.8
Molybdenum recovery	%	84.5	85.6	(1.3)	85.1	83.9	1.5
Molybdenum production	kt	9.2	10.9	(15.6)	1.8	2.4	(25.0)
Molybdenum sales	kt	9.2	10.8	(14.8)	2.2	2.1	4.8
Gold grade	g/t	0.044	0.047	(7.0)	0.043	0.037	15.0
Gold recovery	%	71.8	73.0	(1.7)	74.5	83.0	(10.2)
Gold production	koz	53.2	60.3	(11.8)	11.8	13.4	(11.9)
Gold sales	koz	51.1	58.4	(12.5)	14.2	11.1	27.9
Cash costs before by-product credits <sup>(1)</sup>	\$/lb	1.59	1.27	25.2	1.74	1.60	8.7
Net cash costs <sup>(1)</sup>	\$/lb	0.89	0.81	9.9	1.12	0.81	38.3

(1) Includes tolling charges of \$0.15/lb in Q4 2021, \$0.17/lb in Q3 2021, \$0.15/lb FY 2021 and \$0.18/lb FY 2020

## **Centinela**

Centinela had a solid year in 2021 with increased production and lower costs with higher sulphide grades and increased throughput.

Production for 2021 was 274,200 tonnes, 11.1% higher than in 2020, due to higher grades and increased throughput at Centinela Concentrates which operated at design capacity for the full year. During Q4 Centinela produced 71,400 tonnes of copper, 1.0% higher than in the previous quarter.

For the full year, copper in concentrate production was 185,400 tonnes, 20.7% higher than in 2020, reflecting expected higher ore grades and throughput over 105 ktpd. Production for the quarter was 47,400 tonnes, 0.4% lower than in Q3.

Full year copper cathode production was 88,800 tonnes, 4.8% lower than in 2020 mainly due to expected lower grades and recoveries, despite higher throughput. Cathode production during the quarter was 24,000 tonnes, 3.6% higher than Q3 2021 primarily on higher ore grades partially offset by lower throughput.

Gold production for the full year was 199,000 ounces, 38.5% higher than in 2020, due to higher throughput and grades. For the quarter, production was 53,100 ounces, 0.6% lower than the previous quarter on lower grades.

Cash costs before by-product credits for the full year were \$1.87/lb, 2c/lb higher than in 2020 as the impact of higher copper production was offset by the stronger Chilean peso and higher input costs. Cash costs before by-product credits were \$2.00/lb in Q4 2021, 7.5% higher than in the previous quarter.

For the full year, by-product credits were \$0.74/lb, 16c/lb higher than in 2020 due to higher gold production and the improved molybdenum price. In Q4 by-product credits increased by 5c/lb compared with Q3 as molybdenum production increased, although the price declined.

During the full year net cash costs were \$1.13/lb, 14c/lb lower than 2020 due to higher by-product credits driven by higher gold production offset by higher cash costs before by-product credits. Net cash costs in Q4 were \$1.23/lb, 7.9% higher than in the previous quarter.

In 2022 the average mined grade and recoveries at Centinela Concentrates will decline, partly offset by higher grades at Centinela Cathodes. Total production is expected to be 245-255,000 tonnes.

A labour negotiation with the largest of the workers' unions was successfully concluded during the quarter, before the deadline in May 2022. There will be no further negotiations at Centinela during 2022.

Major maintenance scheduled in Q1 and Q3 2022 is included in full year guidance.

CENTINELA		Year to Date			Q4	Q3	
		2021	2020	%	2021	2021	%
<b>CONCENTRATES</b>							
Daily ore throughput	kt	105.1	97.0	8.4	110.8	100.3	10.4
Copper grade	%	0.60	0.53	12.0	0.59	0.62	(4.7)
Copper recovery	%	84.8	84.5	0.3	84.9	84.9	(0.0)
Copper production	kt	185.4	153.5	20.7	47.4	47.6	(0.4)
Copper sales	kt	187.7	152.7	23.0	50.6	56.3	(10.0)
Molybdenum grade	%	0.009	0.012	(21.2)	0.010	0.008	27.2
Molybdenum recovery	%	47.9	38.6	24.0	46.2	43.8	5.5
Molybdenum production	kt	1.3	1.7	(23.5)	0.4	0.2	100.0
Molybdenum sales	kt	1.2	1.7	(29.4)	0.2	0.2	0.0
Gold grade	g/t	0.24	0.19	28.5	0.25	0.26	(7.1)
Gold recovery	%	71.0	70.6	0.5	70.4	69.1	1.8
Gold production	koz	199.0	143.7	38.5	53.1	53.4	(0.6)
Gold sales	koz	193.5	141.2	37.0	54.2	61.4	(11.7)
<b>CATHODES</b>							
Daily ore throughput	kt	57.8	56.9	1.6	57.8	60.7	(4.9)
Copper grade	%	0.62	0.64	(3.6)	0.64	0.61	5.8
Copper recovery	%	65.6	67.6	(2.9)	67.4	64.9	3.9
Copper production – heap leach	kt	85.3	89.0	(4.2)	23.3	22.2	4.7
Copper production – total <sup>(1)</sup>	kt	88.8	93.3	(4.8)	24.0	23.2	3.6
Copper sales	kt	88.4	95.0	(7.0)	24.8	25.0	(0.9)
Total copper production	kt	274.2	246.8	11.1	71.4	70.7	1.0
Cash costs before by-product credits <sup>(2)</sup>	\$/lb	1.87	1.85	1.1	2.00	1.86	7.5
Net cash costs <sup>(2)</sup>	\$/lb	1.13	1.27	(11.0)	1.23	1.14	7.9

(1) Includes production from ROM material

(2) Includes tolling charges of \$0.13/lb in Q4 2021, \$0.10/lb in Q3 2021, \$0.12/lb FY 2021 and \$0.14/lb FY 2020

## Antucoya

Production for the full year was 78,600 tonnes, 0.9% lower than last year due to higher throughput, offset by expected lower grades and resulting lower recoveries. During Q4 production was 20,900 tonnes, 14.2% higher than the previous quarter as throughput, grades and recoveries increased.

During the quarter, cash costs were \$2.02/lb compared to \$2.06/lb in Q3. For the full year cash costs were \$2.04/lb, 12.1% higher than in 2020 due to a stronger Chilean peso, and higher input costs and maintenance expenditure.

In 2022, the labour agreement with the supervisor's union expires in November.

Major maintenance scheduled in Q1 and Q3 2022 is included in full year guidance.

ANTUCOYA		Year to Date			Q4	Q3	
		2021	2020	%	2021	2021	%
Daily ore throughput	kt	85.5	76.0	12.5	91.1	82.9	9.9
Copper grade	%	0.34	0.38	(10.2)	0.35	0.33	4.1
Copper recovery	%	69.1	73.7	(6.3)	71.3	67.9	5.0
Copper production	kt	78.6	79.3	(0.9)	20.9	18.3	14.2
Copper sales	kt	80.4	76.5	5.1	19.9	20.3	(2.0)
Cash costs	\$/lb	2.04	1.82	12.1	2.02	2.06	(1.9)

## Zaldívar

Attributable copper production for the year was 44,000 tonnes, 8.7% lower than in 2020 mainly due to expected lower grades, partially offset by higher throughput. During the quarter Zaldívar produced 12,400 tonnes of copper, 12.7% higher than in the previous quarter on higher grades, recoveries and throughput.

Cash costs during the quarter were \$2.31/lb and for the full year were \$2.39/lb, compared with \$1.80/lb in 2020, mainly due to lower grades, higher maintenance costs and the stronger Chilean peso.

In 2022, the labour agreement with the supervisor's union expires in August.

Major maintenance scheduled in Q1 and Q3 2022 is included in full year guidance.

ZALDÍVAR		Year to Date			Q4	Q3	
		2021	2020	%	2021	2021	%
Daily ore throughput	kt	44.4	39.3	12.9	48.6	48.0	1.3
Copper grade	%	0.74	1.02	(27.5)	0.77	0.65	17.6
Copper recovery <sup>(1)</sup>	%	53.5	50.1	6.8	53.5	52.9	1.2
Copper production – heap leach <sup>(2)</sup>	kt	32.0	36.6	(12.4)	9.1	7.7	17.8
Copper production – total <sup>(2,3)</sup>	kt	44.0	48.2	(8.7)	12.4	11.0	12.7
Copper sales <sup>(2)</sup>	kt	44.6	48.3	(7.7)	12.0	11.6	3.4
Cash costs	\$/lb	2.39	1.80	32.8	2.31	2.34	(1.3)

(1) 12-month rolling recoveries

(2) Group's 50% share

(3) Includes production from secondary leaching

## Transport Division

Total transport volumes in Q4 were 1.8 million tonnes, 0.5% higher than the previous quarter. For the full year, transport volumes increased by 4.0% to 6.7 million tonnes as a new transport contract started.

TRANSPORT		Year to Date			Q4	Q3	
		2021	2020	%	2021	2021	%
Rail	kt	5,222	4,847	7.7	1,338	1,370	(2.3)
Road	kt	1,481	1,597	(7.3)	422	381	10.8
Total tonnage transported		6,702	6,444	4.0	1,760	1,751	0.5

## Commodity prices and exchange rates

		Year to Date			Q4	Q3	
		2021	2020	%	2021	2021	%
<b>Copper</b>							
Market price	\$/lb	4.23	2.80	51.1	4.40	4.25	3.5
Realised price	\$/lb	4.37	2.98	46.6	4.65	3.99	16.5
<b>Gold</b>							
Market price	\$/oz	1,799	1,770	1.6	1,795	1,790	0.3
Realised price	\$/oz	1,788	1,797	(0.5)	1,812	1,781	1.7
<b>Molybdenum</b>							
Market price	\$/lb	15.9	8.7	82.8	18.9	19.0	(0.5)
Realised price	\$/lb	17.4	8.8	97.7	18.1	20.2	(10.4)
<b>Exchange rates</b>							
Chilean peso	per \$	760	792	(4.0)	826	773	6.9

Spot commodity prices for copper, gold and molybdenum as at 31 December 2021 were \$4.40/lb, \$1,820/oz and \$18.7/lb respectively, compared with \$4.10/lb, \$1,737/oz and \$18.5/lb as at 30 September 2021 and \$3.51/lb, \$1,891/oz and \$10.0/lb as at 31 December 2020.

The provisional pricing adjustments for copper, gold and molybdenum for the full year were positive \$352.5 million, negative \$10.8 million and positive \$37.6 million respectively.

The provisional pricing adjustments for copper, gold and molybdenum for the quarter were positive \$150.9 million, negative \$0.5 million and negative \$9.4 million respectively.



## Exceptional item

During 2021 there was an exceptional item of \$91 million which reflects the recognition of a deferred tax asset at Antucoya, due to the increased consensus copper price forecasts resulting in higher forecast taxable profits.

## 2022 Guidance

		Los Pelambres	Centinela	Antucoya	Zaldívar	Group
<b>Production</b>						
Copper	kt	290 – 300	245 – 255	75 – 80	50 – 55	<b>660 – 690</b>
Gold	koz	40 – 50	130 – 140	-	-	<b>170 – 190</b>
Molybdenum	kt	6.5 – 7.5	2.0 – 2.5	-	-	<b>8.5 – 10.0</b>
<b>Grade</b>						
Copper	%	0.64%	0.57%	0.36%	0.75%	-
<b>Cash costs</b>						
Cash costs before by-product credits <sup>(1)</sup>	\$/lb	1.75	2.30	2.30	2.20	<b>2.00</b>
Net cash costs <sup>(1, 2)</sup>	\$/lb	1.25	1.60	2.30	2.20	<b>1.55</b>

(1) Assumed CLP/USD exchange rate of 810

(2) Includes by-product credits at a gold price of \$1,800/oz and a molybdenum price of \$15.0/lb

As previously announced, copper production for 2022 is expected to be 660-690,000 tonnes as grades decrease at Centinela Concentrates and the temporarily reduced throughput at Los Pelambres because of the drought. It assumes there is no precipitation until the rainy season and the desalination plant starts operating in H2 2022. Copper production is expected to increase quarter on quarter throughout the year.

Gold production for 2022 is expected to be 170-190,000 ounces, as grades decrease at Centinela Concentrates.

Molybdenum production is expected to be 8,500-10,000 tonnes, as a result of lower grades at Los Pelambres.

Group cash costs in 2022 before and after by-product credits are expected to increase to \$2.00/lb and \$1.55/lb, respectively reflecting increased input costs, especially sulphuric acid (up 125%) at our cathode operations, and lower production at the Group's two lowest cost operations, namely Los Pelambres and Centinela Concentrates. By-product credits are also expected to decrease as gold and molybdenum production falls.

In 2022 consolidated Group capital expenditure, which excludes Zaldívar, is expected to be \$1.7-1.9 billion, as sustaining and mine development expenditure for the year increase to approximately \$1.0 billion, and development expenditure continues on the Los Pelambres Expansion project and at Centinela, including the ongoing study and review work on the second concentrator. The final estimated capital expenditure to complete the Los Pelambres Expansion remains under review due primarily to COVID-19 impacts.