



ALROSA Q4 and 12M 2021 operating results

Moscow, 21 January 2022 – ALROSA, a global leader in diamond production, reports its 2021 diamond production of 32.4 m carats and sales of 45.5 m carats. Proceeds from rough and polished diamond sales totalled \$4.2 bn.

Q4 and 12M 2021 trading update:

- **Q4 ore & gravels output** declined by 19% qoq to **7.4 mt** as a result of the seasonal discontinuation of production at the Mirny Division's alluvial deposits and lower output at the V.Munskoye deposit due to the shift of the mining focus to stripping. The 33% yoy growth was driven by the launch of production at the Zarya and Zarnitsa pipes. **12M** output increased by 12% to **33.5 mt** on the Udachny UG mine restart and gradual ramp-up to its design capacity.
- **Q4 ore & gravels processing** was down 44% qoq to **6.4 mt** due to the seasonal halt in the processing of gravels from the Almazy Anabara alluvial deposits. The 31% yoy growth is explained by the low base effect from 2020 (suspension of processing plants No. 1 of Severalmaz and No. 14 of the Aikhal Division for scheduled preventive maintenance). **12M** volumes increased to **30.9 mt** (+4%).
- **Q4 diamonds output** grew by 4% qoq to **9.1 m ct**. The 29% yoy growth was due to ore processing volumes growth (Severalmaz and Aikhal) and a higher grade at the International UG mine. **12M** output rose by 8% to **32.4 m ct**, primarily due to higher volumes from the V.Munskoye and Nyurba Division deposits.
- **Q4 diamond grade** was seasonally up 87% qoq (-1% yoy) to **1.43 cpt** following the suspension of production at alluvials. **12M** grade increased by 4% to **1.05 cpt** as the share of gravel processing at low yielding Almazy Anabara dropped.
- **Q4 diamond sales** saw a 3% qoq uptick to **9.4 m ct**, incl. 0.5 m ct of diamonds purchased at Gokhran auctions in Q3 2021. The 45% yoy decrease was attributable to the high base effect of Q4 2020 (Q4 2020: 17.0 m ct, incl. 9.9 m ct from inventories) and minimum levels of rough diamond inventories available for sale since mid-2021. **12M** diamond sales were up 1.4x to **45.5 m ct**, incl. 1.4 m ct purchased at Gokhran auctions and 11.7 m ct from accumulated inventories. Gem-quality diamonds accounted for 67% of total sales (compared to 72% and 69% in 2019 and 2018, respectively).
- **Diamond inventories as at the end of Q4** amounted to **8.8 m ct** (+0.2 m ct qoq). **Ore and gravels inventories** saw a seasonal increase to **11.8 mt** (+0.8 mt qoq and +15% yoy).
- **In Q4, revenue per carat of gem-quality diamonds** stood at **\$124/ct**, down 9% qoq due to changes in the sales mix, incl. the resale of lower-size rough diamonds purchased at Gokhran auctions. The 36% yoy growth was driven by

a 32% yoy increase in the price index. **12M** revenue per carat was \$128/ct, up 17% yoy on the back of a higher price index and changes in the sales mix.

- **Q4 average price index** gained 6% qoq (+32% yoy). In **12M**, the price index added **33%** (December 2021 vs December 2020), exceeding the level of late 2018 by 6%; the average index change in 2021 was +12.5% yoy.
- **Diamond (rough and polished) sales in Q4** amounted to **\$895 m** (-5% qoq and -27% yoy), incl. \$844 m from rough and \$51 m from polished diamond sales. The qoq and yoy changes are associated with the high base effect of the previous year, when most sales were made from the inventories, as well as the December trading session shifting towards the end of the month with sales partly moving to January 2022. **12M** revenue surged by 49% to **\$4,169 m**, incl. \$3,977 m from rough and \$192 m from polished diamond sales.

	<i>Unit</i>	Q4 2021	Q3 2021	<i>qoq</i>	Q4 2020	<i>yoy</i>	12M 2021	12M 2020	<i>yoy</i>
Ore and gravels output	<i>mt</i>	7.4	9.5	(22%)	5.6	33%	33.5	29.7	13%
Ore and gravels processing	<i>mt</i>	6.4	11.5	(44%)	4.9	30.6%	30.9	29.7	4%
Grade	<i>cpt</i>	1.43	0.76	87%	1.45	(1%)	1.05	1.01	4%
Diamond production	<i>m ct</i>	9.1	8.8	4%	7.1	29%	32.4	30.0	8%
Ore and gravels inventories*	<i>mt</i>	11.8	11.0	7%	10.2	15%	11.8	10.2	15%
Diamond inventories	<i>m ct</i>	8.8	8.6	3%	20.7	(57%)	8.8	20.7	(57%)
Revenue per carat (total)	<i>\$/ct</i>	89.7	98.7	(9%)	67.4	33%	87.3	82.7	6%
Revenue per carat (gem-quality diamonds)	<i>\$/ct</i>	123.6	136.0	(9%)	91.1	36%	128.3	109.5	17%
Price index**		1.10	1.04	6%	0.83	32%	0.90	0.80	13%
Diamond sales, incl.	<i>m ct</i>	9.4	9.2	3%	17.0	(45%)	45.5	32.1	42%
<i>gem-quality diamonds</i>	<i>m ct</i>	6.7	6.5	2%	12.2	(46%)	30.4	23.8	28%
Sales revenue, incl.	<i>\$ m</i>	895	938	(5%)	1,222	(27%)	4,169	2,802	49%
<i>rough diamonds</i>	<i>\$ m</i>	844	904	(7%)	1,144	(26%)	3,977	2,652	50%
<i>polished diamonds</i>	<i>\$ m</i>	51	34	49%	78	(35%)	192	150	28%

* Balance inventories of ore and gravels (excl. off-balance inventories). For details, see [Q4&12M 2021 ALROSA Trading Update_EXCEL](#)

** For gem-quality diamonds excl. +10.8 ct ones. For quarterly indicators Q1 2017 = 1.00.

Diamond market overview

- In Q4 2021, consumer sentiment remained high amid the festive season, with preliminary data on US sales suggesting the most profitable Christmas period in the last few years. [MasterCard SpendingPulse](#) reports an impressive 32% yoy increase in US jewelry sales for the period from 1 November to 24 December.
- Strong jewelry sales supported the demand for polished diamonds, whose price strengthened in November–December on the back of stable orders in the US.
- Demand for rough diamonds outstrips the supply. Following the completion of the Diwali celebration, cutters in India have ramped up production to prepare for jewelry companies' restocking in Q1 2022 on the heels of the Christmas season sales. The decline in diamond supply since mid-2021 due to inventories reaching minimum levels and producers' limited capacity (mid-term production volumes are estimated at 110–120 m ct vs the pre-pandemic levels of 140–150 m ct) coupled with high jewelry demand is a boon for prices.

Hereinafter, data on Q4 and 12M 2021 production, sales, prices, and inventories is preliminary and may be updated. Data on the diamond market is the Company's estimate.

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Key events in the next three months ([Investor calendar](#))

10 February	January 2022 sales results
	Capital Markets Day
2 March	Q4 and 12M 2021 IFRS results
10 March	February 2022 sales results
11 April	March 2022 sales results
15 April	Q1 2022 trading update

PRELIMINARY SALES RESULTS

Sales

Q4: 9.4 m ct

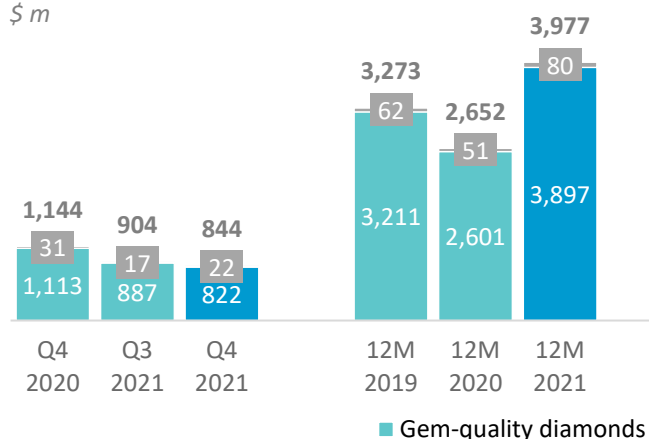
12M: 45.5 m ct

- **Diamond sales in Q4** increased by 3% qoq to **9.4 m ct**, incl. 0.5 m ct purchased as part of Gokhran auctions in Q3 2021. The 45% yoy reduction was caused by the high base effect of Q4 2020 (Q4 2020 sales totalled 17.0 m ct, incl. 9.9 m ct from inventories). The sales of gem-quality and industrial diamonds amounted to 6.7 m ct and 2.8 m ct, respectively.

12M sales were up 1.4x yoy to **45.5 m ct**, incl. 1.4 m ct purchased at Gokhran auctions and 11.7 m ct from inventories. The sales of gem-quality and industrial diamonds amounted to 30.4 m ct (+28%) and 15.2 m ct (+1.8x), respectively.

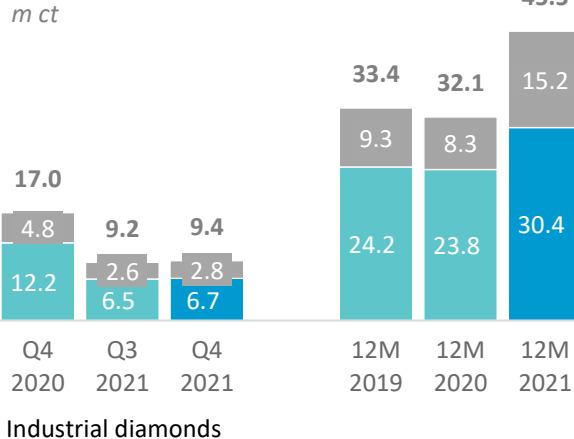
Diamond sales

\$ m



Diamond sales

m ct



Inventories

8.8 m ct

- **Diamond inventories as at the end of Q4** amounted to **8.8 m ct** (+0.2 m ct qoq). Sales growth ahead of production was driven by the sales of diamonds purchased as part of Gokhran auctions in Q3 2021. Inventories declined by 11.9 m ct during 12M of 2021 as a result of their sale in 1H 2021 (Q4 2020: 20.7 m ct).

Total sales

(incl. polished diamonds)

Q4: \$895 m

12M: \$4,169 m

Rough diamond sales

Q4: \$844 m

12M: \$3,977 m

- **Q4 total sales** amounted to **\$895 m** (-5% qoq and -27% yoy), incl. \$844 m in rough (excl. polished) (-7% qoq and -26% yoy). The qoq and yoy changes are associated with the high base effect of the previous year, when most sales were made from the inventories, as well as the December trading session shifting towards the end of the month with sales partly moving to January 2022.

Total sales for 12M reached **\$4,169 m** (+1.5x yoy and +25% vs 12M 2019), incl. \$3,977 m in rough (excl. polished) (+1.5x and +21% vs 12M 2019).

- **Polished diamond sales in Q4** rose by 49% qoq to \$51 m, driven by a successful polished diamond [auction](#) and New Year sales as part of the ALROSA Diamond Exclusive programme. The 35% yoy reduction was associated with the high base effect of the previous year due to the sale of the previously accumulated stock in Q4 2020 and the unique Spirit of the Rose diamond. **12M** polished diamond sales saw a 28% yoy increase to **\$192 m**, and +3x vs 2019 level mostly driven by the consolidation of Kristall Group.

Revenue per carat of gem-quality diamonds

Q4: \$124/ct

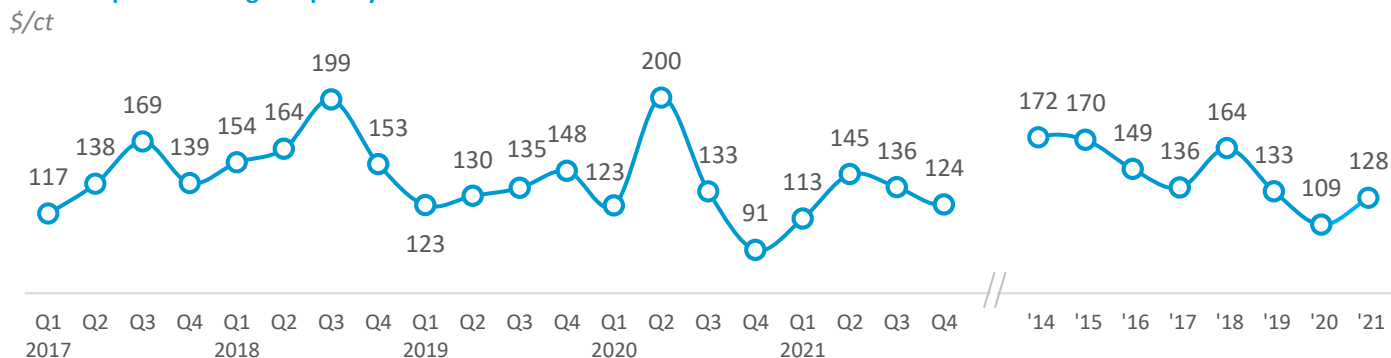
12M: \$128/ct

- **In Q4, revenue per carat of gem-quality diamonds** shed 9% qoq and amounted to **\$124/ct** due to changes in the sales mix, incl. the resale of lower-size rough diamonds purchased as part of Gokhran auctions, coupled with a 6% qoq uptick

in the price index. The 36% yoy growth was primarily driven by a 32% yoy increase in the price index.

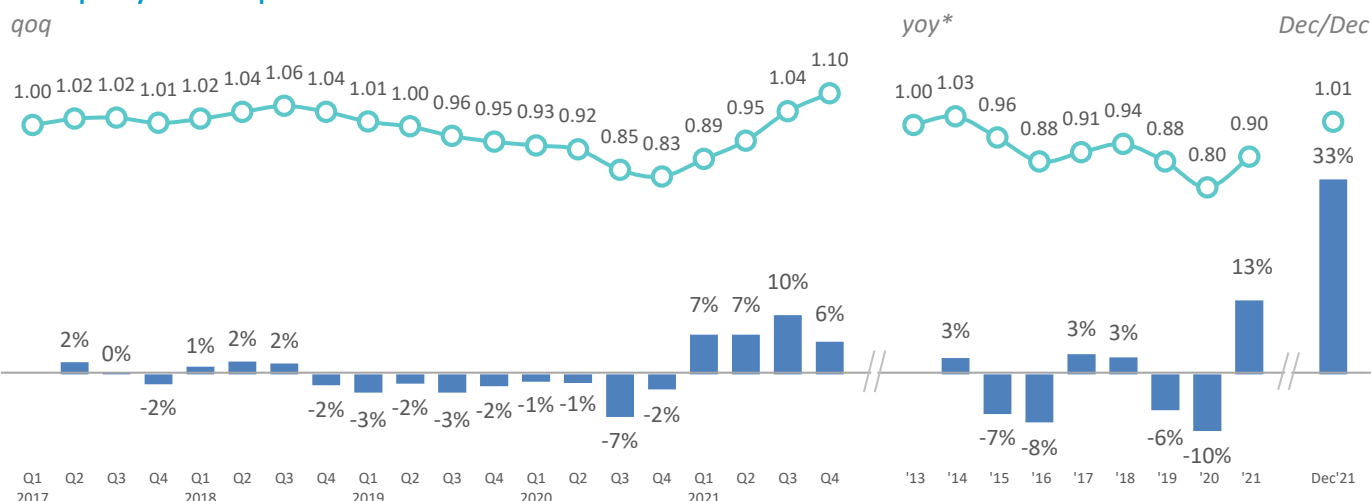
In 12M 2021, revenue per carat of gem-quality diamonds was \$128/ct, up 17% due to a 12.5% increase in the price index, as well as an improved sales mix.

Revenue per carat of gem-quality diamonds



- **Q4 average price index gained 6% qoq (+32% yoy). In 12M, the price index added 33% (Dec'2021 vs Dec'2020), exceeding the level of late 2018 by 6%; the average index change in 2021 was +12.5% yoy.**

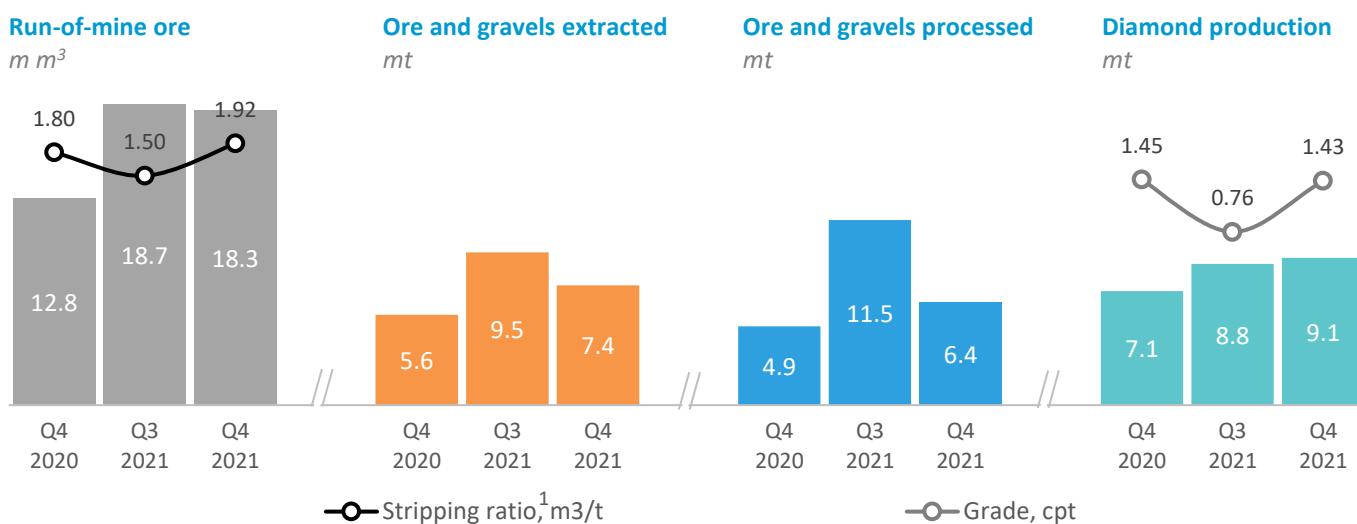
Gem-quality diamond price indices



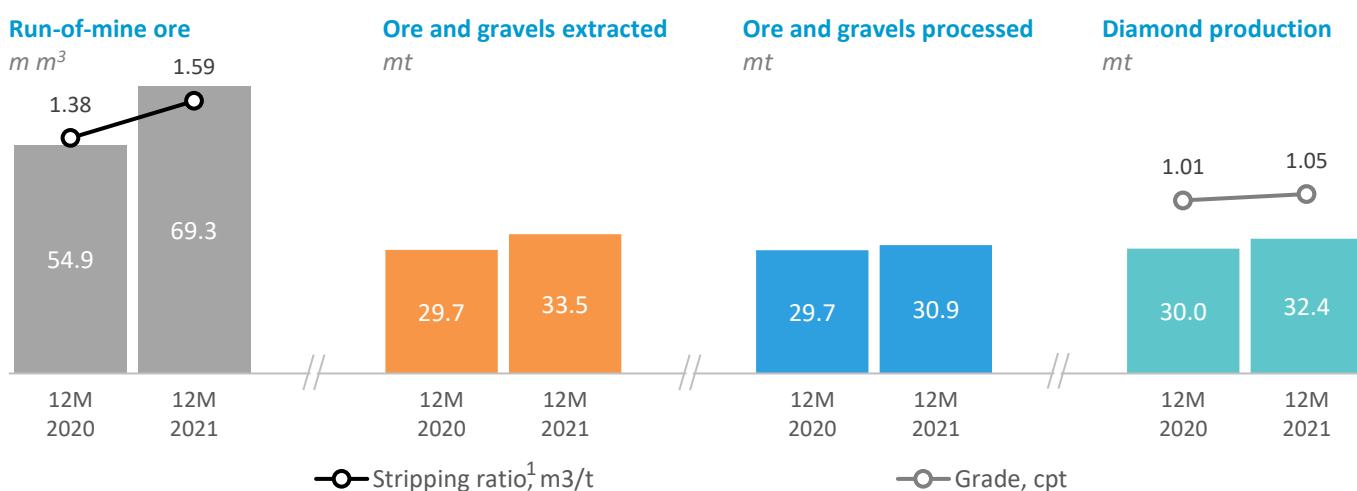
* December 2013 = 1.00.

PRODUCTION

Key highlights for Q4 2021



Key highlights for 12M 2021



Run-of-mine ore
Q4: 18.3 m³
12M: 69.3 m³

- **Q4 run-of-mine ore** stood at **18.3 m³** (-2% qoq). Growth of 43% yoy was driven by resumed mining operations at the V.Munskoye and Severalmaz deposits after the temporary suspension in 2020, an increase in mining at the Nyurbinskaya pipe following the start of open pit reconstruction, and an increase in mining operations at the Botuobinskaya pipe due to the low base effect of 2020 and the mine's ramp-up to design capacity, which also explains the increase in run-of-mine ore to **69.3 m³** (+26%) in **12M**.
- **Q4 stripping ratio** grew by 28% qoq (+7% yoy) to 1.92 m³/t, driven by a 22% qoq decrease in ore and gravels output due to a seasonal decrease in gravels output at the Mirny Division's alluvial deposits and a decline in ore output at the V.Munskoye deposit. **12M** stripping ratio was 1.59 m³/t, up 16% due to an increase in stripping operations at the V.Munskoye and Severalmaz deposits

¹ The stripping ratio is calculated as rock moved in cubic metres (including pre-mining and pre-stripping) divided by ore and gravels output (in tonnes).

after the temporary suspension of mining in 2020 as part of the anti-crisis measures taken to reduce diamond production, and at the Nyurbinskaya pipe following the start of open pit reconstruction.

Ore and gravels output

Q4: 7.4 mt

12M: 33.5 mt

- **In Q4, ore and gravels output** declined by 22% qoq to **7.4 mt** mainly due to the seasonal suspension of production at the Mirny Division's alluvial deposits and lower ore output at the V.Munskoye deposit as a result of shifting focus to stripping. The 33% yoy growth was driven by the temporary suspension of mining at the Zarya and Zarnitsa deposits in 2020, as well as an increase in mining at the Botuobinskaya pipe and the Nyurba Division's alluvial deposits due to the low base effect of the previous year resulting from the mining focus shift to stripping.

12M ore and gravels output amounted to **33.5 mt**, up 13% due to the resumption of mining after the temporary suspension at the V.Munskoye deposit, Zarnitsa pipe, and the Severalmaz deposits in 2020 as part of the anti-crisis measures and the Udachny UG mine's ramp-up to design capacity.

Ore and gravels processing

Q4: 6.4 mt

12M: 30.9 mt

- **In Q4, ore and gravels processing** stood at **6.4 mt**, down 44% qoq due to the seasonal suspension of processing of gravels from the Almazy Anabara alluvial deposits and the seasonal suspension of production at the Mirny Division's alluvial deposits. An increase of 31% yoy was driven by higher processing of ore from the Jubilee pipe owing to the low base effect of the previous year resulting from the extensive scheduled preventive maintenance at the Aikhal Division's processing plant No. 14 and higher processing of ore from the Severalmaz deposits due to the suspension of processing plant No. 1 in 2020.

12M ore and gravels processing amounted to **30.9 mt** (+4%).

- **Ore and gravels inventories² as at the end of Q4** gained 7% qoq (+15% yoy) and reached **11.8 mt** (11.0 mt as at the end of Q3) as production exceeded processing mostly as a result of the seasonal nature of operations at the Almazy Anabara deposits.

Average diamond grade

Q4: 1.43 cpt

12M: 1.05 cpt

- **Q4 average diamond grade** seasonally increased by 87% qoq (-1% yoy) to **1.43 cpt** (Q3 2021: 0.76 cpt) mainly due to the suspension of processing operations at the Almazy Anabara alluvial deposits.

12M average diamond grade was **1.05 cpt**, up 4% as a result of a decrease in the share of Almazy Anabara gravels in processing following the suspension of operations at Ebelyakh since Q4 2020 as part of anti-crisis measures ([press release](#)).

Diamond production

Q4: 9.1 m ct

12M: 32.4 m ct

- **Q4 diamond production** increased by 4% qoq to **9.1 m ct** mainly due to:
 - (+) resumed processing of ore from the International UG mine due to the relaunch of the Mirny Division's processing plant No. 3 after its scheduled off-season downtime;
 - (+) growth of production at the Aikhal UG mine due to higher ore processing volumes and average grade;

² Balance inventories of ore and gravels (excl. off-balance inventories). For details, see [Q4&12M 2021 ALROSA Trading Update EXCEL](#)

- (+) increase in the processing of ore from the Udachny UG mine due to scheduled preventive maintenance at the Udachny Division's processing plant No. 12 in May–July;
- (-) seasonal suspension of processing gravels from the Almazy Anabara deposits;
- (-) seasonal reduction of processing gravels from the Nyurba Division's alluvial deposits;

A 29% yoy increase was attributable to:

- (+) higher production at the Aikhal UG mine coming from the low base effect of the previous year as a result of scheduled preventive maintenance at processing plant No. 14 in Q4 2020;
- (+) growth of production at the International UG mine driven by higher ore processing volumes as a result of processing plant No. 3 switching to a new operating mode;
- (+) higher production at the Severalmaz deposits due to the low base effect of the previous year resulting from the suspension of processing plant No. 1.

12M diamond production gained 8% to reach **32.4 m ct** mainly due to the growth of production at the V.Munskoye deposit, Aikhal UG mine, and Nyurbinskaya and Botuobinskaya pipes, while production at Almazy Anabara and the Jubilee pipe declined (for details, see pages 11–16).

- **Q4 open-pit mining** amounted to **4.7 m ct** (-8% qoq). The 52% yoy growth came from higher output at Severalmaz driven by the low base effect of the previous year and at the Botuobinskaya pipe as a result of higher ore processing volumes.

In **12M**, the 32% growth to **19.9 m ct** was the result of the Nyurba Division's processing plants being predominantly fed with ore following a decrease in gravel processing, as well as of higher production at the V.Munskoye deposit.

In **Q4 and 12M 2021**, **open-pit mining** accounted for **51%** and **61%** of total diamond production, respectively.

- **Underground mining in Q4** went up 2.4x qoq to **4.2 m ct** on the back of processing ore from the International UG mine following the relaunch of processing plant No. 3 after its scheduled off-season downtime and increased processing of ore from the Udachnaya pipe in view of scheduled maintenance at processing plant No. 12 in May–July. The 22% yoy growth was driven by higher processing of ore from the International UG mine due to processing plant No. 3 shifting to a new operating mode, and from the Aikhal UG mine in light of the low base effect of the previous year stemming from the anti-crisis measures taken in 2020, which also led to a 22% increase in **12M** underground mining to **9.2 m ct**.

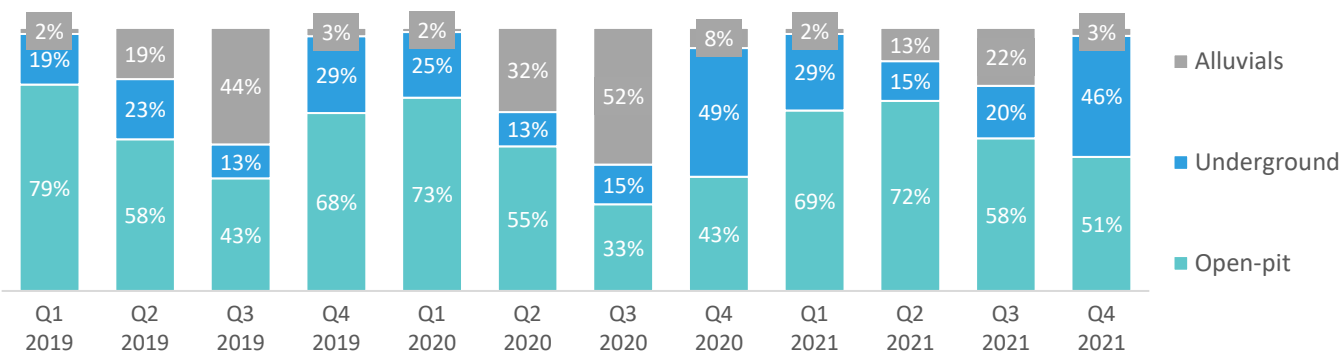
In **Q4 and 12M 2021**, **underground mining** accounted for **46%** and **28%** of total production, respectively.

- **Alluvial mining in Q4** decreased seasonally to **0.3 m ct** (-87% qoq, -52% yoy). It shrank by 55% in **12M** to **3.3 m ct** due to the planned reduction in gravel

processing from the Nyurba Division’s alluvial deposits and lower production at Almazy Anabara.

In Q4 and 12M 2021, alluvials accounted for 3% and 10% of total production, respectively.

Diamond production by mining type



PERFORMANCE BY DIVISION

Aikhal Division operational overview

Accounted for 22% and 25% in ALROSA Group's total diamond production in Q4 and 12M 2021, respectively

	Q4 2021	Q3 2021	qoq	Q4 2020	yoy	12M 2021	12M 2020	yoy
Ore processing, '000 t	1,824	2,158	(15%)	986	85%	7,829	7,619	3%
Grade, cpt	1.12	0.90	24%	0.95	17%	1.05	1.06	(1%)
Diamond production, '000 ct	2,042	1,952	5%	941	2.2x	8,241	8,110	2%

Aikhal Division:

- Jubilee pipe
- Aikhal pipe
- Zarya pipe
- Komsomolskaya pipe (mining completed in 2019)

Location: Republic of Sakha (Yakutia), near Aikhal settlement, 485 km away from Mirny town

Ore processed in Q4 amounted to **1.8 mt** (-15% qoq and -85% yoy). **12M ore processing: 7.8 mt** (+3%).

Diamond production: 2.0 m ct (+5% qoq). A 2.2x yoy increase was mainly due to the lasting suspension of processing plant No. 14 for scheduled preventive maintenance in Q4 2020 along with a rise in the average diamond grade at the Aikhal UG mine. **12M diamond production was 8.2 m ct** (+2%).

Open-pit mining

Jubilee:

- In **Q4**, diamond production was down to **0.7 m ct** (-40% qoq), which was caused by challenging mining and geological environment, as well as a lower average grade due to the processing of ores from lower-grade blocks in line with the mining direction. A 43% yoy increase was due to the low base effect of the previous year associated with the lasting preventive maintenance of processing plant No. 14 in Q4 2020.
- **12M**: a 16% decrease to **5.2 m ct** was attributable to a lower average grade as a result of the processing of ores from lower-grade blocks in line with the mining direction.

Zarya:

- **Q4**: production stood at **0.1 m ct**, up 89% qoq (+53% yoy) due to the increased ore processing from the deposit.
- **12M**: production shed 32% to **0.2 m ct**, as ore from the deposit was only processed in Q3 and Q4 2021 due to the resumption of mining on 1 June 2021.

Underground mining

Aikhal:

- **Q4**: a 81% qoq growth in production to **1.2 m ct** due to the planned increase in ore processing volumes and processing of higher-grade ore from the respective parts of the deposit. A 3.5x yoy growth came from the lasting preventive maintenance of processing plant No. 14 in Q4 2020.
- **12M**: a 74% qoq surge in production to **2.9 m ct** came from a 67% increase in ore processing volumes as a result of the low base effect of the previous year (suspension of mining operations from 15 May to 30 September 2020 as part of the anti-crisis measures).

Mirny Division operational overview

Accounted for 18% and 8% in ALROSA Group's total diamond production in Q4 and 12M 2021, respectively

	Q4 2021	Q3 2021	qoq	Q4 2020	yoy	12M 2021	12M 2020	yoy
Ore and gravels processing, '000 t	858	1,473	(42%)	892	(4%)	3,795	3,773	1%
Grade, cpt	1.92	0.07	29.5x	1.00	92%	0.66	0.62	5%
Diamond production, '000 ct	1,647	96	17.2x	891	85%	2,489	2,354	6%

Mirny Division:

- Mir pipe (no production underway currently)
- International pipe
- Alluvial deposits

Location: Republic of Sakha (Yakutia), Mirny town, 220 km south of the Arctic Circle

In Q4, ore and gravels processing amounted to **0.9 mt** (-42% qoq and -4% yoy). **12M volumes were 3.8 mt** (+1%).

Diamond production in Q4 amounted to **1.6 m ct** (+17.2x qoq, +85% yoy) driven by the increased ore processing from the International pipe in view of the decision to switch processing plant No. 3 to the seasonal operating mode. **12M diamond production** rose by 6% to **2.5 m ct**.

Underground mining

International:

- **Q4:** diamond production totalled **1.5 m ct** (+2.1x yoy). In Q3, ore from the deposit was not processed due to the scheduled shutdown of processing plant No. 3 for off-season downtime: in order to optimise utilisation of processing capacities, the plant switched to a new operating mode with seasonal suspension for the period from 1 April to 30 September. During the downtime of processing plant No. 3, diamonds were mined exclusively with dredges.
- **12M:** diamond production gained 8% to **1.9 m ct** due to a higher average grade (+8%) as a result of increased processing of ores from higher-grade blocks in line with the mining direction.

Alluvial mining

- **Q4:** 93% qoq increase (-9% yoy) in diamond production to **185,000 ct** driven by the scheduled resumption of operations at processing plant No. 3 (see the comment above) and the processing of higher-grade gravels from the Irelyakh and Vodorazdelnye Galechniki placers.
- **12M** gravels output amounted to **0.5 m ct** (-3%).

Udachny Division operational overview

Accounted for 23% and 21% in ALROSA Group's total diamond production in Q4 and 12M 2021, respectively

	Q4 2021	Q3 2021	qoq	Q4 2020	yoy	12M 2021	12M 2020	yoy
Ore processing, '000 t	2,400	1,566	53%	2,434	(1%)	7,640	5,529	38%
Grade, cpt	0.88	0.90	(2%)	1.09	(19%)	0.88	0.90	(2%)
Diamond production, '000 ct	2,121	1,405	51%	2,654	(20%)	6,697	4,963	35%

Udachny Division:

- Udachnaya pipe
- Zarnitsa pipe
- Zapolyarnaya pipe (V.Munskoye deposit)
- Mining at the alluvial deposits was completed in 2019.

Location: Republic of Sakha (Yakutia), 550 km north of Mirny town

Ore processed in Q4 amounted to **2.4 mt** (+53% qoq and -1% yoy) due to the scheduled shutdown of processing plant No. 12 for summer preventive maintenance (from 16 May to 21 July). **Ore processed in 12M** stood at **7.6 mt** (+38%) due to the low base effect of 2020 as a result of the anti-crisis measures taken to reduce the output.

Q4 diamond production was **2.1 m ct** (+51% qoq and -20% yoy) due to larger processing volumes. **12M diamond production** surged 35% to **6.7 m ct** as a result of the low base effect of the previous year (12M 2020: 4.9 m ct, 12M 2019: 5.7 m ct).

Open-pit mining

Zarnitsa:

- In **Q4**, no production operations were conducted.
- **12M** saw the processing of small amounts of ore from the remaining stockpiles, with diamond production totalling **31,000 ct**. In 2019, a decision was taken to suspend mining operations at the deposit from 1 May 2020. [Mining resumed from 1 July 2021](#), with ore processing from the deposit slated for 2022.

Zapolyarnaya (V.Munskoye deposit):

- **Q4**: diamond production added 66% qoq to **0.6 m ct** as a result of higher processing volumes of ore from the V.Munskoye deposit due to the low base effect of Q3 following the scheduled shutdown of processing plant No. 12 for summer preventive maintenance (from 16 May to 21 July). A 2.6x yoy growth was attributable to the planned replacement of ore from the Udachny UG mine with ore from the V.Munskoye deposit.
- **12M**: a 4.5x yoy increase to **2.3 m ct** came from the suspension of mining and operations at processing plant No. 12 as part of the anti-crisis measures taken to reduce the output in 2020 (12M 2020: 0.5 m ct, 12M 2019: 1.5 m ct).

Underground mining

Udachnaya:

- **Q4**: up 46% qoq to **1.6 m ct** due to the low base effect of Q3 following the scheduled shutdown of processing plant No. 12 for summer preventive maintenance (from 16 May to 21 July). A 36% drop yoy due to lower ore processing volumes (see the comment above).
- In **12M**, underground mining amounted to 4.4 m ct (+6%).

Nyurba Division operational overview

Accounted for 25% and 31% in ALROSA Group's total diamond production in Q4 and 12M 2021, respectively

	Q4 2021	Q3 2021	qoq	Q4 2020	yoy	12M 2021	12M 2020	yoy
Ore and gravels processing, '000 t	571	871	(34%)	482	18%	2,558	2,464	4%
Grade, cpt	4.01	3.62	11%	4.90	(18%)	3.90	3.36	16%
Diamond production, '000 ct	2,291	3,157	(27%)	2,362	(3%)	9,979	8,272	21%

Nyurba Division:

- Nyurbinskaya pipe
- Botuobinskaya pipe
- Alluvial deposits

Location: Republic of Sakha (Yakutia), 200 km north-west of Nyurba town and 320 km north-east of Mirny town

Ore and gravels processing dropped by 34% to **0.6mt** (-5% yoy) as a result of a seasonal decline in the processing of gravels from alluvial deposits and a planned decrease in the processing of ore from the Nyurbinskaya pipe. The processing volume for **12M** came in at **2.6 mt** (+4%).

Q4 diamond production totalled **2.3 m ct** (-27% qoq and -3% yoy). **12M diamond production** increased by 21% to **10.0 m ct** due to a change in the processing mix with a lower share of gravels.

Open-pit mining

Nyurbinskaya:

- **Q4:** planned reduction in the diamond production volumes by 34% qoq (-34% yoy) to **0.8 m ct**.
- **12M** diamond production went up by 39% to **3.7 m ct**. This was caused by the planned increase in the processing of ore to make up for excluding lower-grade gravels from the Nyurbinskaya placer from the 2021 schedule of processing plant No. 16.

Botuobinskaya:

- **Q4** diamond production added 26% qoq to **1.5 m ct** (+64% yoy) on the back of the planned increase in ore processing volumes with a decrease of average grade due to processing of low grade ores.
- **12M** saw diamond production grow 2.1x to **4.7 m ct**, driven by an increase in the share of ore processed at processing plant No. 16 due to a lower share of gravels.

Alluvial mining in Q4 stood at **0.1 m ct**, an 11x qoq decrease associated with the seasonal suspension of operations at processing plant No. 15. It shrank by 77% yoy in **Q4** and by 58% in **12M** (to **1.4 m ct**) as a result of a planned reduction in gravels processing in 2021.

Severalmaz operational overview

Accounted for 11% in ALROSA Group's total diamond production in both Q4 and 12M 2021

	Q4 2021	Q3 2021	qoq	Q4 2020	yoy	12M 2021	12M 2020	yoy
Ore processing, '000 t	743	783	(5%)	102	7.3x	2,642	2,221	19%
Grade, cpt	1.40	1.45	(3%)	2.25	(38%)	1.36	1.25	9%
Diamond production, '000 ct	1,043	1,132	(8%)	230	4.5x	3,602	2,787	29%

Severalmaz

(Lomonosov Division):

- Arkhangelskaya pipe
- Karpinskogo-1 pipe
- Karpinskogo-2 pipe

Location: Arkhangelsk
Region, Russian
Federation

Ore processing in Q4 was at **0.7 mt** (-5% qoq), up 7.3x yoy due to the suspension of processing plant No. 1 in Q4 2020. **12M** ore processing amounted to **2.6 mt**, up 19% yoy due to a longer downtime of the processing plant in 2020 resulting from the anti-crisis measures taken in May 2020 to cut diamond production.

Q4 diamond production was at **1.0 m ct**, down 8% qoq as a result of a 5% qoq decrease in the volumes of ore processed and a lower average grade due to the processing of ore from lower-grade blocks.

- Arkhangelskaya: 0.4 m ct (-31% qoq and +89% yoy).
- Karpinskogo-1: 0.7 m ct (+13% qoq and +18x yoy).

12M diamond production was at **3.6 m ct**, up 29% thanks to higher ore processing volumes (+19%) and an increased average grade (+9%) on the back of processing ore from richer parts of the Karpinskogo-1 pipe.

Almazy Anabara operational overview

Accounted for 0% and 4% in ALROSA Group's total diamond production in Q4 and 12M 2021, respectively

	Q4 2021	Q3 2021	qoq	Q4 2020	yoy	12M 2021	12M 2020	yoy
Gravels processing, '000 t	-	4,640	-	-	-	6,440	8,080	(20%)
Grade, cpt	-	0.22	-	-	-	0.22	0.44	(51%)
Diamond production, '000 ct	-	1,024	-	-	-	1,390	3,534	(61%)

Almazy Anabara: several alluvial deposits located in the north-west of the Republic of Sakha (Yakutia)

There was no diamond production in Q4 due to seasonality. A decrease by 61% **in 12M (to 1.4 m ct)** follows the decision to suspend operations at the Ebelyakh alluvial deposit from Q4 2020 as part of the [anti-crisis measures taken in 2020 to cut diamond production](#).

Almazy Anabara conducts mining operations from May/June to September (weather permitting).

APPENDICES

Appendix 1. Diamond production

'000 ct	Production method	Q4 2021	Q3 2021	qoq	Q4 2020	yoy
Aikhal Division		2,042	1,952	5%	941	2.2x
Jubilee pipe	Open pit	745	1,240	(40%)	520	43.3%
Komsomolskaya pipe	Open pit	-	-	-	4	-
Aikhal mine	Underground	1,181	652	81%	342	3.5x
Zarya pipe	Open pit	115	61	89%	75	53%
Mirny Division		1,647	96	17.2x	891	85%
International mine	Underground	1,461	-	-	687	2.1x
Alluvial deposits	Alluvials	185	96	93%	204	(9%)
Udachny Division		2,121	1,405	51%	2,654	(20%)
Zarnitsa pipe	Open pit	-	-	-	4	-
Zapolyarnaya pipe	Open pit	555	334	66%	216	2.6x
Udachny mine	Underground	1,566	1,071	46%	2,434	(36%)
Nyurba Division		2,291	3,157	(27%)	2,362	(3%)
Nyurbinskaya pipe	Open pit	753	1,145	(34%)	1,133	(34%)
Botuobinskaya pipe	Open pit	1,462	1,156	26%	892	64%
Alluvial deposits	Alluvials	76	856	(91%)	337	(77%)
Severalmaz		1,043	1,132	(8%)	230	4.5x
Arkhangelskaya pipe	Open pit	363	528	(31%)	192	89%
Karpinskogo-1 pipe	Open pit	680	604	13%	38	18x
Almazy Anabara	Alluvials	-	1,024	-	-	-
Total		9,143	8,766	4%	7,077	29%

Appendix 2. Ore and gravels processing

'000 t	Production method	Q4 2021	Q3 2021	qoq	Q4 2020	yoy
Aikhal Division		1,824	2,158	(15%)	986	85%
Jubilee pipe	Open pit	1,143	1,785	(36%)	583	96%
Komsomolskaya pipe	Open pit	-	-	-	10	-
Aikhal mine	Underground	215	137	57%	82	2.6x
Zarya pipe	Open pit	466	236	97%	311	50%
Mirny Division		858	1,473	(42%)	892	(4%)
International mine	Underground	231	-	-	139	67%
Alluvial deposits	Alluvials	627	1,473	(57%)	753	(17%)
Udachny Division		2,400	1,566	53%	2,434	(1%)
Zarnitsa pipe	Open pit	-	-	-	15	-
Zapolyarnaya pipe	Open pit	835	478	75%	263	3.2x
Udachny mine	Underground	1,565	1,088	44%	2,156	(27%)
Nyurba Division		571	871	(34%)	482	18%
Nyurbinskaya pipe	Open pit	198	298	(34%)	264	(25%)
Botuobinskaya pipe	Open pit	334	233	43%	155	2.2x
Alluvial deposits	Alluvials	39	340	(89%)	63	(38%)
Severalmaz		743	783	(5%)	102	7.3x
Arkhangelskaya pipe	Open pit	344	456	(25%)	88	3.9x
Karpinskogo-1 pipe	Open pit	399	328	22%	14	28.1x
Almazy Anabara	Alluvials	-	4,640	-	-	-
Total		6,395	11,491	(44%)	4,896	31%

Appendix 3. Grade

cpt	Production method	Q4 2021	Q3 2021	qoq	Q4 2020	yoy
Aikhal Division		1.12	0.90	24%	0.95	17%
Jubilee pipe	Open pit	0.65	0.69	(6%)	0.89	(27%)
Komsomolskaya pipe	Open pit	-	-	-	0.36	-
Aikhal mine	Underground	5.49	4.76	16%	4.17	32%
Zarya pipe	Open pit	0.25	0.26	(4%)	0.24	2%
Mirny Division		1.92	0.07	29.5x	1.00	92%
International mine	Underground	6.33	-	-	4.95	28%
Alluvial deposits	Alluvials	0.30	0.07	4.5x	0.27	9%
Udachny Division		0.88	0.90	(2%)	1.09	(19%)
Zarnitsa pipe	Open pit	-	-	-	0.24	-
Zapolyarnaya pipe	Open pit	0.66	0.70	(5%)	0.82	(19%)
Udachny mine	Underground	1.00	0.98	2%	1.13	(11%)
Nyurba Division		4.01	3.62	11%	4.90	(18%)
Nyurbinskaya pipe	Open pit	3.80	3.84	(1%)	4.29	(11%)
Botuobinskaya pipe	Open pit	4.38	4.96	(12%)	5.76	(24%)
Alluvial deposits	Alluvials	1.96	2.52	(22%)	5.35	(63%)
Severalmaz		1.40	1.45	(3%)	2.25	(38%)
Arkhangelskaya pipe	Open pit	1.06	1.16	(9%)	2.18	(52%)
Karpinskogo-1 pipe	Open pit	1.70	1.84	(8%)	2.66	(36%)
Almazy Anabara	Alluvials	-	0.22	-	-	-
Total		1.43	0.76	87%	1.45	(1%)

Appendix 4. Diamond, ore and gravels inventories

Inventories (as at the end of the period)	Q4 2021	Q3 2021	Q2 2021	Q1 2021	Q4 2020	Q3 2020	Q2 2020	Q1 2020	Q4 2019	Q3 2019
Diamonds, m ct	8.8	8.6	8.4	12.8	20.7	30.6	26.3	21.1	22.6	21.7
Ore and gravels*, mt	11.8	11.0	14.4	13.8	10.2	9.2	16.2	14.0	9.9	7.2

* Balance inventories of ore and gravels (excl. off-balance inventories). For details, see [Q4&12M 2021 ALROSA Trading Update EXCEL](#)

GLOSSARY

ct – carat, unit of mass (weight) equal to 200 mg; one of the four Cs of diamond quality along with colour, cut, and clarity

Diamond price index helps track changes in average diamond prices on a like-for-like basis (excluding 10.8+ ct stones)

Gem-quality diamonds – diamonds used in jewelry

Off-balance inventories of ore and gravels – ore and gravels with grades below the minimal commercial cut-off (in quantitative and qualitative terms).

Revenue per carat is sales revenue in US dollars divided by sales volume in carats

Stripping ratio is calculated as rock moved in cubic metres (incl. pre-stripping and pre-mining) divided by ore and gravels output (in tonnes)

t – tonne

V.Munskoye deposit – the Udachny Division’s Verkhne-Munskoye deposit, incl. the Zapolyarnaya pipe