

Revenue

In 2017, revenue of Group GMK segment increased by 24% to USD 7,671 million. This was primarily driven by higher realized metal prices and transition of NN Harjavalta to the Company's own Russian feed. This positive effect was partly compensated by lower sales volume in 2017 owing to accumulation of palladium in 2017 and release of stock in 2016.

The revenue of Group KGMK segment increased by 34% to USD 888 million mainly due to the increase in revenue from processing of the feed coming from Polar division.

Revenue of NN Harjavalta increased by 16% to USD 840 million. This was primarily driven by higher realized metal prices and increased metal production from the Company's own Russian feed.

Revenue of Other metallurgical segment increased by 68% to USD 141 million. This was primarily driven by higher realized metal prices.

Revenue of Other non-metallurgical segment decreased by 25% to USD 1,266 million. This was driven primarily by changes of inter-segment revenue streams driven by transition to Group's own Russian feed and accumulation of metal stock in 2017.

In 2017, EBITDA of Group GMK segment increased by 21% to USD 4,701 million owing primarily to higher realized metal prices partly offset by lower sales volume in 2017 owing to accumulation of stock in 2017 due to Palladium fund activities and higher base effect of release of stock in 2016 as well as increased cash costs on the back of the Russian rouble appreciation against US Dollar.

EBITDA of Group KGMK segment increased by 44% to USD 169 million primarily owing to the increased sales volume and higher margin of tolling operations.

EBITDA of NN Harjavalta increased by 87% to USD 84 million primarily due to higher revenue and processing the Company's own Russian feed instead of low-margin third parties feed.

EBITDA of Other metallurgical segment decreased five times to negative USD 53 million primarily due to one-off expenses.

EBITDA of Other non-metallurgical segment decreased by USD 5 million to USD 114 million.

EBITDA of Unallocated segment decreased by 76% to negative USD 643 million primarily due to increased social expenses of the Group.

Cash Operating Costs

	2017	2016	Change,%
METAL SALES			
Group			
Nickel, thousand tons ¹	215	271	(21%)
from own Russian feed	206	229	(10%)
from 3d parties feed	9	42	(79%)
Copper, thousand tons ¹	368	374	(2%)
from own Russian feed	365	369	(1%)
from 3d parties feed	3	5	(40%)
Palladium, koz ¹	2,405	2,779	(13%)
from own Russian feed	2,353	2,758	(15%)
from 3d parties feed	52	21	148%
Platinum, koz ¹	657	669	(2%)
from own Russian feed	639	661	(3%)
from 3d parties feed	18	8	125%

	2017	2016	Change,%
Gold, koz ¹	141	155	(9%)
Rhodium, koz ¹	68	85	(20%)
Cobalt, thousand tons ¹	3	5	(40%)
Silver, koz ¹	2,469	2,565	(4%)
Semi-products, nickel, thousand tons ²	17	13	31%
Semi-products, copper, thousand tons ²	28	15	87%
Semi-products, palladium, koz ²	138	115	20%
Semi-products, platinum, koz ²	48	43	12%
Semi-products, gold, koz ²	8	9	(11%)
Semi-products, silver, koz ²	528	148	4x
AVERAGE REALIZED PRICES OF METALS PRODUCED BY NORILSK NICKEL			
Nickel (USD per tonne)	10,704	9,701	10%
Copper (USD per tonne)	6,202	4,911	26%
Palladium (USD per oz)	858	614	40%
Platinum (USD per oz)	949	977	(3%)
Cobalt (USD per tonne)	41,977	22,962	83%
Gold (USD per oz)	1,259	1,254	0%
Rhodium (USD per oz)	1,085	668	62%
Revenue, USD million			
Nickel	2,304	2,625	(12%)
Copper	2,281	1,839	24%
Palladium	2,346	1,888	24%
Platinum	623	654	(5%)
Semi-products	424	216	96%
Other metals	437	424	3%
Revenue from metal sales	8,415	7,646	10%
Revenue from other sales	731	613	19%
Total revenue	9,146	8,259	11%

¹ All information is reported on the 100% basis, excluding sales of metals purchased from third parties.

² Metal volumes represent metals contained in semi-products.

Revenue from metals



Nickel sales accounted for 27% of the Group's total metal revenue in 2017 down from 34% in 2016. The decrease by 7 p.p. was driven by the reduction of sales volumes following a decrease of metal production from third party feed and stronger performance of palladium and copper relative to nickel price.

In 2017, nickel revenue decreased by 12% (or USD 321 million) to USD 2,304 million primarily due to lower sales volumes (USD 593 million) owing to decrease of Nickel production from third parties feed and the higher base effect as temporary metal stock was sold in 2016, which was partly offset positively by higher nickel price (USD 267 million).

Additional USD 5 million to nickel revenue in 2017 was contributed by the re-sale of purchased metal to fulfil the Company's contractual obligations.

The average realized nickel price increased 10% to USD 10,704 per tonne in 2017 from USD 9,701 per tonne in 2016.

Sales volume of nickel produced by the Company from its own Russian feed decreased by 10% (or 23 thousand tons) to 206 thousand tons. The decrease was primarily driven by the sale of metal from a temporary stock in 2016.

Sales volume of nickel produced from third parties feed decreased by 79% in 2017 to 9 thousand tons as Harjavalta started the processing of the Company's own Russian feed.



In 2017, copper sales accounted for 27% of the Group's total metal sales, increasing 24% (or USD 442 million) to USD 2,281 million primarily owing to higher realized copper price (USD 483 million) that was partly negatively offset by the decrease in sales volume (USD 41 million).

The average realized copper price increased 26% from USD 4,911 in 2016 to USD 6,202 per tonne in 2017.

Physical volume of copper sales from the Company's own Russian feed decreased by 1% (or 4 thousand tons) to 365 thousand tons. The decrease owing to the higher base effect as copper from temporary metal stock was sold in 2016 was partly positively offset by the copper sales, produced from concentrate purchased from Rostec.

The volume of copper sales from purchased semi-products decreased by 2 thousand tons to 3 thousand tons in 2017.



In 2017, palladium became the largest contributor to the Group's revenue, accounting for 28% of the Group's total metal revenue, up by 3 p.p. The palladium revenue increased 24% (or USD 458 million) to USD 2,346 million. The positive impact of higher realized price (USD 681 million) was partly negatively offset by the reduction of sales volume (USD 324 million) mainly owing to the higher base effect as temporary metal stock was sold in 2016 and stock accumulation in 2017 in Palladium fund.

Additional USD 285 million to palladium revenue in 2017 was contributed by the re-sale of purchased metal to fulfil the Company's contractual obligations (vs USD 184 million in 2016).



In 2017, platinum sales accounted for 7% of the Group's total metal revenue and decreased by 5% (or USD 31 million) to USD 623 million due to lower volumes of platinum sales owing to the higher base effect as metal stock was sold in 2016 (USD 11 million) and lower realized platinum price (USD 20 million) down 3% from USD 977 per oz in 2016 to USD 949 per oz in 2017.

Other metals

In 2017, revenue from other metals increasing 3% (or USD 13 million) to USD 437 million owing to the increase in rhodium (up 30%) and cobalt (up 8%) sales which was partly negatively offset by lower gold (down 9%) and silver (down 5%) revenue.

Semi-products

In 2017, semi-products revenue (primarily copper cake and nickel concentrate) increased by USD 208 million (or 96%) to USD 424 million, and accounted for 5% of the Group's total metal revenue. This increase was mainly driven by higher physical sales to third parties instead of processing these semis at the Company's own refineries.

Other sales

In 2017, other sales were up by 19% or USD 731 million primarily owing to the Russian rouble appreciation (USD 80 million) and revenue increase in real terms driven by the increase of prices for services provided to third parties (USD 13 million), and higher revenue from transport and consumer services subsidiaries of the Group, which was partly offset negatively by the divestiture of non-core assets.

Cost of Metal Sales

Cost of metals sales

In 2017, the cost of metal sales increased by 9% (or USD 335 million) to USD 3,968 million owing to:

- Increase in cash operating costs by 33% (USD 965 million);
- Increase in depreciation charges by 38% (USD 174 million);
- Change in metal inventories y-o-y (cost of metal sales decrease by USD 804 million).

The negative effect of currencies appreciation (RUB and ZAR) amounted to USD 312 million.

The inflationary growth of cash operating costs by USD 115 million was exacerbated by an increase in metal purchase costs (USD 346 million) and increase of the mineral extraction tax (USD 83 million) resulting from the change in legislation in 2017. Mineral extraction tax increased following the cancellation of PGM export duties in September, 2016.

Cash operating costs

In 2017, total cash operating costs increased by 33% (or USD 965 million) to USD 3,852 million.

Cash operating costs structure in 2017 and 2016 was affected by consolidation of 50% of Nkomati joint operation.

Cash operating costs

USD million	2017	2016	Change,%
Labour	1,377	1,145	20%
Purchases of metals for resale	530	184	188%
Purchases of raw materials and semi-products	297	292	2%
Materials and supplies	703	520	35%
Mineral extraction tax and other levies	221	122	81%
Third-party services	204	170	20%
Electricity and heat energy	132	101	31%
Fuel	81	60	35%
Production costs related to joint operation	93	79	18%
Transportation expenses	64	71	(10%)
Sundry costs	150	143	5%
Total cash operating costs	3,852	2,887	33%
Depreciation and amortisation	630	456	38%
(Increase)/decrease of metal inventories	(514)	290	n.a.
Total cost of metal sales	3,968	3,633	9%