



# 2018 Financial Results Presentation

February 26, 2019  
Moscow

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# 2018 Financial Performance Highlights

## Consolidated Revenue

**\$11.7bn**

up 28% vs 2017

- + Realized metal prices: Ni, Cu, Pd
- + Pt price
- + Sales volumes: Cu, Pd

## EBITDA

**\$6.2bn**

up 56% vs 2017

- + Metal revenue
- + Operating efficiency gains
- + Depreciation of RUB against USD
- Domestic inflation

## EBITDA margin

**53%**

up 9 p.p. vs 2017

- ✓ **Global mining industry-leading level**

## Net Working Capital

**\$0.9bn**

-\$1.3bn vs. Dec'31

- ✓ **Beating guidance**
- + Sale of palladium stock
- + Optimization of capital structure

## Free Cash Flow

**\$4.9bn**

n.a.

- ✓ **Record high**
- + EBITDA increase
- + Reduction of working capital
- + Lower CAPEX

## CAPEX

**\$1.6bn**

down 22% vs 2017

- + Completion of Chita
- + Completion of downstream reconfiguration
- + Adjustment of investment schedules
- + Depreciation of RUB against USD

## Net Debt/EBITDA ratio

**1.1x**

0.8x for dividend calculation

- ✓ **Back to mid-cycle levels**
- + Investment grade credit ratings from all three international rating agencies

## Interim 1H 2018 dividends

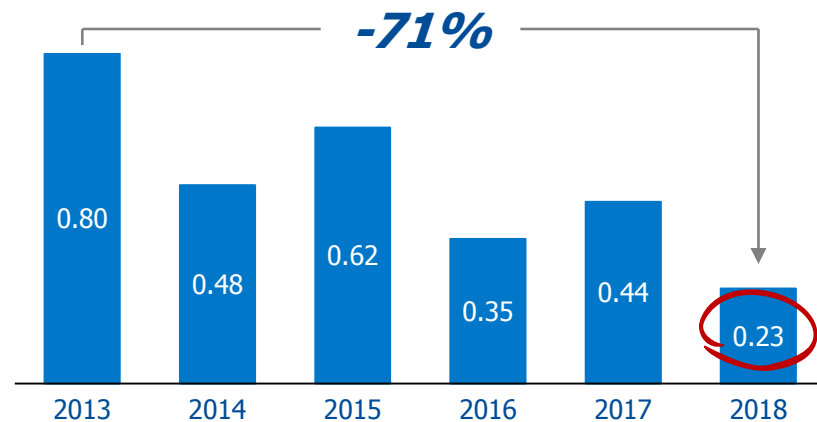
**\$1.8bn**

Dividend of USD 11.65 per share paid in 4Q2018

# Health & Safety: Delivering Steady Improvements

## LTIFR: Improved to Record Low Levels

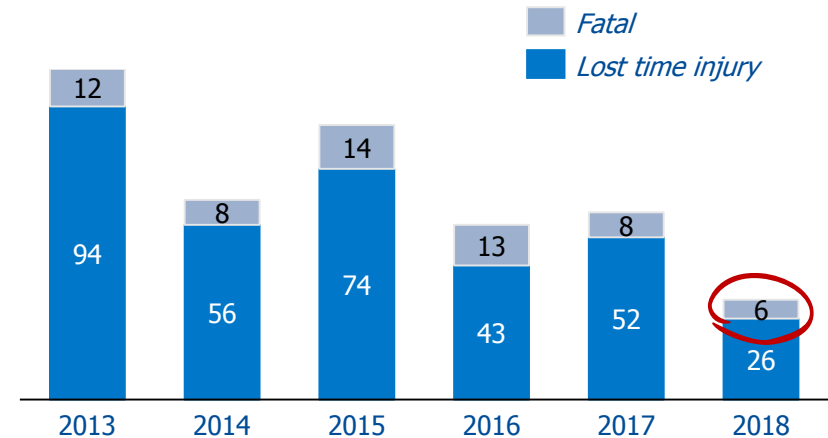
LTIFR ( $1 \times 10^6$ )



- LTIFR remains below the global mining industry average
- Reiterating focus on personal and process safety across all operations
- Commitment to create strong safety culture at all levels of the organization

## Accident Statistics Improved in 2018

Employees



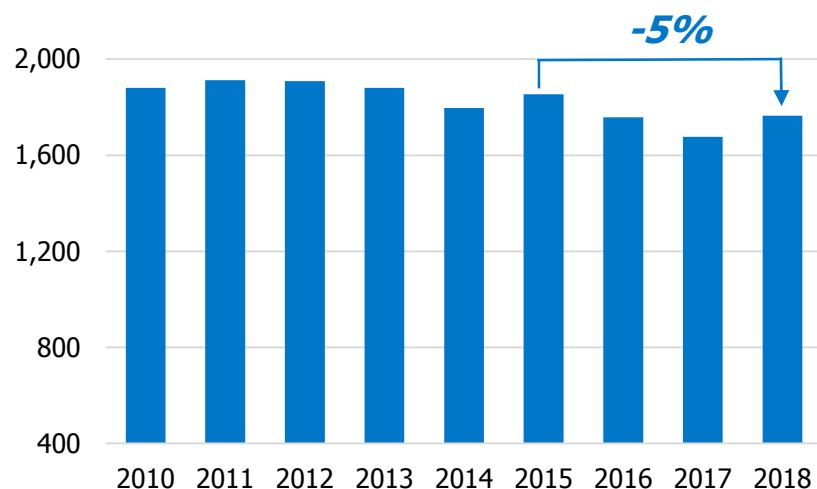
- Total recordable fatal accidents and lost time injury rates decreased by 47% y-o-y
- 45 internal audits of Occupational Safety and Health management system were conducted in 2018
- 105 employees were fired for the violation of cardinal safety rules (vs 152 in 2017)

Source: Company data

# Reducing Environmental Footprint

## Polar Division: Sulphur Dioxide Emissions Down 5% from 2015

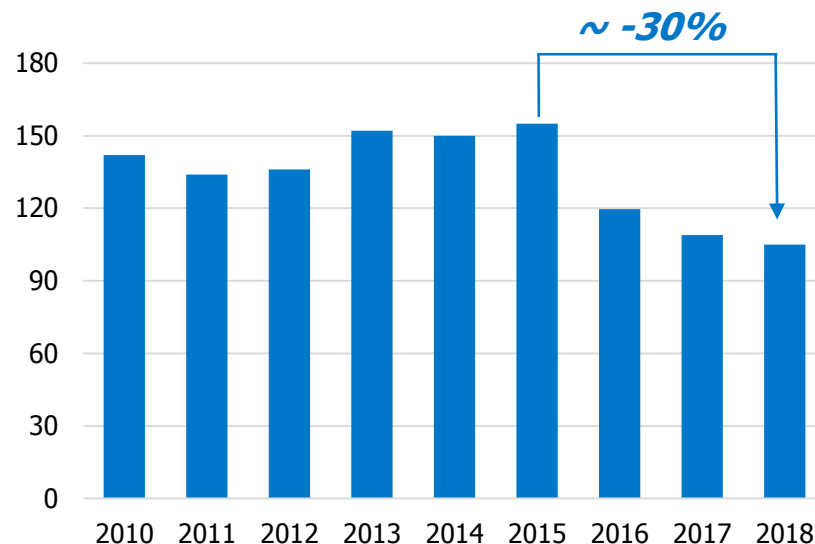
SO<sub>2</sub> Emissions, kt



- SO<sub>2</sub> emissions increased 5% in 2018 despite 15% increase of copper production (smelting) in Polar Division
- SO<sub>2</sub> emissions remained within the government approved limits

## Kola Division: Sulphur Dioxide Emissions Reduced 30% from 2015

SO<sub>2</sub> Emissions, kt



### Reduction of SO<sub>2</sub> emissions in 2018 was due to:

- Reduced smelting of higher sulphur content third party materials
- Sale of high-grade copper concentrate to third parties
- Reduced anode smelting as chlorine leaching refinery was ramping up



# ESG Performance Highlights

## Recognition of Norilsk Nickel ESG Efforts...



**Signatory to UN Global Compact** since 2016



FTSE4Good

**Reiterated as an index constituent in July 2018**  
Score of **3.1/5** <sup>(1)</sup>  
(up from 2.3 in 2017)



### Rating updated in December 2018

Governance score **4/10** <sup>(2)</sup>  
Environmental score **4/10**  
Social score **3/10**

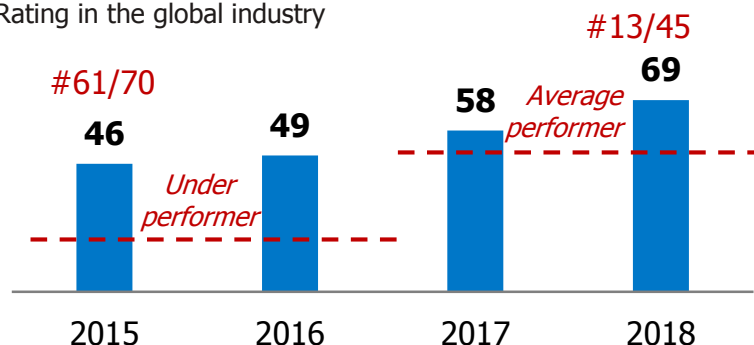


**Ranked #4/33** in the first environmental ranking of Russian mining companies

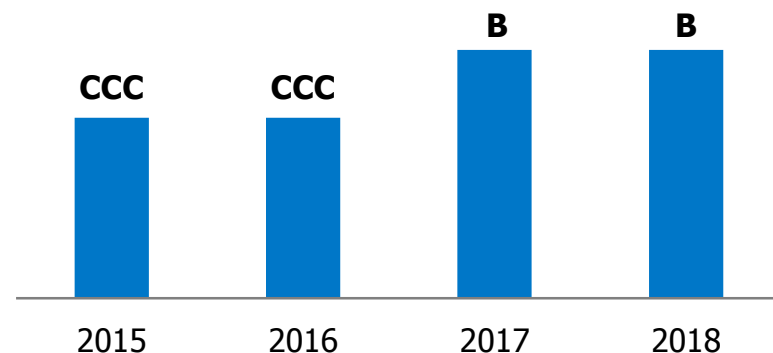
## ...Leads to Gradual Improvement of ESG Assessment

Sustainalytics ESG Score: 69 points (out of 100), Rated «Average Performer» since 2017

Rating in the global industry



MSCI ESG Score: Rated «B» since 2017



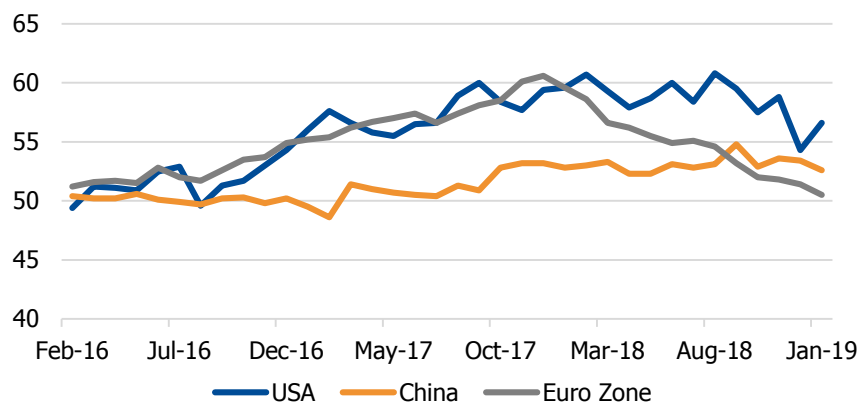
Note: 1. of which 5 – is the highest, 2. of which 1 – is low, 10 – is high risk

# Markets Update

# Weakening Macro and Strong US Dollar – Negative Backdrop for Commodities

## Global PMIs Trending Lower

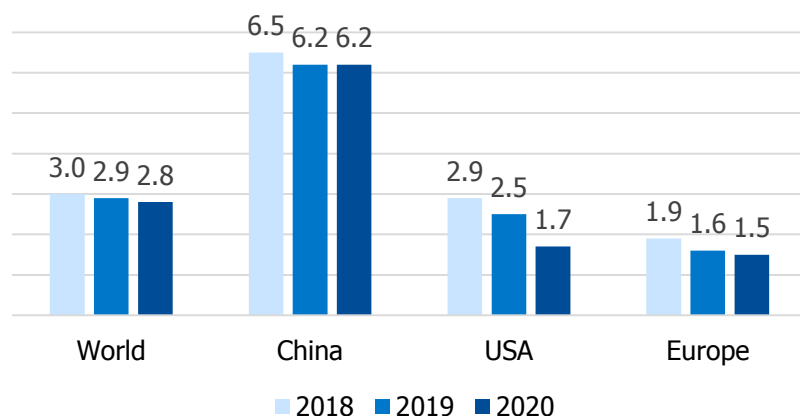
Purchasing Managers Index



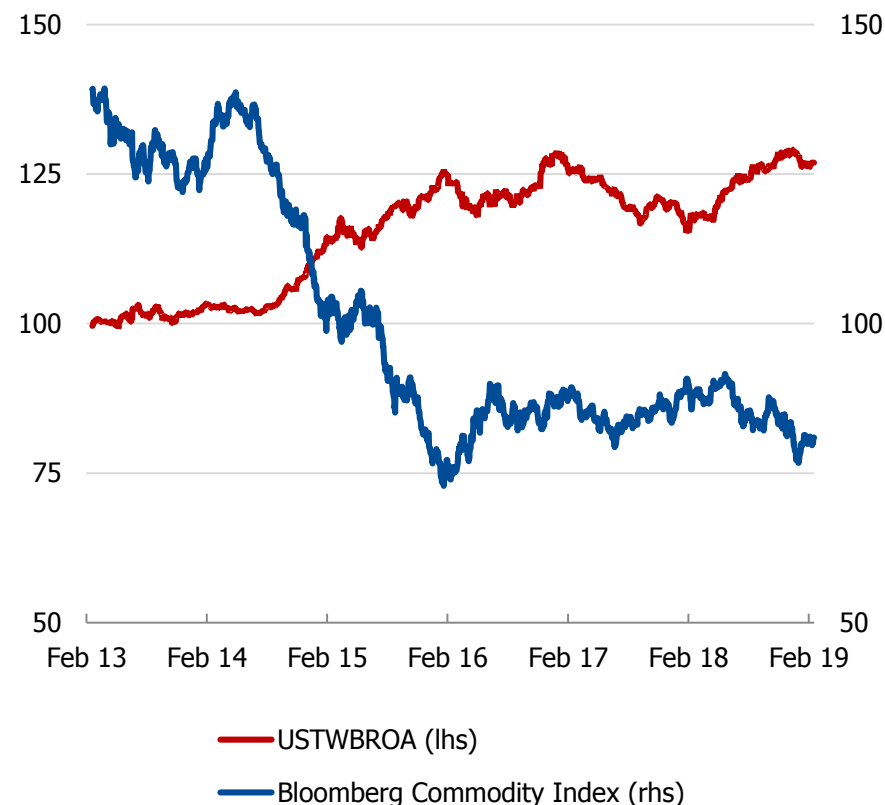
## Global Economic Growth Expected to Slowdown

GDP Growth Rates <sup>(1)</sup>

%

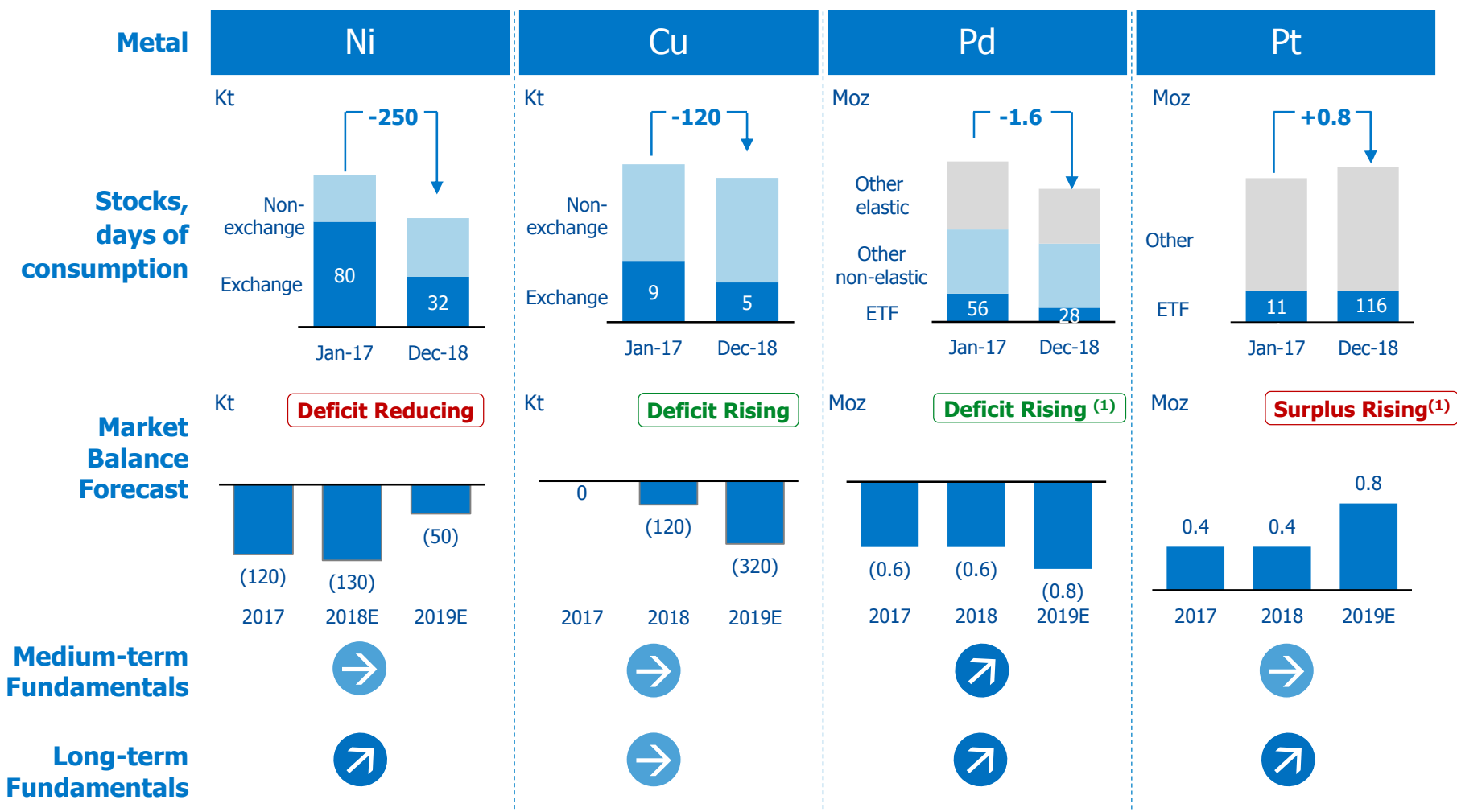


## Strong Trade-Weighted US Dollar Maintains Downward Pressure on Commodities





# Metal Markets Outlook – View on Fundamentals



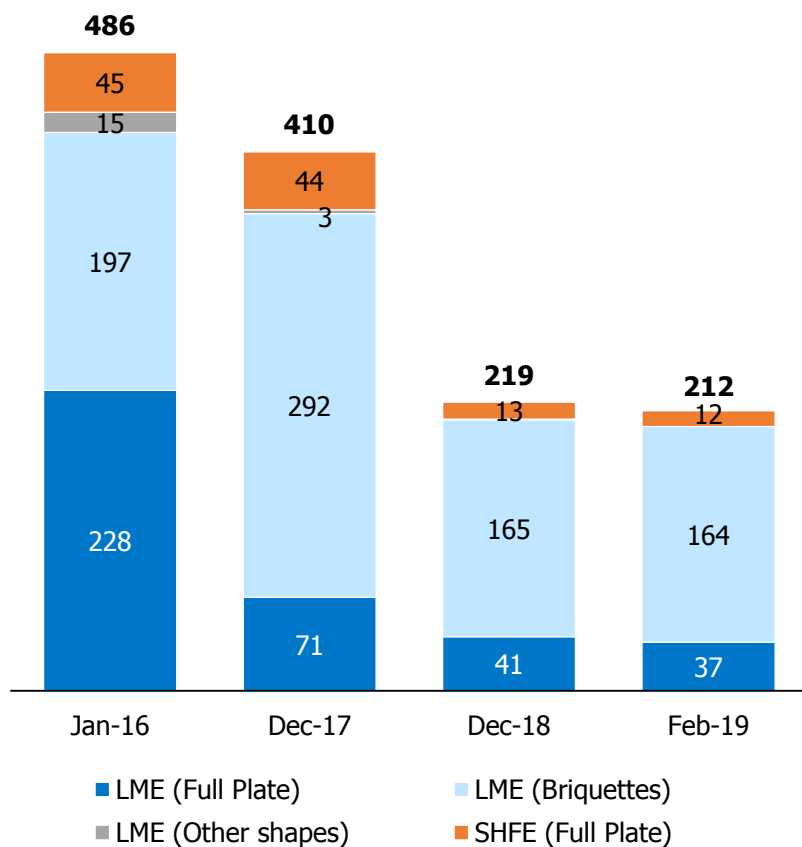
Source: Company estimates

Note: 1. Excluding ETFs, investment demand and industry stocks movement. Numbers are rounded separately

# Nickel Exchange Stocks Are Rapidly Normalizing

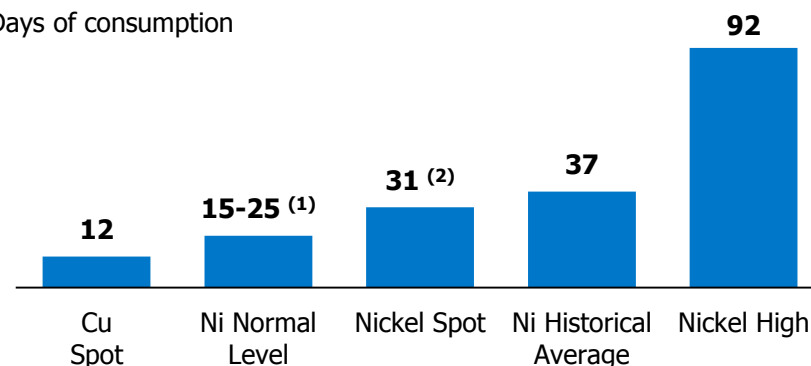
## Drawdown of Exchange Inventories Continues in 2019 Albeit at a Slower Pace

Ni, kt



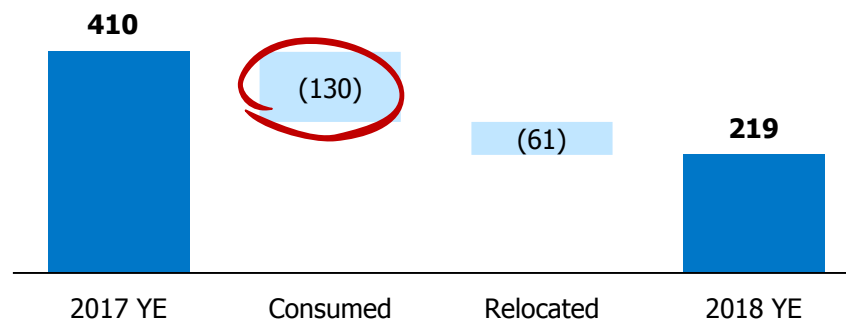
## Inventories More than Halved from Peak Levels and Went Below Historical Averages...

Days of consumption



## ... as Most of Stocks Drawn Were Consumed

Ni, kt



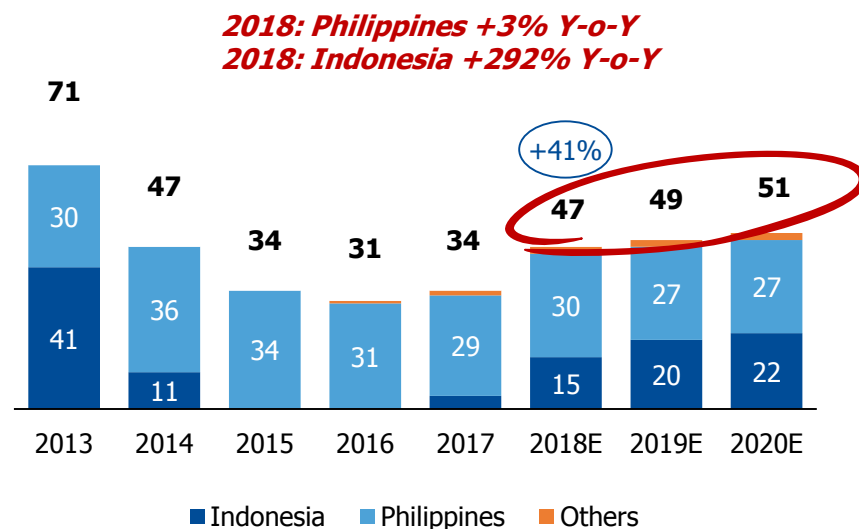
Source: Company estimates, LME, SHFE, SMM

Note: 1. According to markets participants, customers, 2. As of February 15, 2019

# Global NPI Production Volumes Continue to Set Records

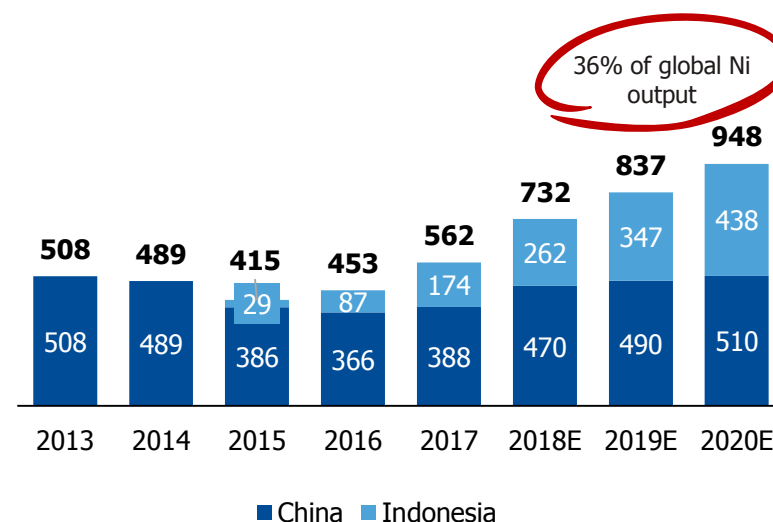
Growth of Nickel Ore Supply to China Expected to Moderate in 2019-2020E...

Ore, Mln wmt



...Leaving Indonesia as the Main Driver of Global NPI Growth

Kt, Ni Units



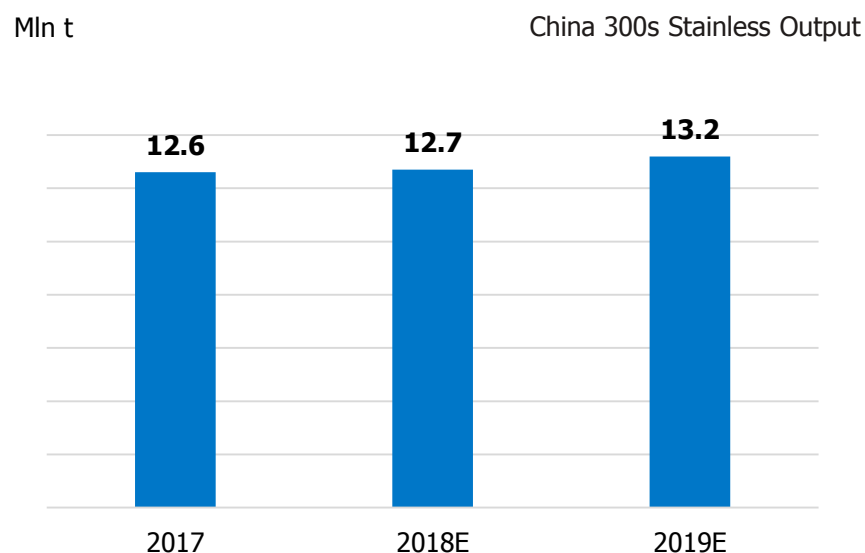
- In April 2017, Indonesia relaxed the ban on export of unprocessed nickel ore for 5 years
- Indonesian government is reportedly committed to reinstate the ban in 2022E
- In the long-term, up to 40% of the feed (200kt of Ni or 5% of global supply) for Chinese NPI could be at risk

# Growth of Ni Demand in Stainless Steel Supported by Indonesia

Indonesian Stainless Production –  
the Main Driver of Nickel Demand Growth

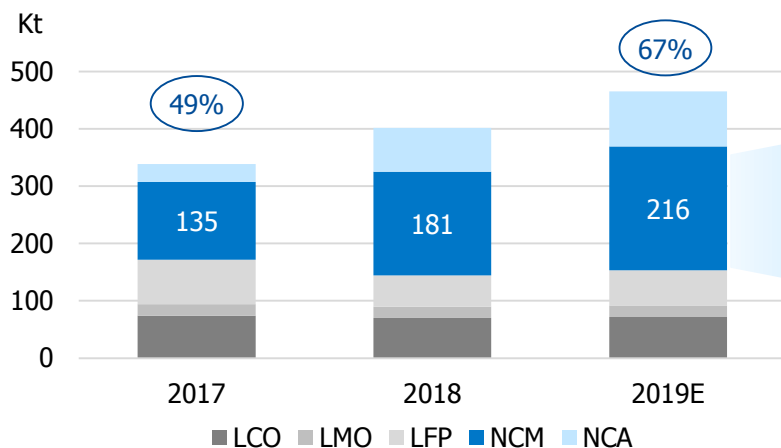


Chinese 300 Series Stainless Output Was Flat in 2018,  
Expected to Pick Up Moderately in 2019



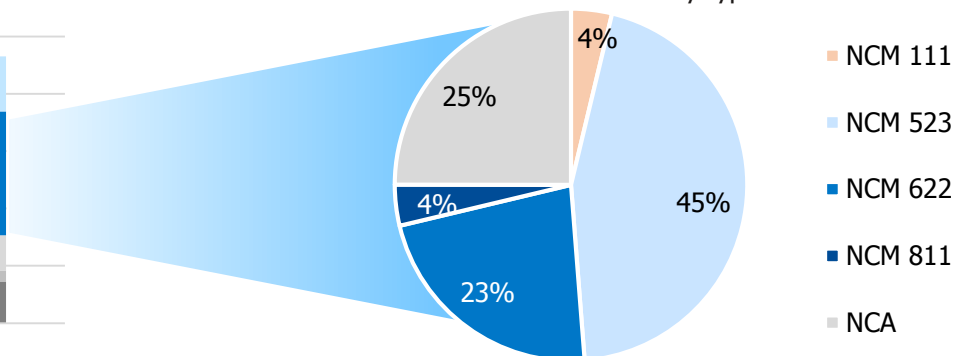
# Nickel Consumption in Batteries – Small But Rapidly Rising

Market Share of Ni-intensive NCM/NCA Cathodes Expected to Reach 67% in 2019E

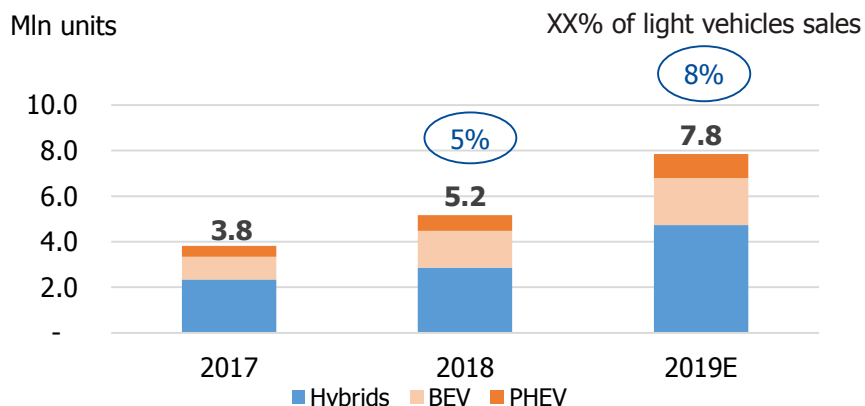


Within NCM Cathodes Chemistry Shifting Towards Higher Ni Loadings

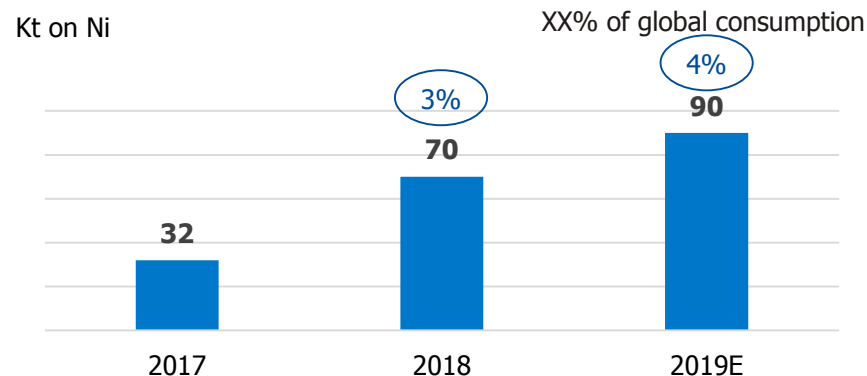
Breakdown of Global PCAM Production by type



Electric Vehicles Maintain High Growth Rates



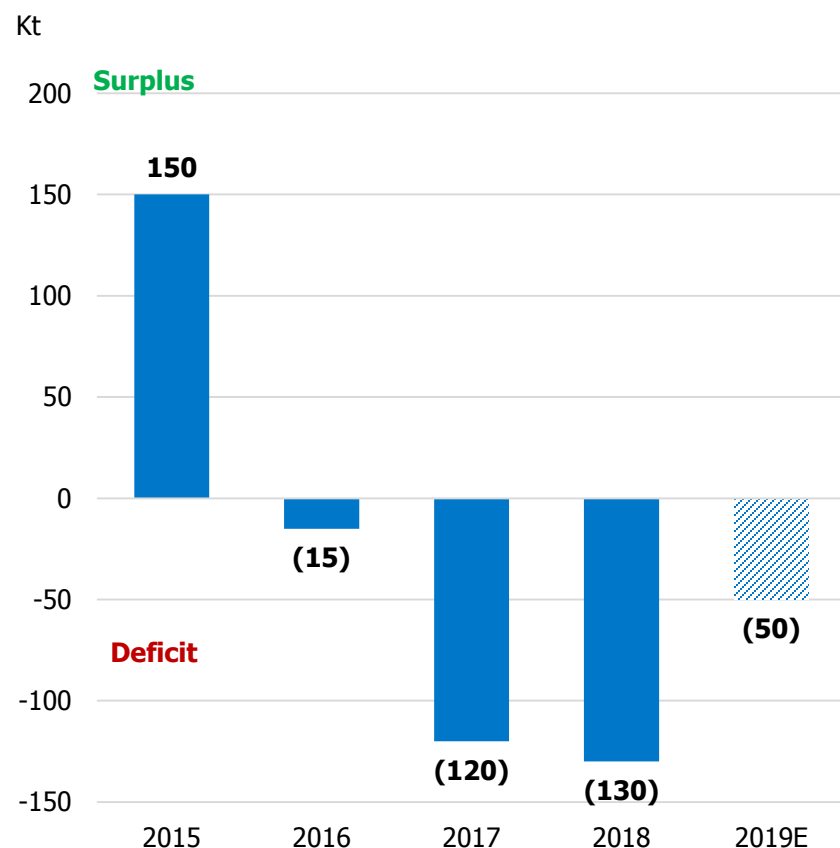
Ni Demand in EV Li-ion Batteries Rising Fast, But Still Small at 4% of Global Consumption



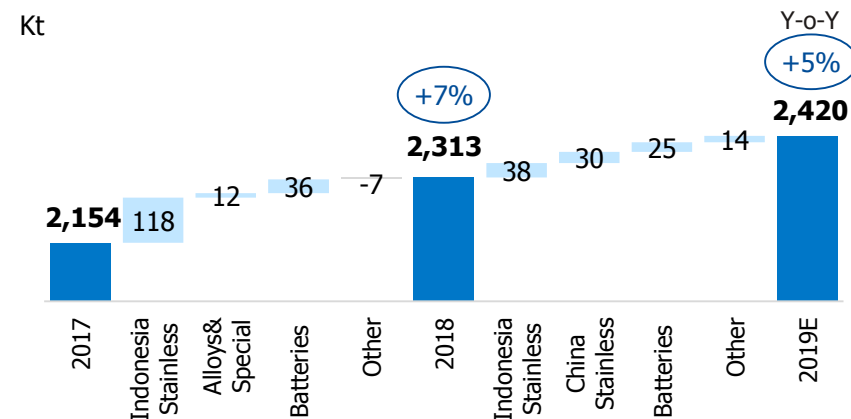
Source: Company data, Chinese customs trade statistics

# Nickel Market: Robust Fundamentals

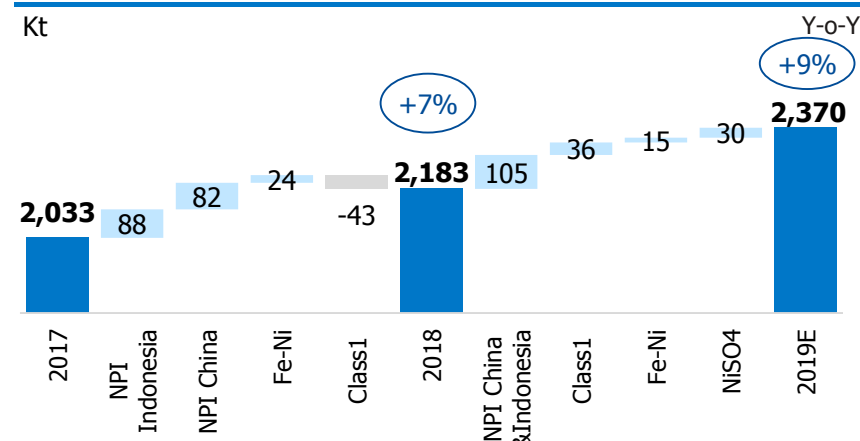
## Nickel Market Balance: Decreasing Apparent Deficit in 2019 Due to Slower Demand Growth



## Demand: Moderating Growth in 2019 on Weaker Global Macro

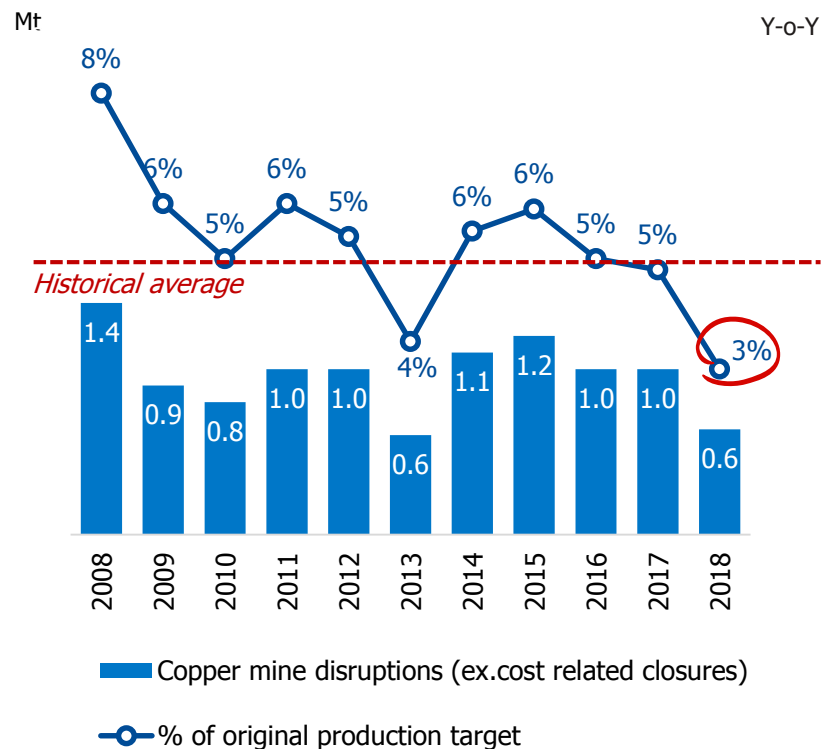


## Supply 2019: Growth Accelerating on NPI Ramp-up in Indonesia and Recovery of Class 1

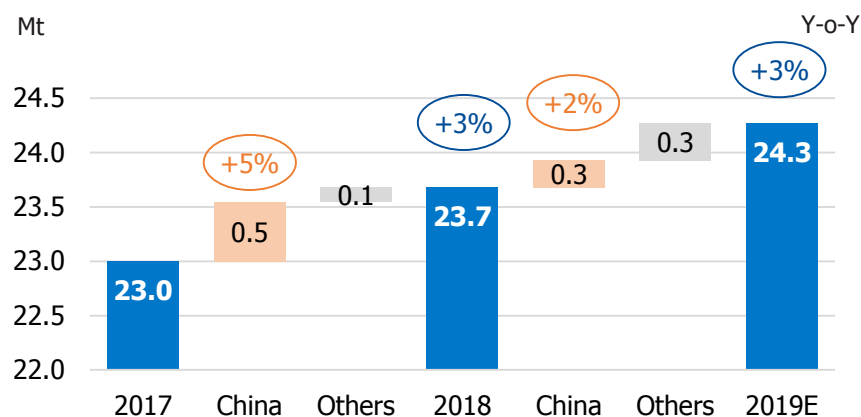


# Copper: Demand Concerns and Supply Disruptions Missed Expectations in 2018

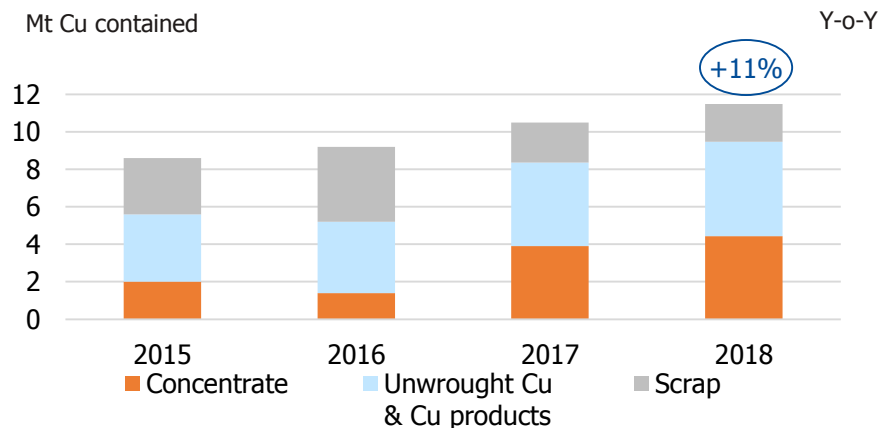
## Copper Supply Disruptions: Abnormally Low in 2018 – Well Below Historical Average



## Moderating China's Copper Demand Still the Main Driver of Global Consumption Growth in 2019



## Copper Imports to China Up Strongly in 2018

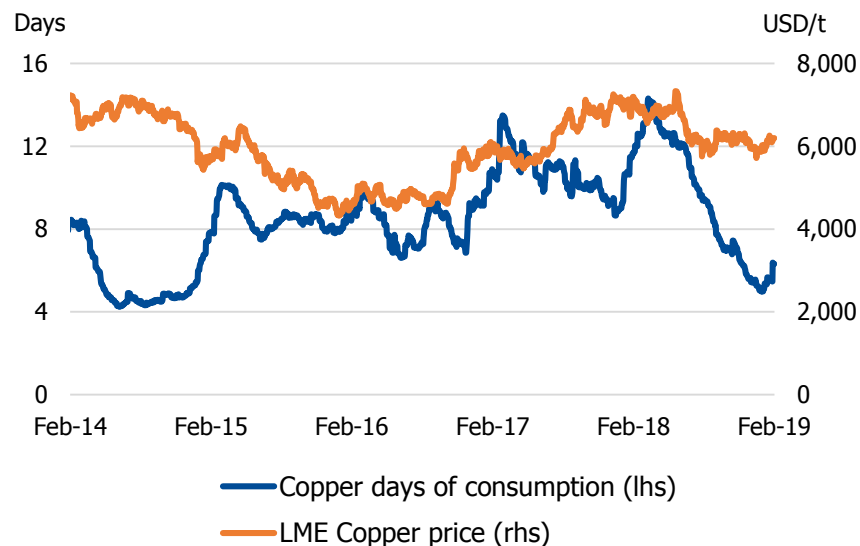


- In 2019, no potential major supply disruption events anticipated so far

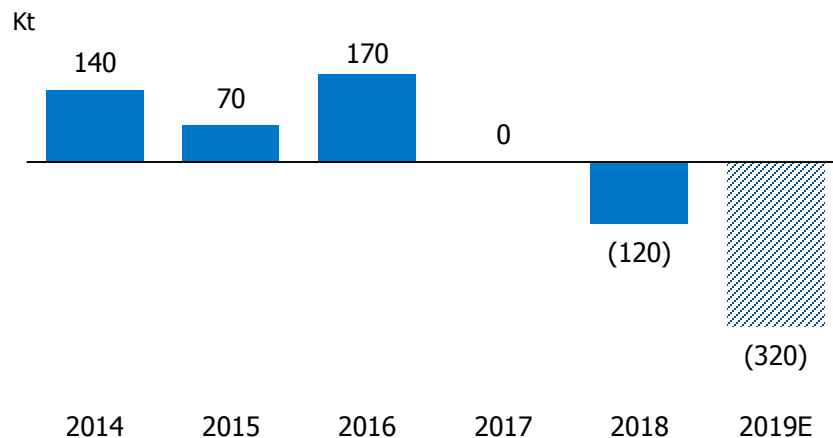


# Copper Market is Developing Small Deficit, Inventories Have Been Trending Lower

## Inventories Running Tight and Near the Low of 2014



## Copper Market Balance: Marginal Deficits to Expand in 2019E



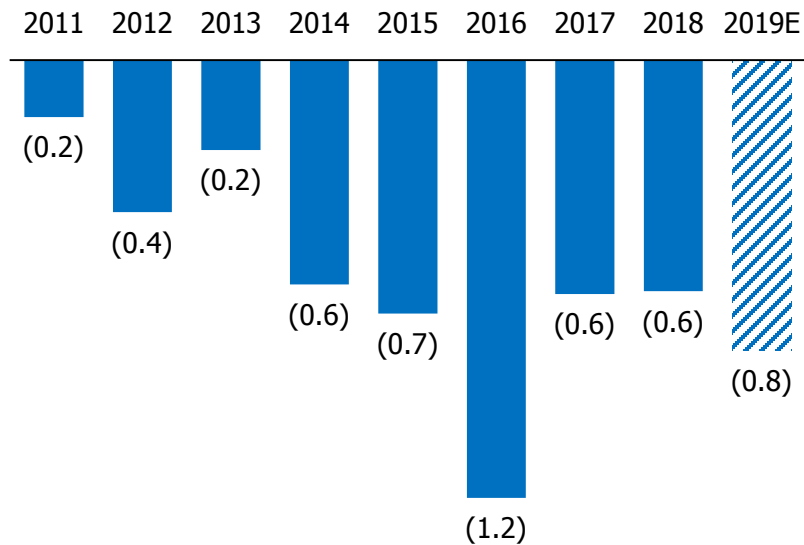
- + Exchange inventories running near historical lows
- + Abnormally low supply disruption rate of 2018 may not sustain in 2019
- + Potential resolution of trade dispute between USA/China in sight

- Growth of Chinese demand normalizing
- Global economy is slowing
- No major potential supply disruption events (negotiations with labour unions) in sight

# Palladium Market Remains in Structural Deficit

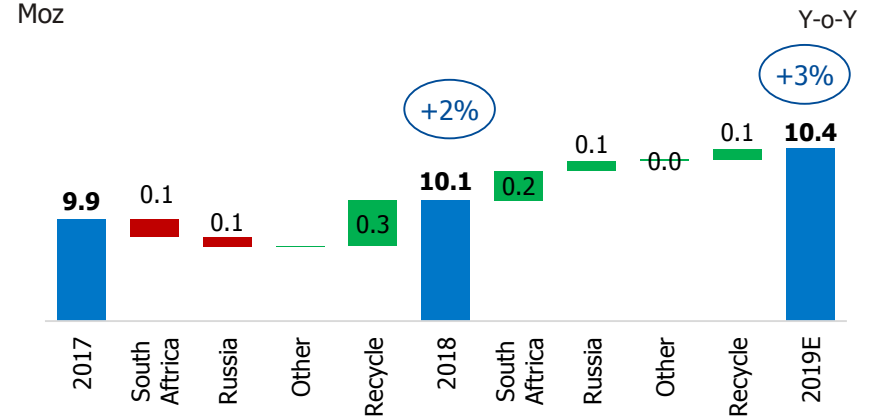
## Global Palladium Market Balance: Major Apparent Deficit Holds

Moz



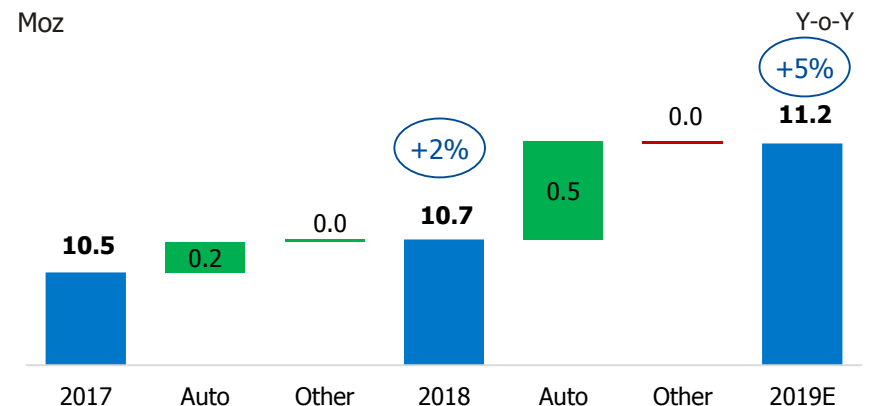
## After Contraction in 2018 Some Recovery of Mine Production Expected in 2019

Moz



## Tightening Emission Standards to Accelerate Demand Growth in 2019

Moz



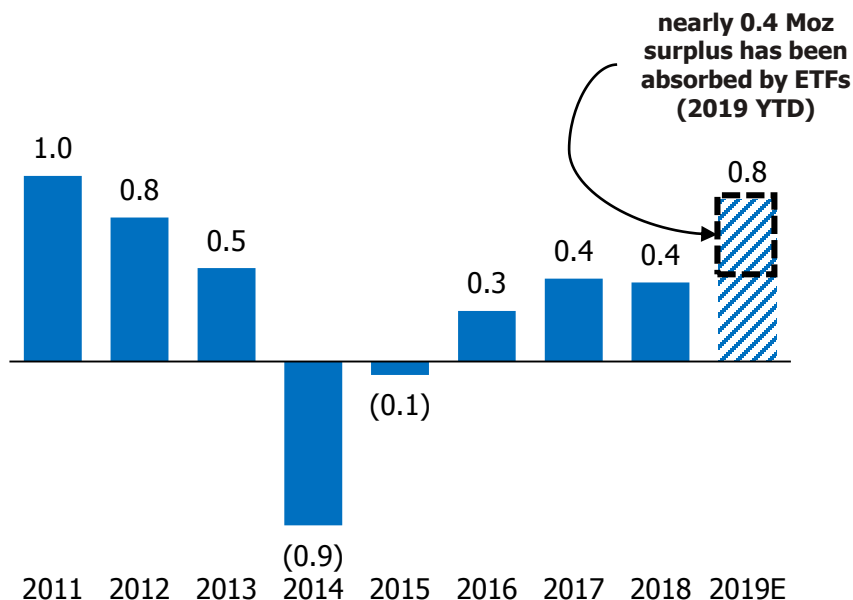
Source: Company data

Note: 1. Excluding ETFs, investment demand and industry stocks movement. Numbers are rounded separately

# Platinum Market is in Sustained Surplus

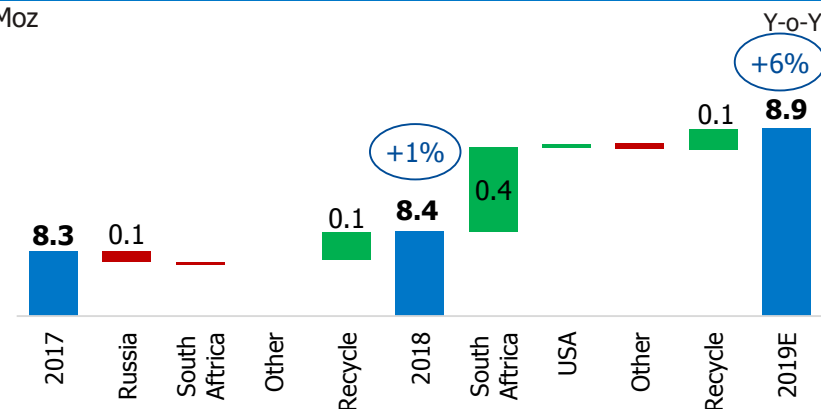
## Global Platinum Market Balance: Apparent Deficit Expanding in 2019

Moz



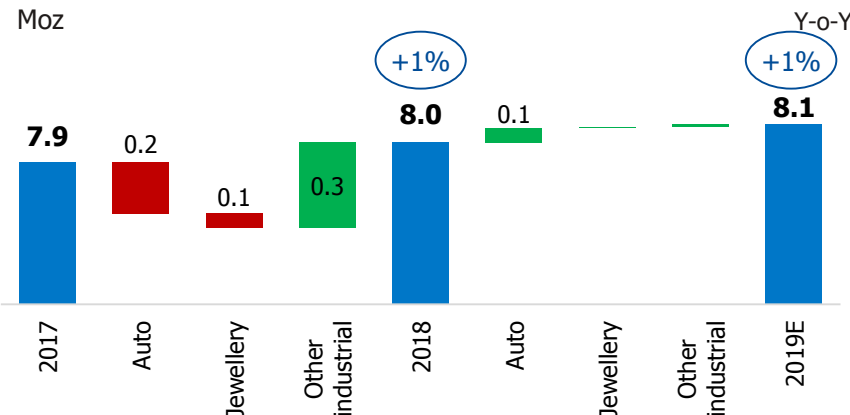
## Increase in Supply Expected in 2019 from Releasing Work-in-progress Pipeline

Moz



## Stagnant Demand on Weak Offtake in Automotive and Jewellery Sectors

Moz

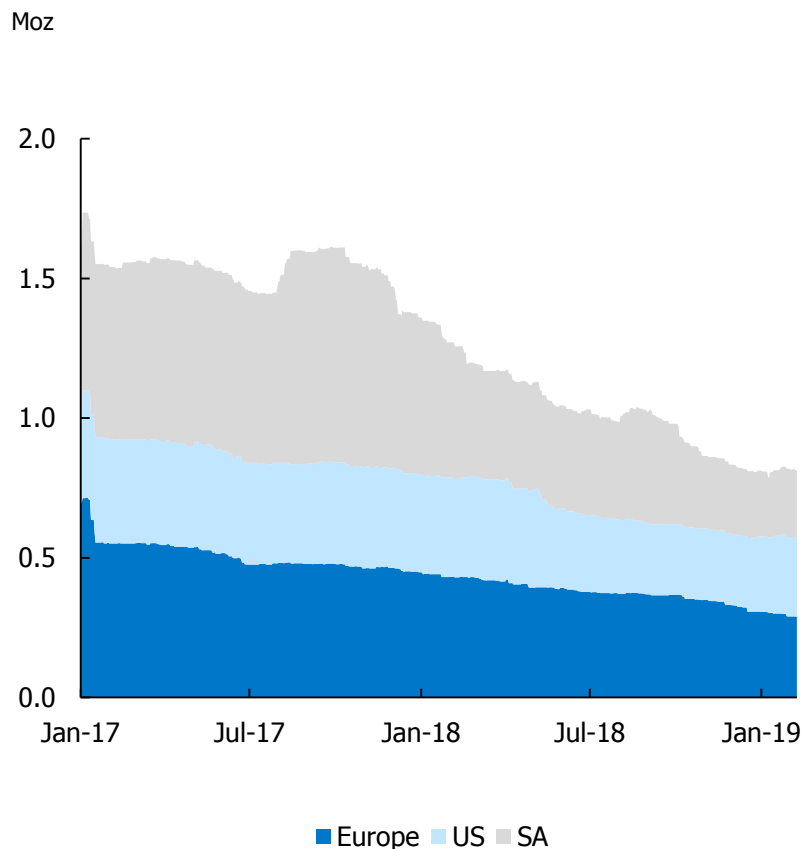


Source: Company data

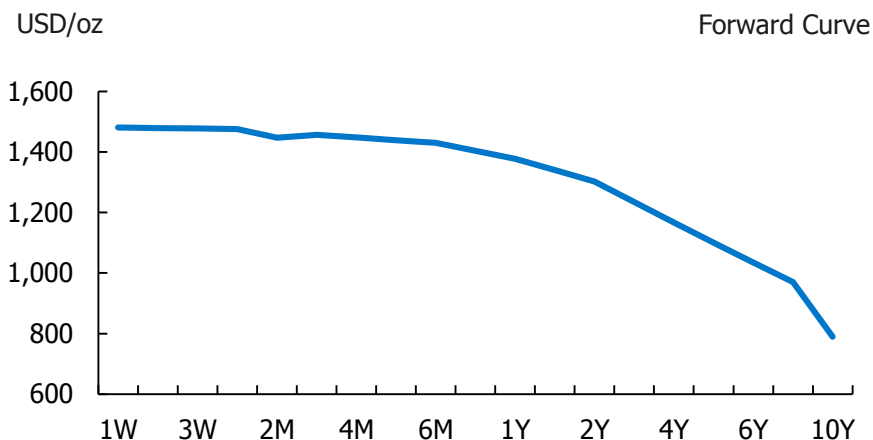
Note: 1. Excluding ETFs, investment demand and industry stocks movement. Numbers are rounded separately

# Physical Market is Running Tight

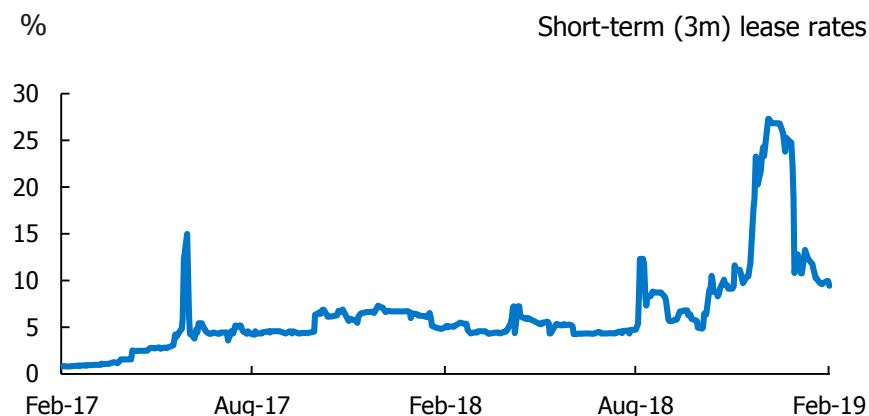
Net Outflows from Palladium ETFs Continued: Over 800Koz since January 2017



Palladium Market Backwardation Reflects Physical Tightness

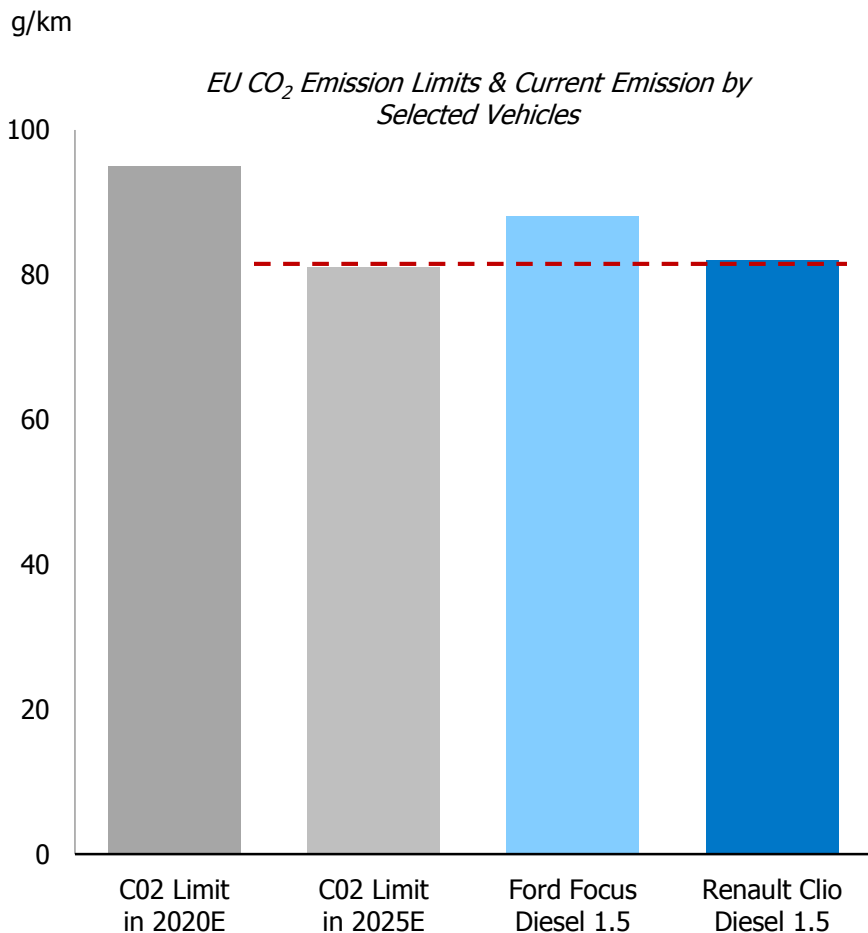


Short-term Palladium Lease Rate are High



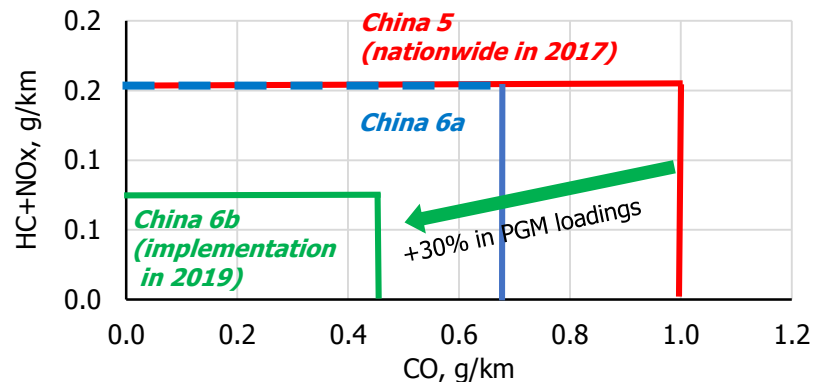
# Environmental Regulations Significantly Impact Powertrain Evolution

## Europe: Modern Diesels Satisfy CO<sub>2</sub> Emission Targets

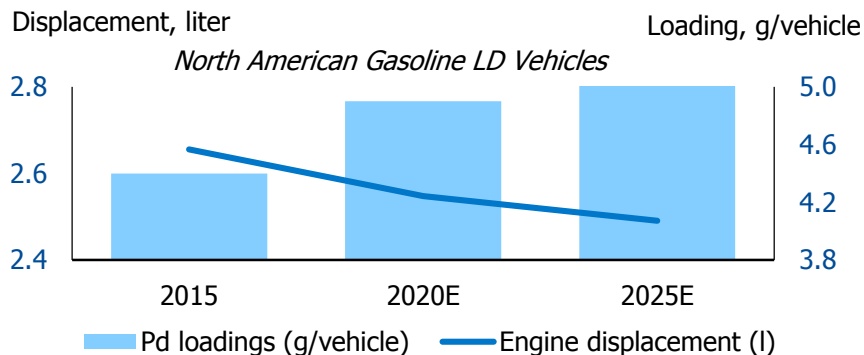


## China: China 6 Regulation Pushes OEMs to Increase PGM Loadings

Tightening NO<sub>x</sub> and CO Targets in China



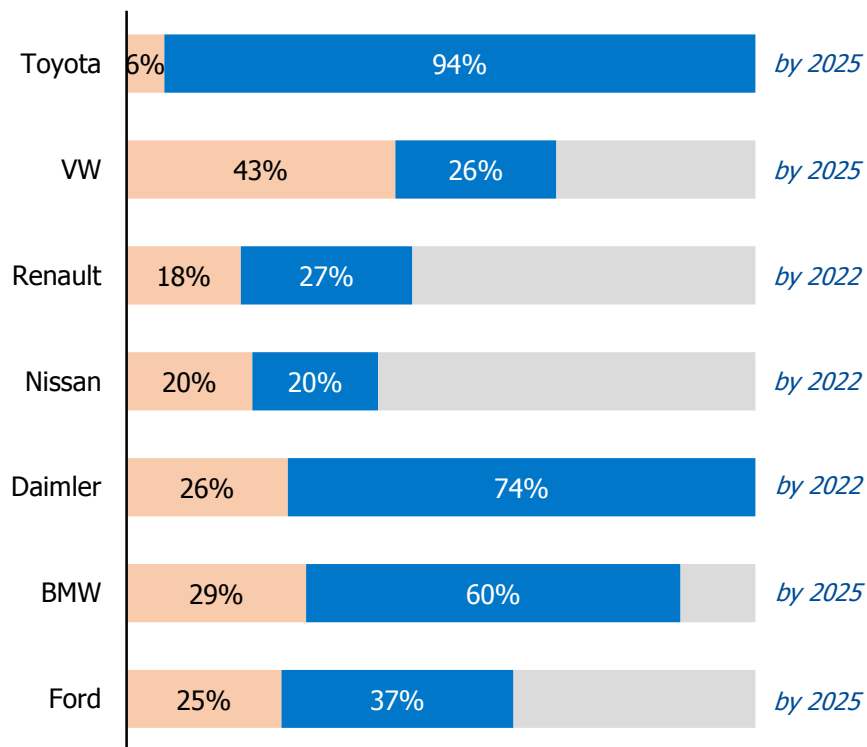
## USA: Pd Loadings Expected to Rise on Stricter Emission Regulations Despite Engine Downsizing



# Fleet Electrification Targets Imply Active Hybridization

## Major Automakers' Plans: Hybrids and Internal Combustion Engines to Dominate

LV production

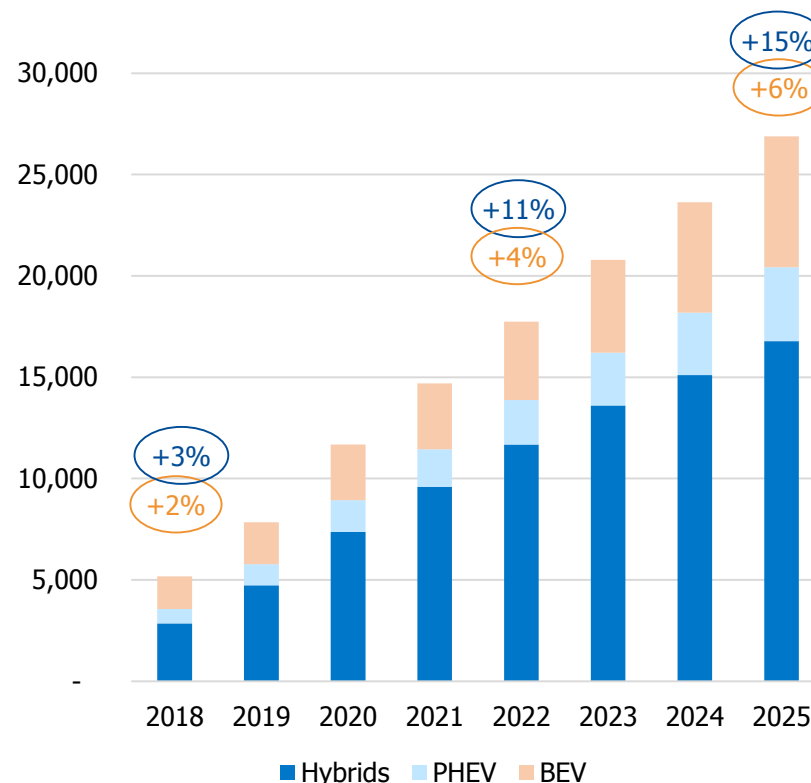


BEV models Hybrid models Internal combustion engine

## Industry Expectations: Hybrids to Dominate in the Electric Vehicles Mix in the Long-term

'000

(%) share in global LV production

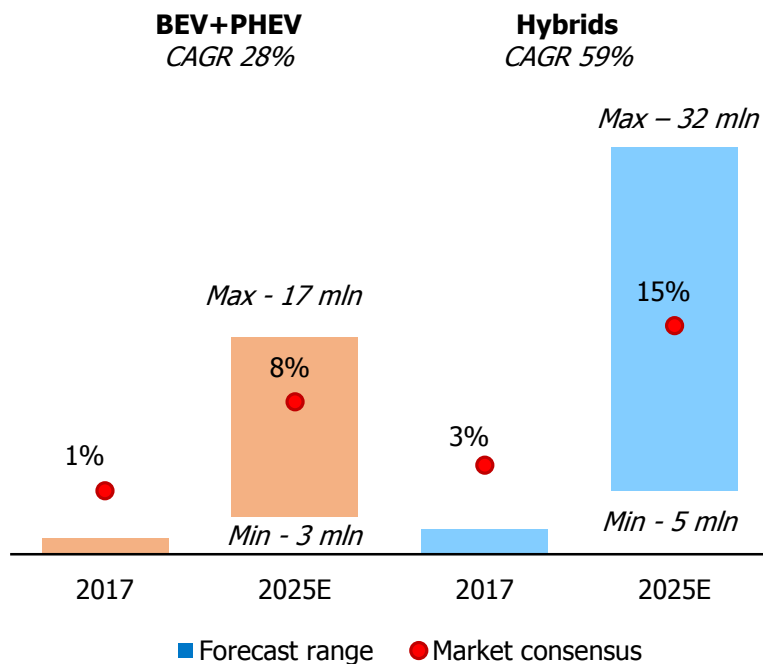


Source: Company data, announcements by OEMs, LMCA

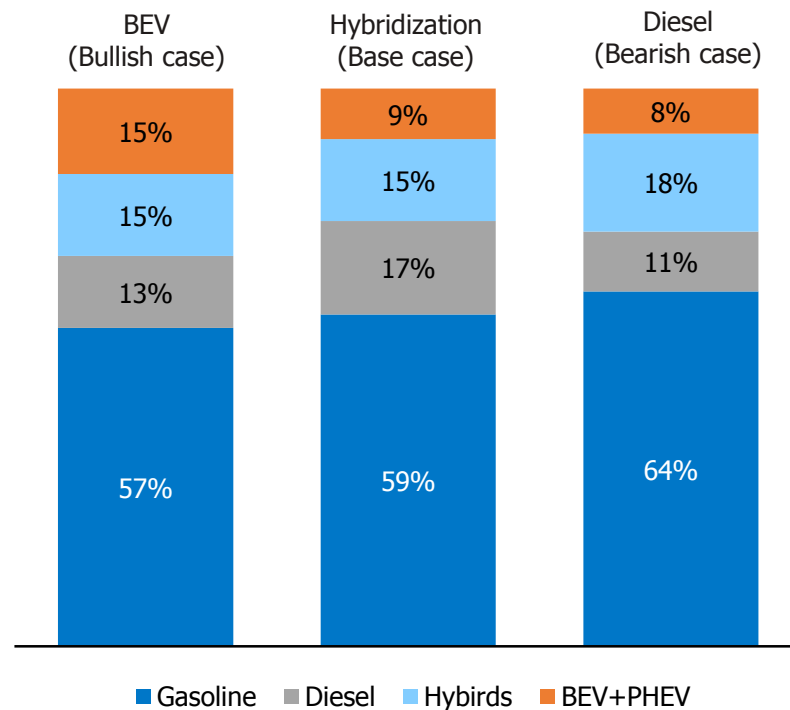
# Long-term Palladium Demand to Remain Strong

Significant Uncertainty in the LT Outlook for Electric Vehicles Results in a Wide Range of Expectations

CAGR 2017-2025E



2025 Scenarios of Global Light Vehicles Mix: Gasoline and Hybrids to Dominate Market Share



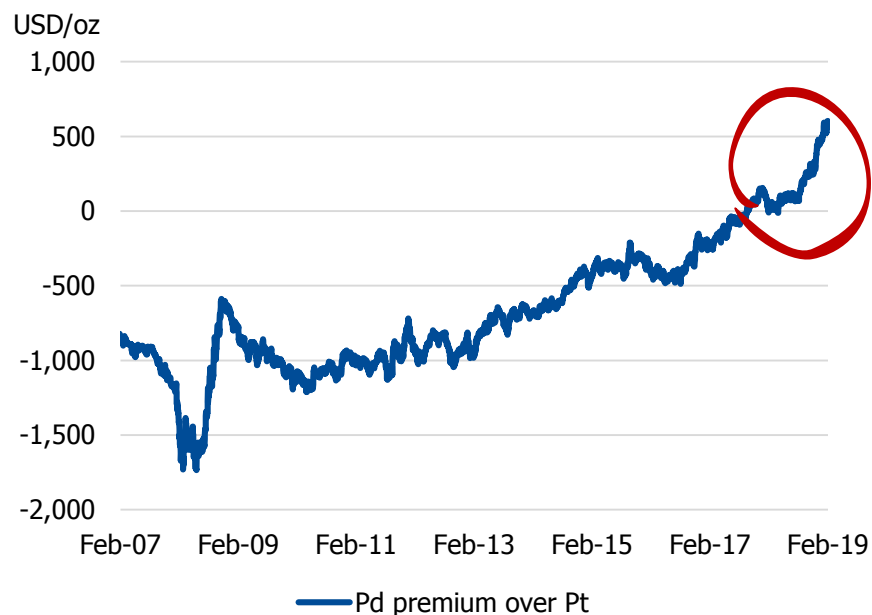
## Key uncertainties for battery electric vehicles (BEVs):

- Cost of ownership
- Deployment of sufficient charging infrastructure
- Sustainability of government incentives



# Premium of Palladium to Platinum is Sustainable in the Mid-Term

Palladium Established a Sustainable Premium to Platinum on Stronger Fundamentals...



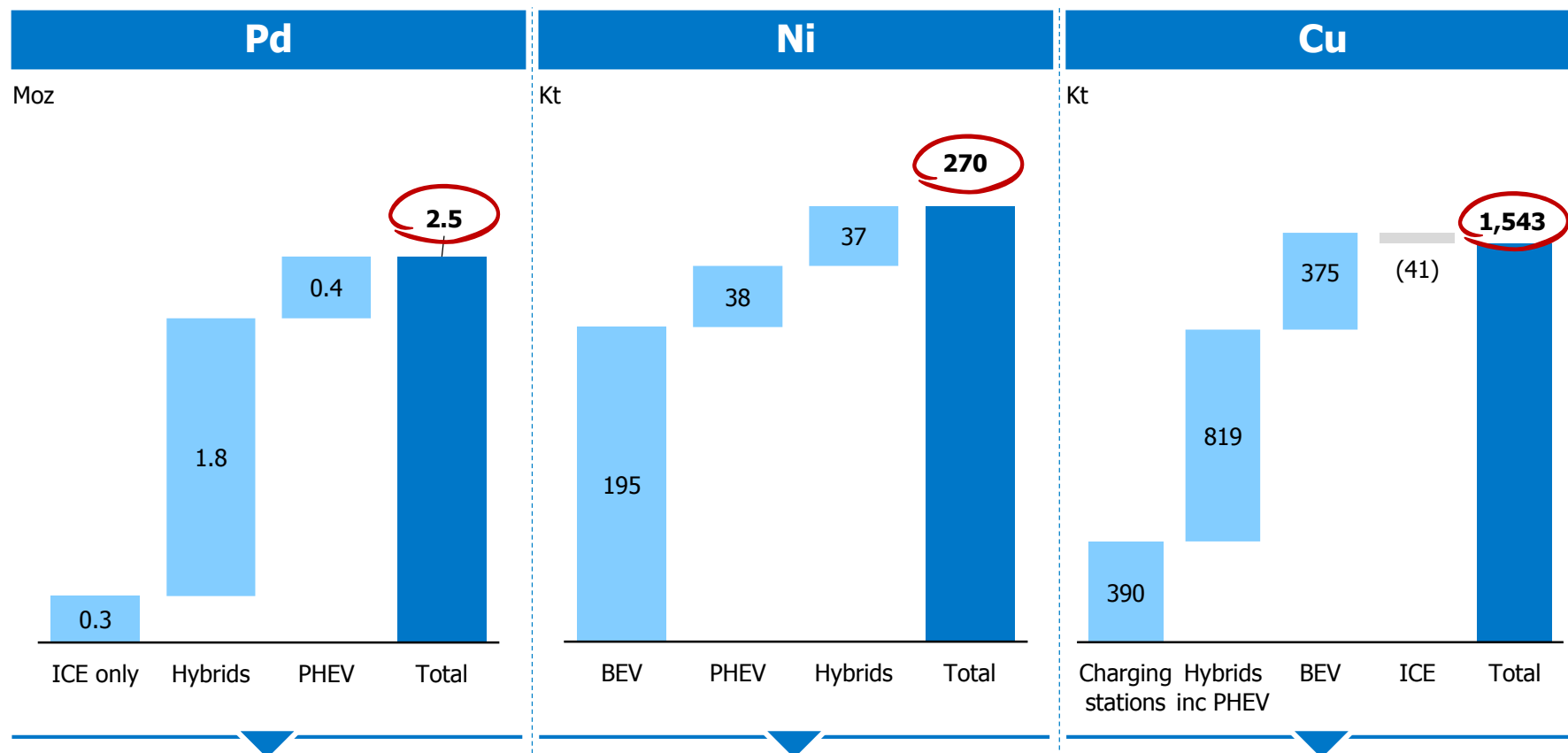
... as Pd Loadings in Gasoline Vehicles are Supported by Higher Fair Value-in-Use

	Palladium	Platinum
	Higher	Lower
Thermal durability	Platinum is more susceptible to sintering at high temperatures <i>To increase engine efficiency and to reduce CO<sub>2</sub> emission OEMs increase the share of ICE, which operate at higher temperatures</i>	
HC and CO oxidation at low temperatures	Higher <i>Hybrid vehicles operate at lower temperatures as ICE is not working continuously</i>	Lower
NOx reduction	Higher	Lower (same for lean burn)

- Palladium performs better than platinum in gasoline vehicles
- Introduction of Real Driving Emission tests incentivises «over engineering» and higher palladium loadings
- Long-term stability/reliability of supply is supportive of palladium demand
- Progress in the development of prospective mining projects should mitigate structural deficit in the medium-term

# Auto Driven Metal Demand Growth in 2018-2025E

## Metal



## Consumption



Pd in catalytic converters



Ni in batteries



Ni in stainless steel, alloys and parts



Cu in electric engines and generators



Cu in wires








Cu in charging stations

Source: Company estimates

Note: 1. Assuming additional 18 mln units of light vehicle sales, 2. Ni consumption in batteries shown at the precursor material basis

# Nornickel's Metal Basket Content by Light Vehicle Type

	 Gasoline	 Diesel	 Hybrid incl. PHEV	 BEV	 FCEV
<b>CAGR<sup>1</sup></b>	0%	0%	+27%	+26%	+21%
<b>Market Share<sup>2</sup></b>	61%	17%	17%	6%	<1%
<b>Ni</b>	Stainless Steel & Parts		+Batteries		2–3 kg
	2-4 kg	2-4 kg	5–15 kg	30–110 kg	
<b>Cu</b>	Wires & Parts		+Electric Motor, Generator Winding		
	20-25 kg	20-25 kg	45-50 kg	75-80 <sup>3</sup> kg	70-75 kg
<b>PGM</b>	Catalysts			-	Fuel Cell
	2-5 g	3-6 g	2-6 g		25-35 g
<b>Pt:Pd ratio</b>	1:4	8:1	1:4		
<b>Metal value per vehicle, US\$<sup>(4)</sup></b>	\$260-480	\$220-380	\$460-770	Up to \$1,800	Up to \$1,400

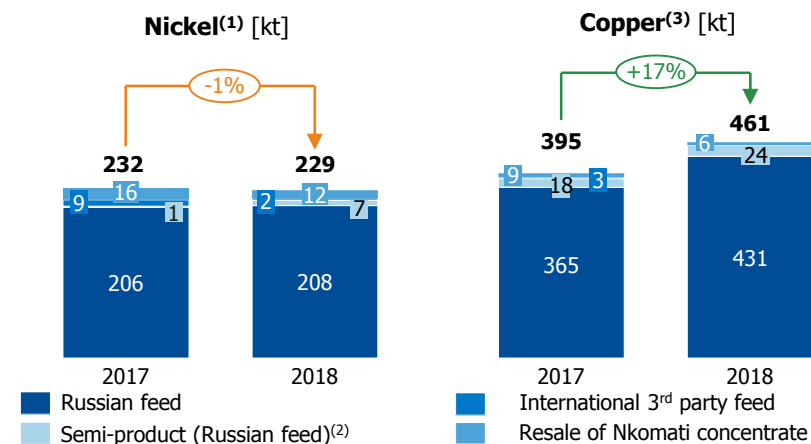
Source: Company estimates, LMC Automotive, Bloomberg;

Note: 1. CAGR for 2017-2025E, 2. Expected market share in 2025 based on production; 3. Excluding additional infrastructure demand of 1-8 kg per charger; 4. Metal values calculated at spot prices as of February 18, 2019

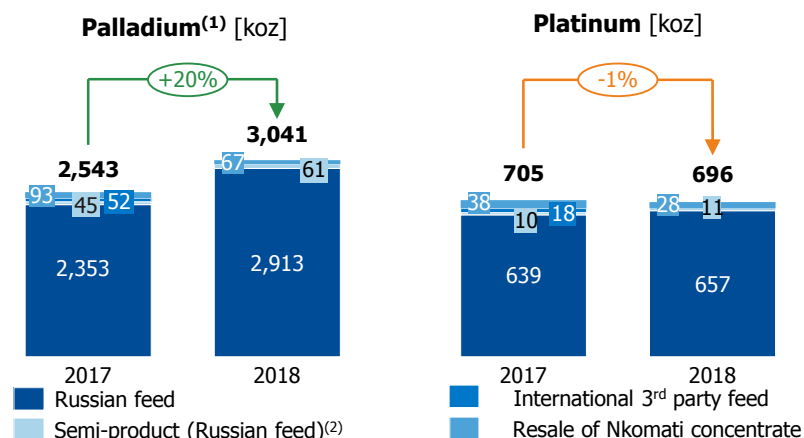
# 2018 Financial Results

# Metal Sales Volumes and Realized Prices

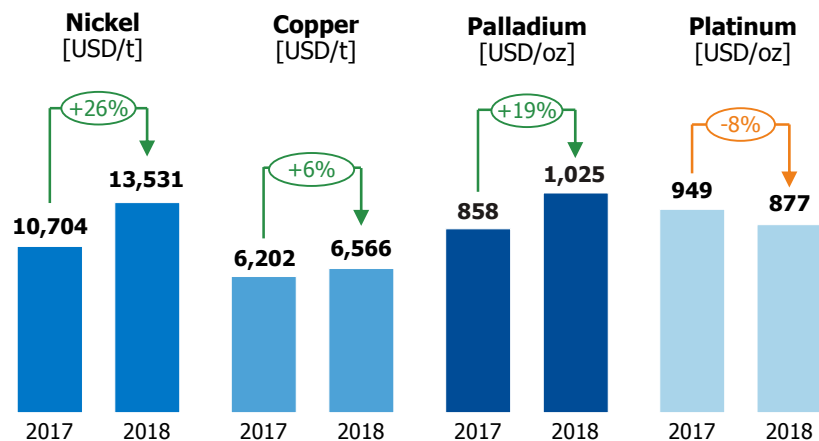
## Base Metals Sales: Strong Growth of Copper



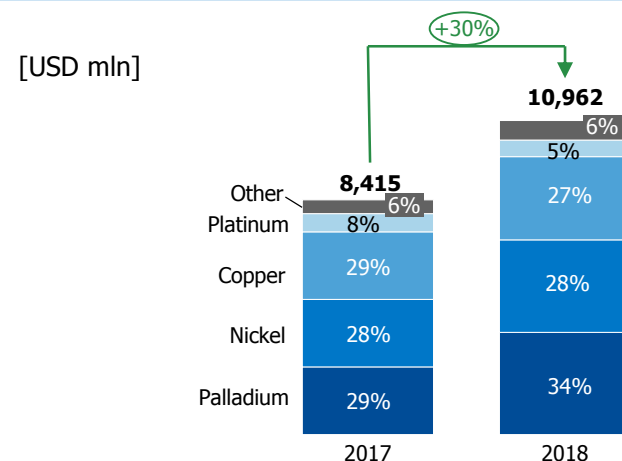
## PGM Sales: Strong Growth of Palladium on Destocking



## Realized Metals Prices: Supported by Robust Commodity Markets



## Sales Breakdown by Metals: Palladium is the Largest Contributor

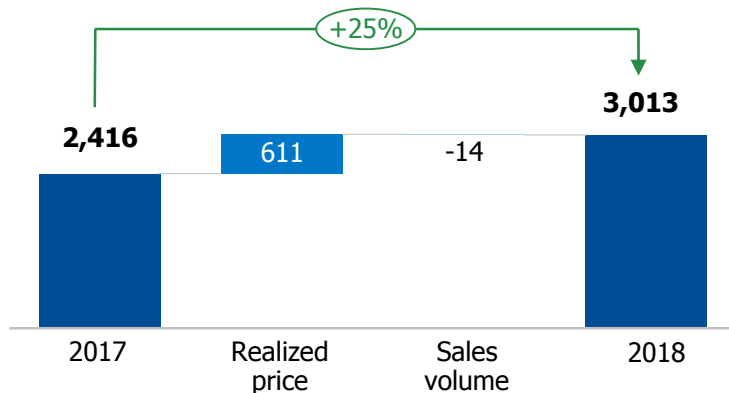


Note 1. Excluding sales of metals purchased from third parties, 2. Metal volumes represent metals contained in semi-products, 3. Copper metal sales excludes the sale of copper in concentrate produced by Bystrinsky GOK (Chita)

# Metals Revenue: Up on Strong Commodity Markets and Sales Volumes

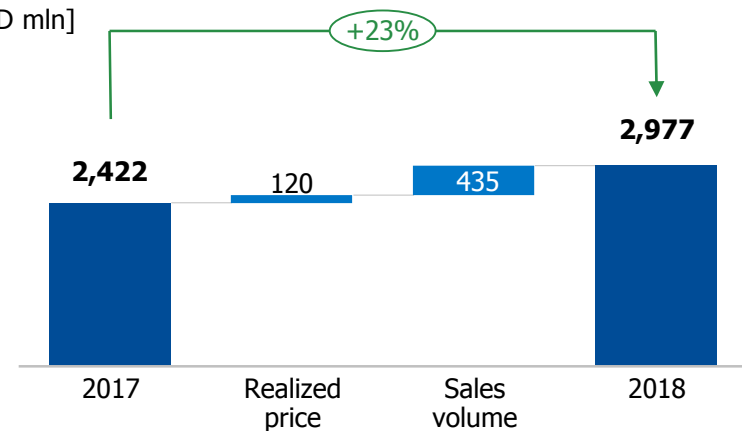
## Nickel Revenue: Up 25% on Higher Prices

[USD mln]



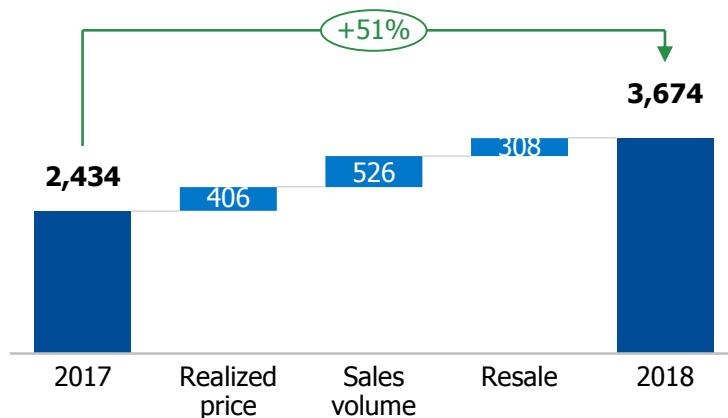
## Copper Revenue: Up 23% on Higher Sales Volumes and Prices

[USD mln]



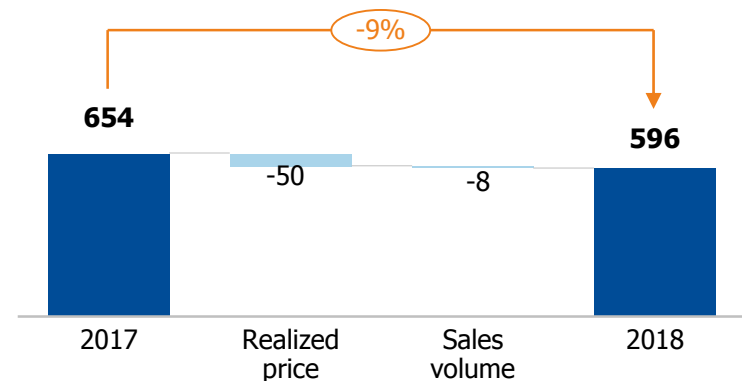
## Palladium Revenue: Up 51% on Higher Prices and Sales Volumes

[USD mln]



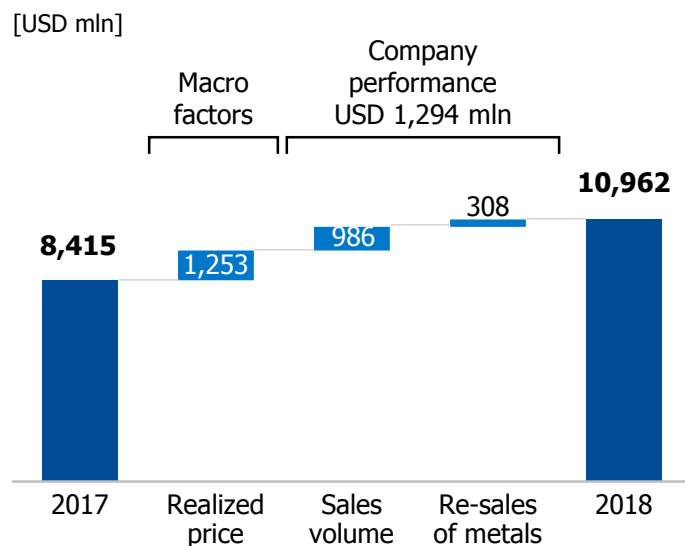
## Platinum Revenue: Down 9% on Lower Prices

[USD mln]



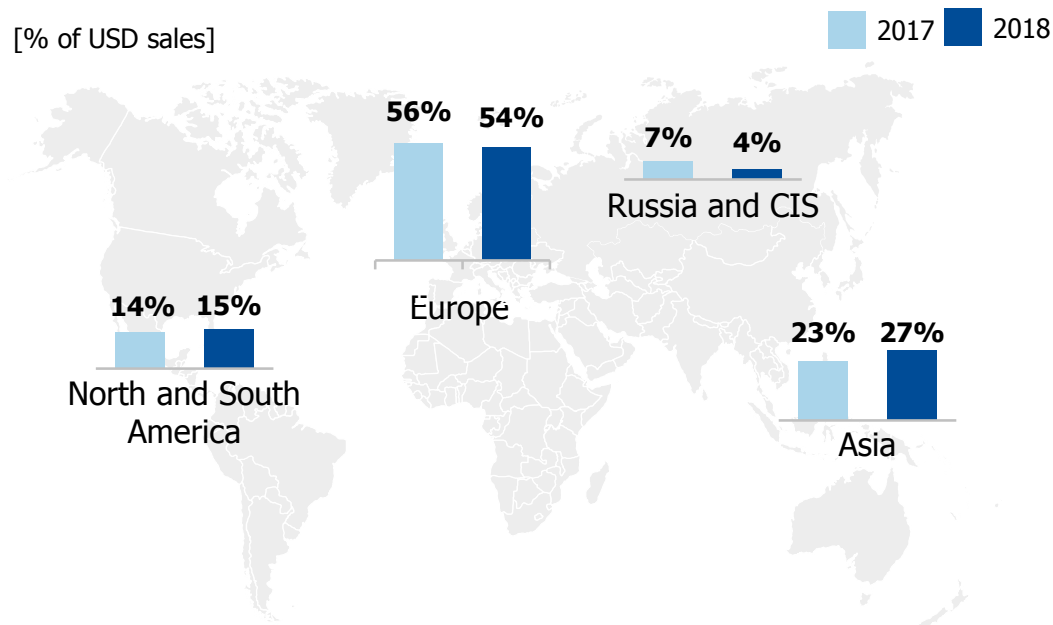
# Consolidated Metal Revenue

## Metal Revenue Up on Higher Prices and Sales Volumes



- + Increase of realized metal prices of all metals, but platinum, on strong commodity markets
- + Higher metal sales volume due to the sale of palladium from stock and higher copper volumes on Rostec concentrate processing
- + Re-sale of metals (mainly palladium)

## Geographical Breakdown of Metal Sales

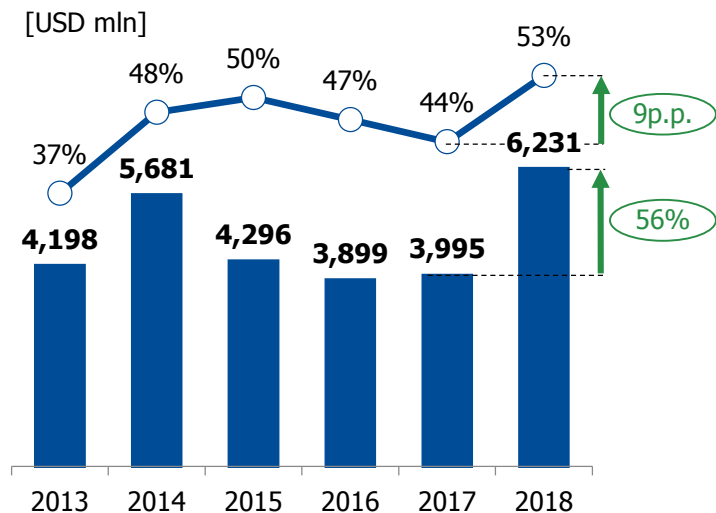


- Europe remains the single largest market accounting for 54% of metal sales
- Increase of sales to Asia to 27%, due to higher physical sales of copper and nickel, mainly to China
- Marginal increase of sales to North and South America to 15% mainly due to higher palladium sales volumes

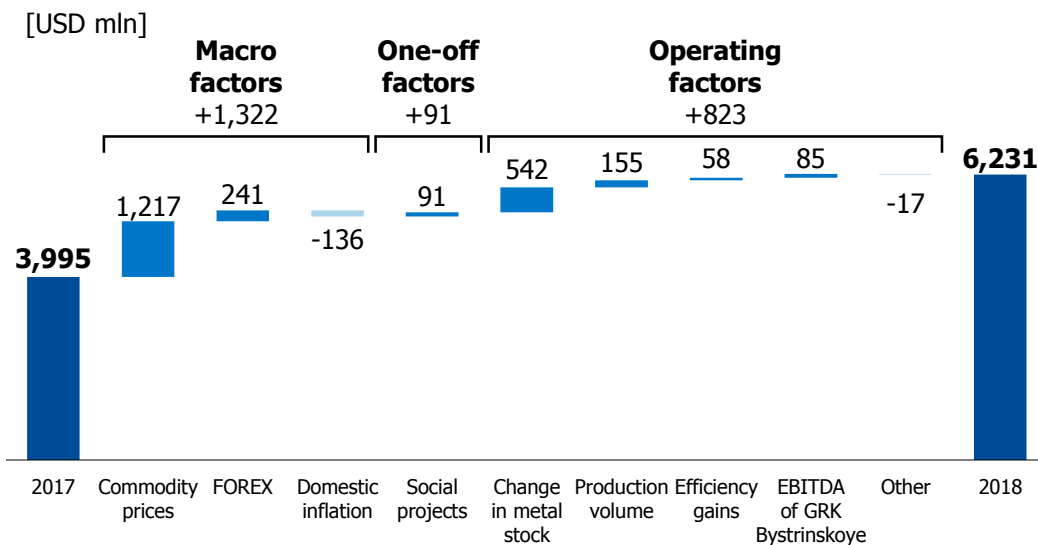


# EBITDA and EBITDA Margin

## Industry Leading EBITDA Margin



## 2018 EBITDA: Up on Strong Macro and Operating Performance

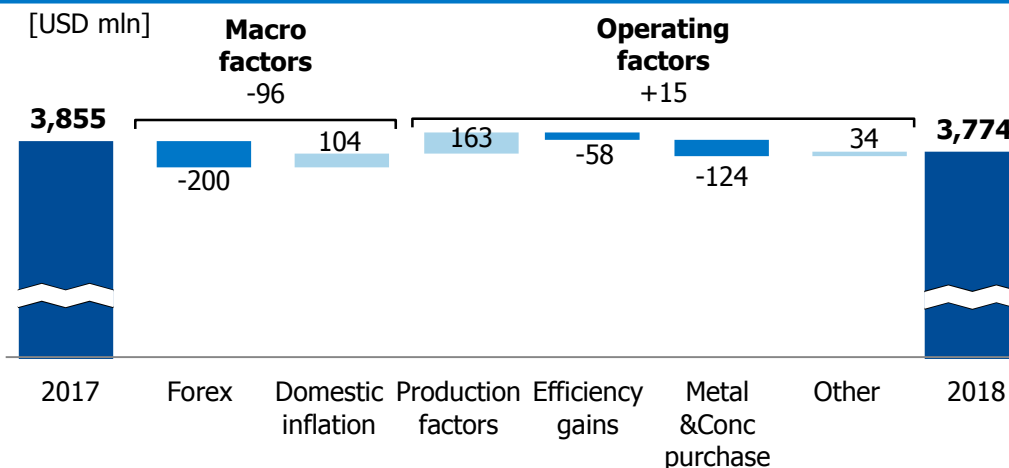


- + Higher realized metal prices (+USD1,217 mln)
- + Depreciation of RUB against USD (+USD241 mln)
- Domestic inflation (-USD136 mln)
- + Decrease in expenses on one-off social projects (+USD91 mln)
- + Release of metal from stock (+USD542 mln)
- + Higher production volumes and operating efficiency gains (+USD213 mln)
- + EBITDA of GRK Bystrinskoye (+USD85 mln)

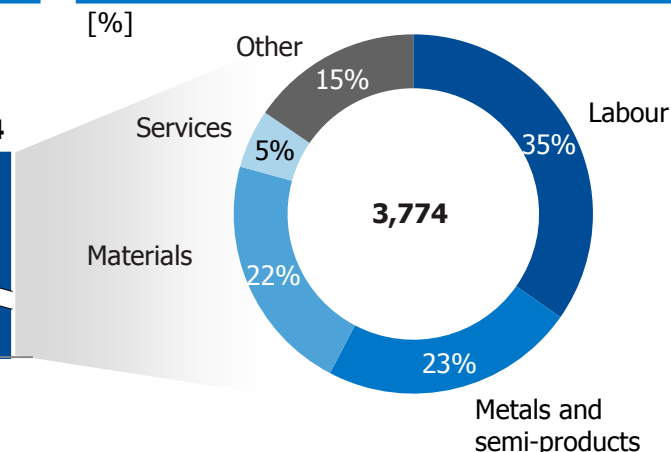
**EBITDA margin back to industry leading 53%**

# Operating Cash Costs: Weathering Out Inflation Pressure

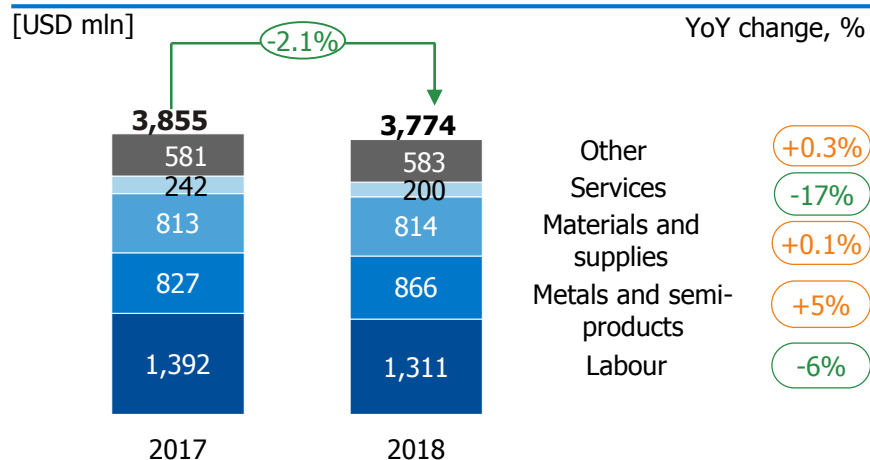
## Operating Cash Costs Changes in 2018



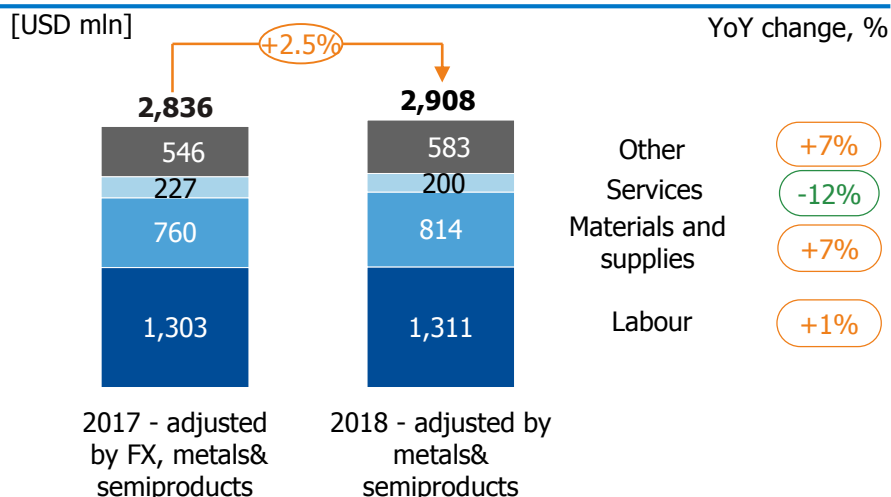
## 2018 Cash Costs Breakdown



## Reported Operating Cash Costs: Down Due to RUB depreciation

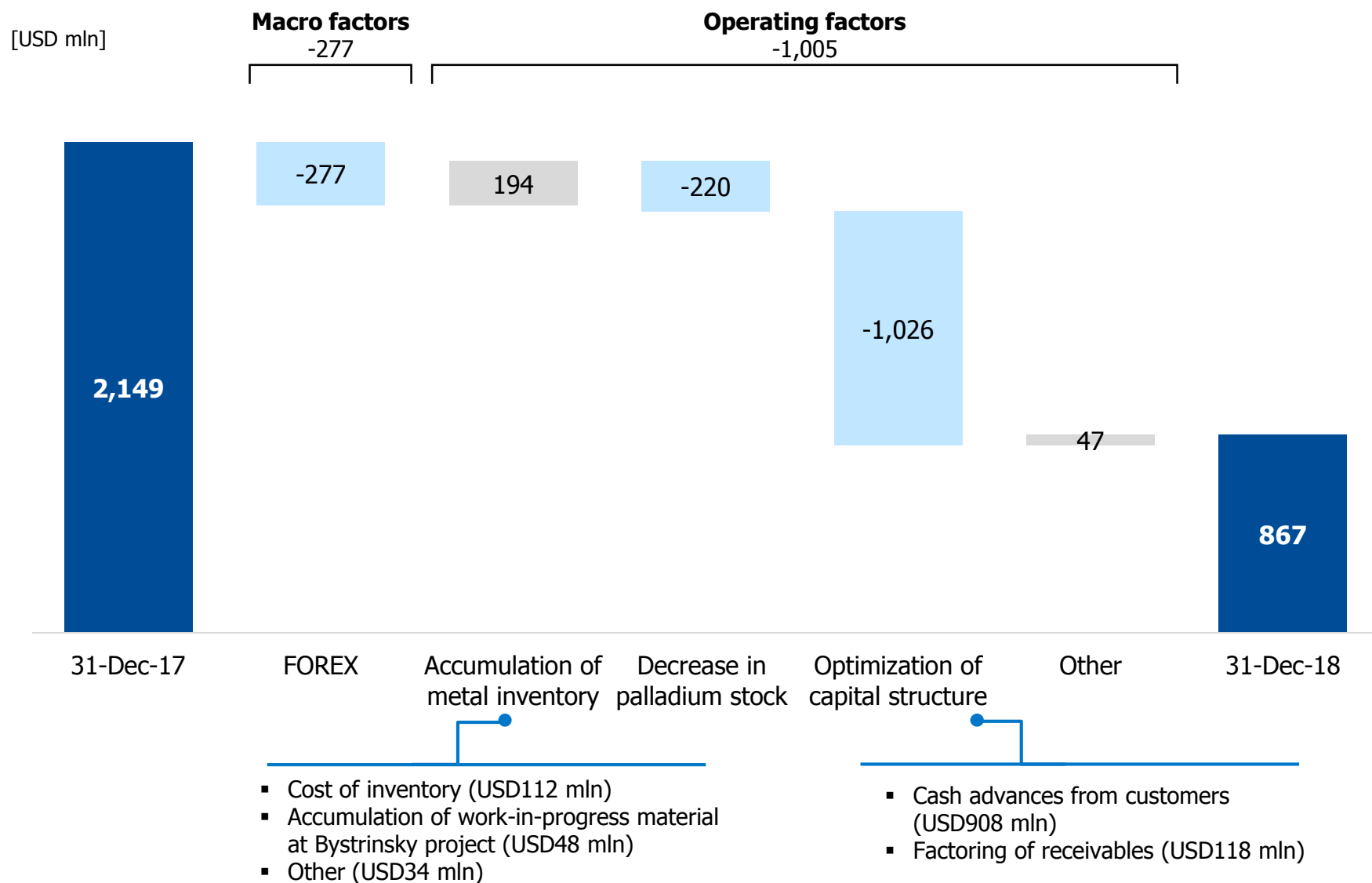


## Adjusted Operating Cash Costs for FX, Metal and Semi-product<sup>(1)</sup> Purchase - Below Domestic Inflation



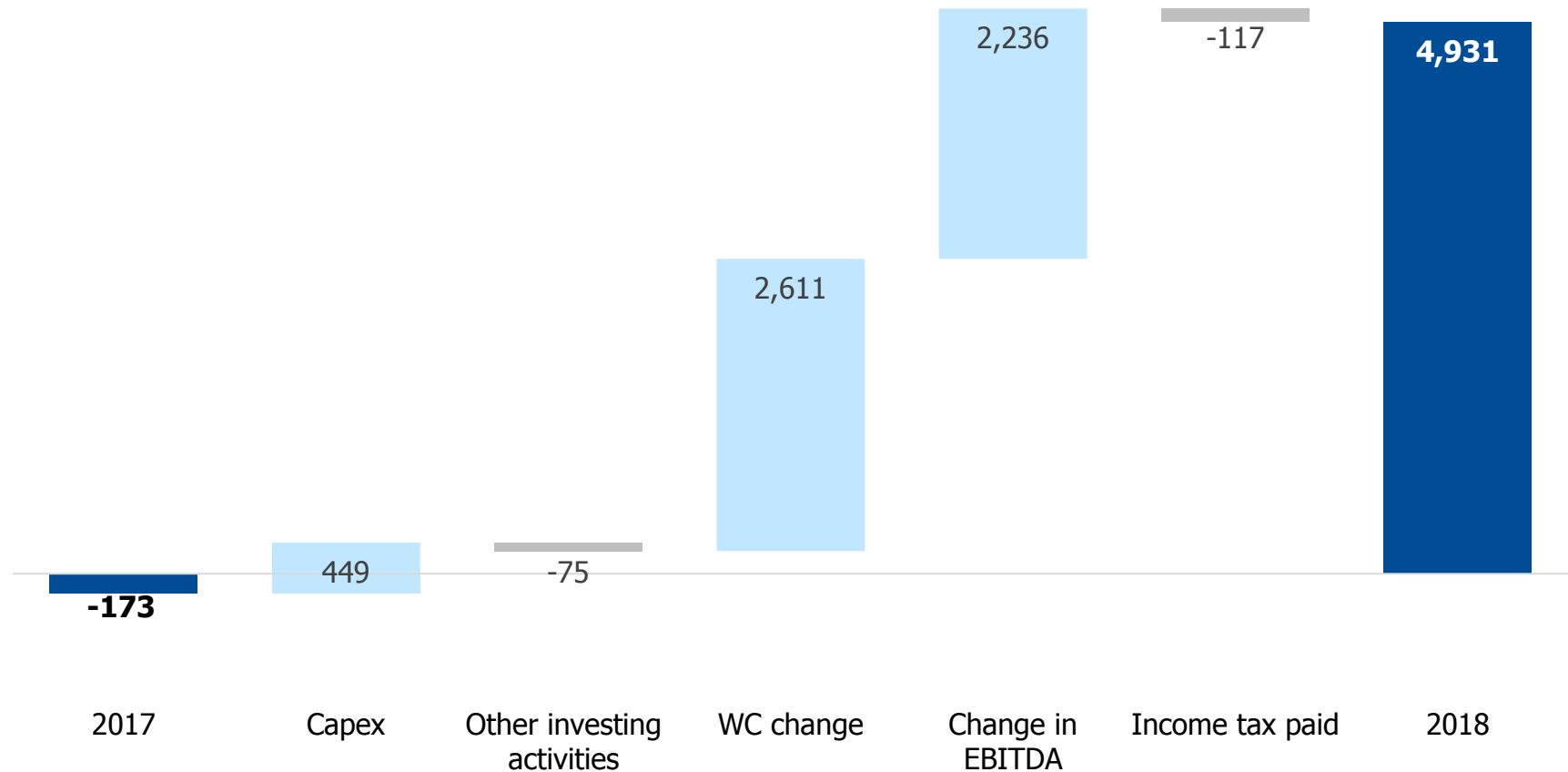
Note 1. Including Rostec and Nkomati

# Net Working Capital in 2017 –2018



# FCF Increased to Almost USD 5 Billion on EBITDA Growth and Release of Working Capital

[USD mln]

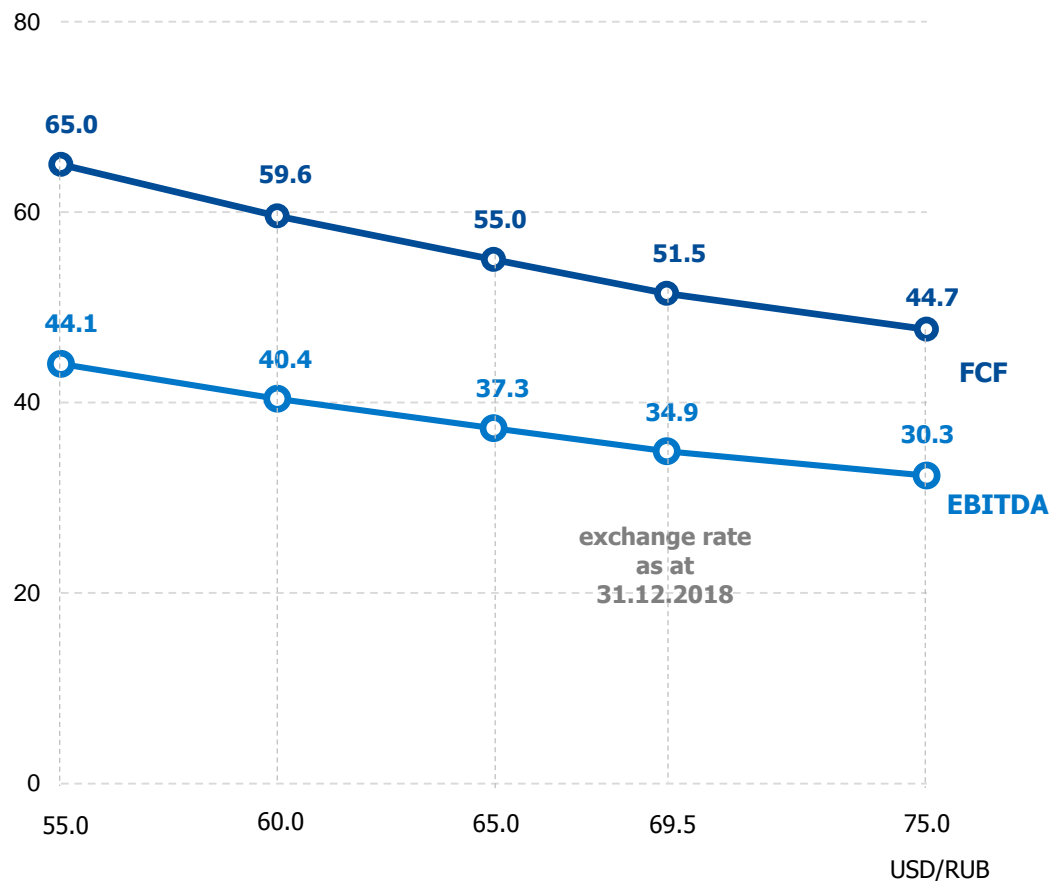


# Financial Results Sensitivity to USD/RUB Exchange Rate

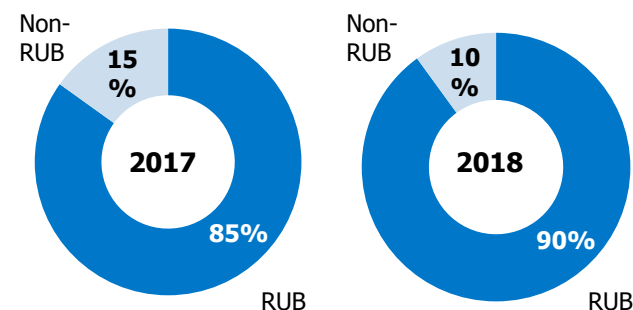
At USD/RUB rate of 69.5, 1% change in exchange rate translates into EBITDA change of USD34.9 mln, FCF change of USD51.5 mln

CAPEX and OPEX Break Up by Currency in 2017 and 2018

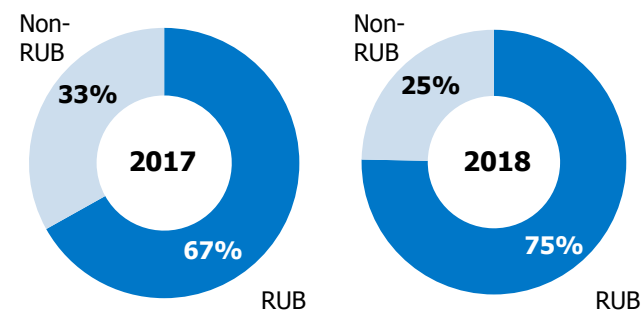
[USD mln]



**OPEX<sup>(1)</sup>**



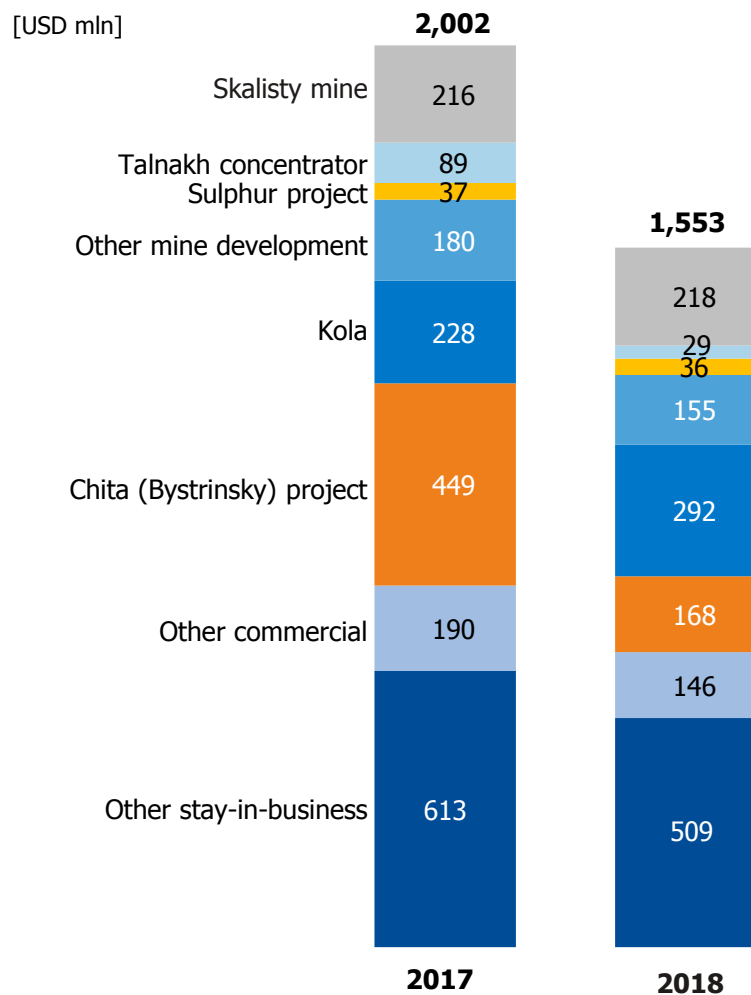
**CAPEX**



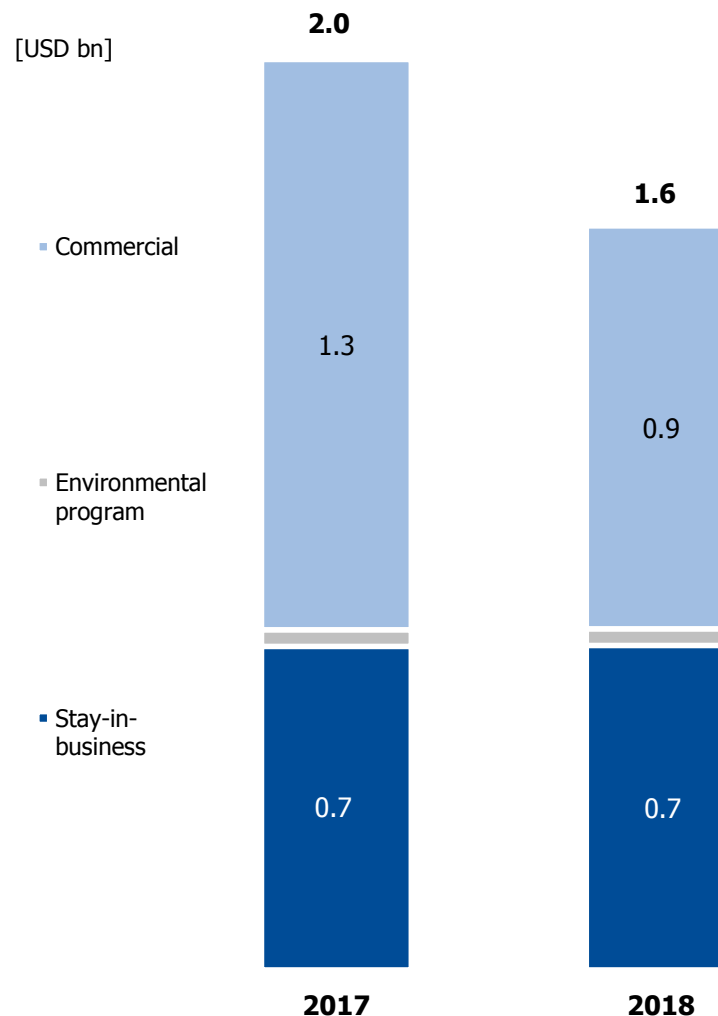
Note: 1. Cash costs (change in stock excluded), Cost of non-metal sales, SG&A; normalized by cost of refined metals for resale

# Allocation of Capital Investments

## CAPEX<sup>(1)</sup> Breakdown by Projects



## CAPEX<sup>(1)</sup> Allocation: Commercial and Stay-in-Business

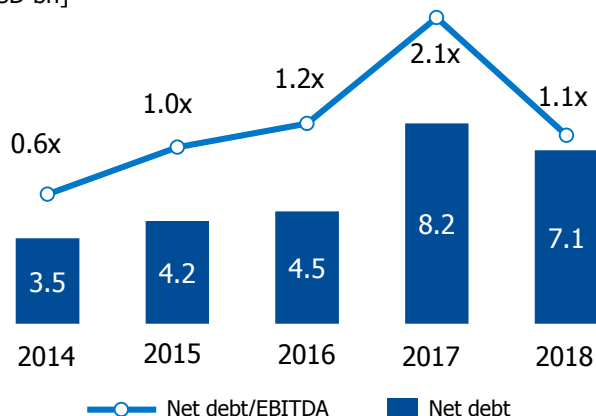


Note: 1. CAPEX in Cash flow statement, net of VAT, 2. Including Talnakh concentrator and South Cluster

# Balance Sheet Management

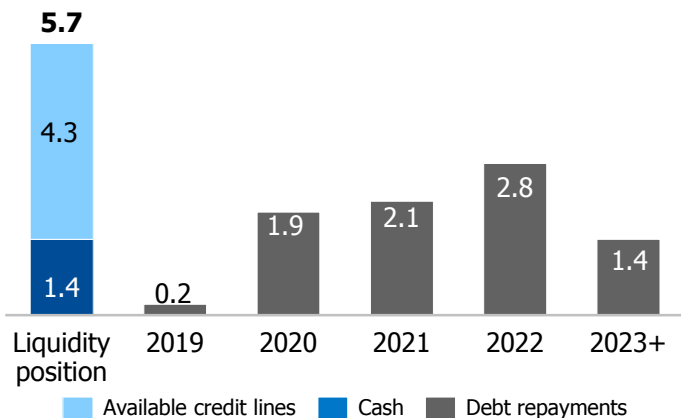
## Historical Leverage: ND/EBITDA Back to Mid-Cycle Average

[USD bn]



## Liquidity and Debt Repayment Schedule

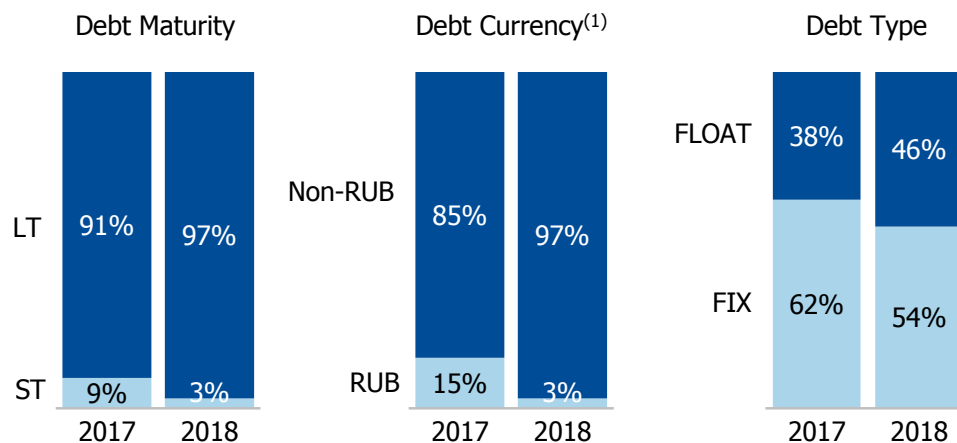
[USD bn]



## Proactive Debt Management

- New credit lines signed for the total amount of approximately USD3.5 bn increasing the total amount of available committed credit lines to approximately USD4.3 bn
- Cash interest paid was reduced by approximately USD100 mln in 2018 driven by repricing of several credit lines and refinancing of liabilities, including redemption of USD750m Eurobonds due April 2018 at the cost of 5-year USD2.5bn syndicated term loan and early prepayment of Bystrinsky Project Finance for the amount of approximately USD677 mln
- In January 2018, Moody's assigned «Baa3» issuer rating to the Company and changed outlook from «Stable» to «Positive». In February 2019, the rating agency upgraded Nor Nickel to «Baa2» with «Stable» outlook.
- The Company maintains investment grade credit ratings from all three major international rating agencies

## Change in Debt Structure



Note: 1. RUB loans with currency swap applied disclosed as USD loans



# Projects Update

# Key Upstream Project of Polar Division – Skalisty Mine Development

## Project Description

- Production capacity: 2.4 Mtpa
- Ore reserves: 66 Mt
- Capex 2018: US\$230 mln
- Capex 2019-2024: ~US\$0.8 bn



## Project Timeline

- Commissioned mining capacity in 2015-2018: 1,350 ktpa
- Completion of #10 ventilation shaft sinking in 2018 (>2 km deep)
- Completion of main shaft and supporting infrastructure in 2020



**Status**                      ~2.0 Mt ore mined in 2018

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**Target Capacity**                      ~2.4 Mtpa<sup>1</sup> by 2024

Note : 1. Including replacement of depleting capacity

# Kola Nickel Refinery Upgrade – Status Update

## Project Description

- Increase the nickel refining capacity from 145 ktpa to 190 ktpa
- Increase in nickel recovery from high-grade matte by over 1.0%
- Optimization of the work-in-progress inventory
- Reduction of environmental footprint
- Total Capex: US\$400 mln
- Capex 2018: US\$180 mln

## Project Timeline

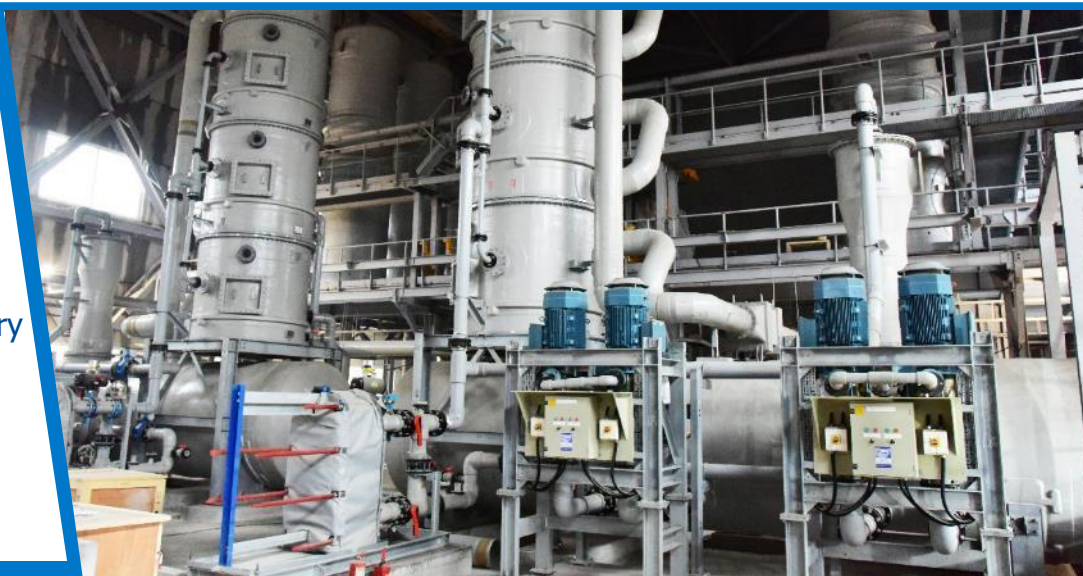
- Completion of infrastructure and gradual capacity commissioning in 2019
- Reaching design capacity and parameters by 4Q 2019

## Current Status

**Completed >82%**

## Capacity

**+20% at Tankhouse-2**





# Ramp-up of Bystrinsky Project

## Project Overview

- The project is ramping up with full capacity expected in 2020
- Ore reserves: 341 Mt, grades:  
Cu – ~0.7%; Fe – ~21%; Au – ~0.9 g/t
- Site infrastructure completed: open pit and concentrator (grinding and flotation)
- External infrastructure completed: power lines and railway to the site
- Total Capex: US\$1.8 bn

## Operating and Financial Outlook

		2018	2019E	2020E+
Ore	Mt <sup>2</sup>	4	8	10
Cu	kt <sup>1</sup>	19	40-46	65-70
Au	t <sup>1</sup>	3.0	6.0-6.5	8.5-9.0
Fe	mt <sup>1</sup>	0.4	1.3-1.4	1.9-2.1
<b>EBITDA</b>	<b>US\$ mln</b>	<b>85</b>	<b>up to 300</b>	<b>400+</b>



**EBITDA 2018 <sup>(3)</sup> US\$ 85 mln**

Note: 1. Metals in concentrate: Cu (in concentrate), Au (in Cu, Au concentrate), Fe (magnetite concentrate); 2. Ore processed, 3. Total EBITDA of GRK Bystrinskoye segment amounted to USD 96 million in 2018, which includes additional financial result from intersegment sales of concentrates

# Environmental Project at Kola: Optimization of Smelting Operations



## Project overview

- **Target:** reduction of Sulphur dioxide emissions at the Norwegian border by 50% by 2020 vs. 2015
- Shut down of ore-thermal furnace in the smelting shop
- Sales of low-grade concentrate to third parties
- Total Capex of US\$80 mln

## Project timeline

- Construction of flotation circuit to separate ore concentrate to low-grade and high grade concentrates
- Construction of the copper-nickel concentrate loading point at Zapolyarny site
- Decommission of ore-thermal furnace №3 in the smelting shop

## Project update

- 30% completion rate
- Construction and equipment (Outotec) installations in progress

**Full completion expected by Q3 2019**

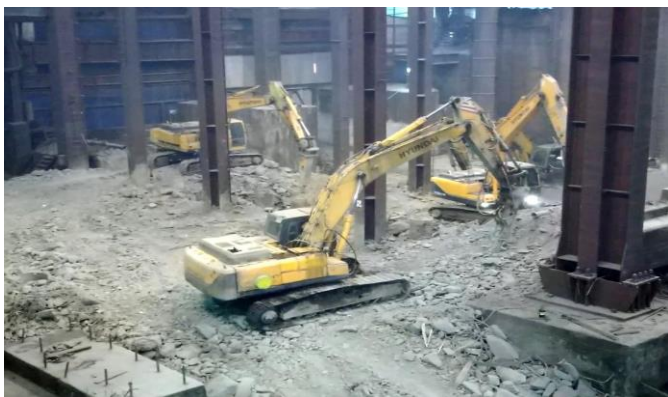
# Current Status of the Sulphur Project at Polar Division



Site Preparation at Nadezhda Smelter



Site Preparation at Copper Plant



## Project overview

- **Target:** reduction of Sulphur dioxide emissions in Norilsk industrial area at least by 75% by 2023 vs. 2015
- **Nadezhda Smelter:** construction of new converters replacing converter furnaces of Copper Smelter; construction of Sulphur Capture and sulphuric acid neutralization
- **Copper Smelter:** construction of Sulphur Capture and elementary sulphur production
- Total Capex of US\$2.5 bn

## Project timeline

- Preparation of engineering project documentation and application for the government regulator (Glavgosexpertisa) approval in 2019
- Start of construction and installation works in 2H 2019
- Project completion in 2022

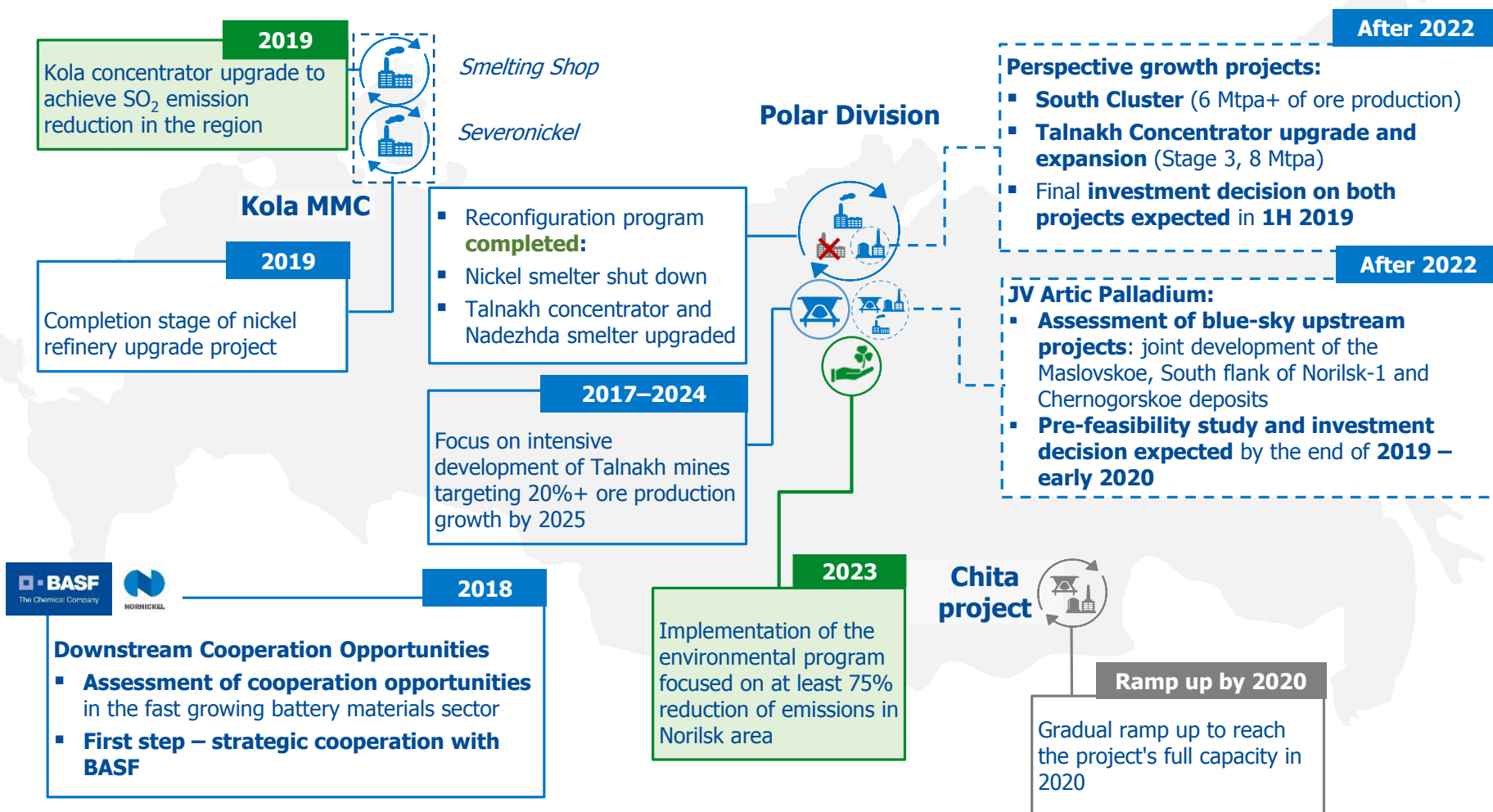
## Project update

- Preparation of construction sites in progress at Copper Plant and Nadezhda Smelter
- Tender process to select construction contractors for the projects at Copper Plant and Nadezhda Smelter is under way



# Strategic Roadmap for Key Production Assets





## Roadmap to Advanced, Efficient and Environmentally Friendly Production Processes

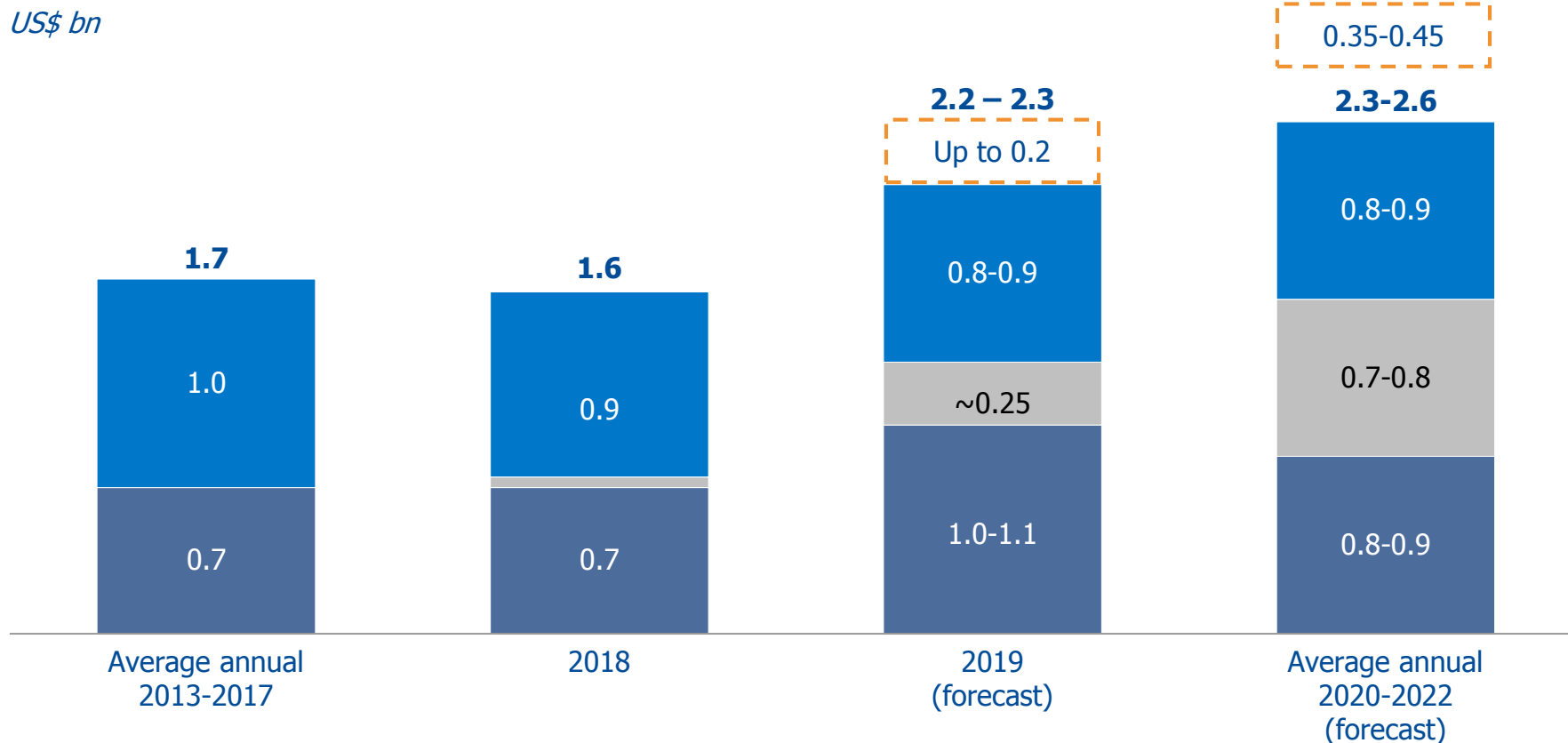


XX - Core investment program projects

XX - Perspective projects, assessment stage

# CAPEX Program: New Investment Cycle in 2019-2022

-  Perspective growth projects (e.g. Talnakh concentrator, South Cluster)
-  Commercial projects (incl. Bystrinsky Project)
-  Environmental program
-  Stay-in business: infrastructure, equipment replacement & capitalized maintenance, social

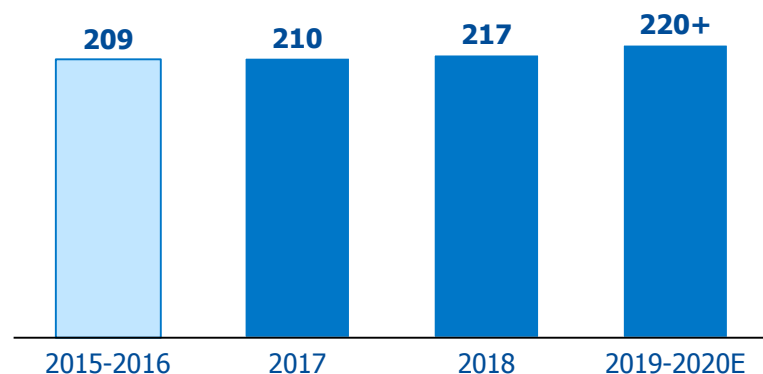




# Production Guidance for 2019-2020<sup>(1)</sup>

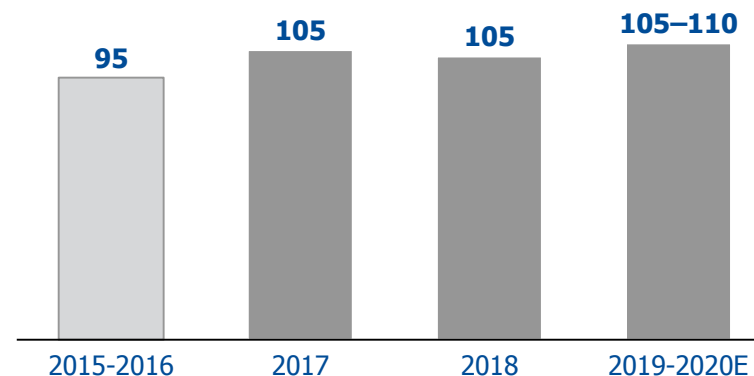
**Ni**

kt



**Pt+Pd**

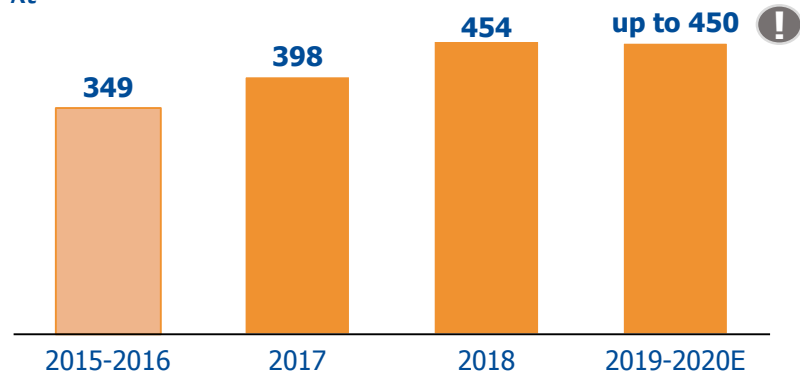
tonnes



**Cu**

*Excluding Bystrinsky project*

kt



- Overall, metal production growth is driven by operational efficiency improvements and commissioning of new mining projects
- In addition, copper production growth is mainly driven by accelerated processing of secondary feedstock resulting from debottlenecking of Cu refining operations



*Temporary decrease in Cu production is expected in 2021-2023 due to secondary feedstock depletion, with mined feedstock volumes expected to recover by ~2024-2025*

Note: 1. Metals produced from own feedstock (including metals in saleable semi-products), excluding production of Nkomati project

# 2019 Outlook

## Metals market outlook

→ Neutral ↗ Positive

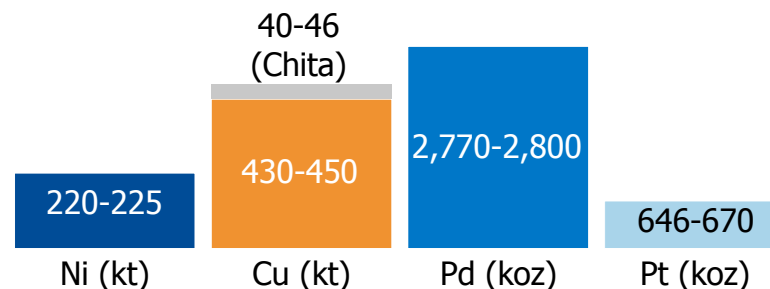
**Ni** → Market deficit to narrow as Indonesia and China continue to increase NPI output while the demand growth is moderating

**Cu** → Market deficit is expanding, but remains marginal. Inventories running low

**Pd** ↗ Apparent market deficit to widen driven by tighter emission regulations in all major markets and flattish primary supply. No evidence of platinum substitution due to technical challenges

**Pt** ↗ Market to remain in surplus, automotive and jewelry demand to stabilize in 2019, potential supply rationalization still feasible

## 2019 Metal Production Guidance<sup>(1)</sup>



## Capex

**USD2.2-2.3 billion<sup>(2)</sup>**

## Working capital

**USD1.0 billion** – medium term target reiterated

## Net debt/EBITDA

**1.0-1.2x** by 2019YE subject to market conditions and FX rates

## Annual dividend for 2018

To be announced in May and payable in July 2019

Note 1. Metal production guidance from Russian feed including Bystrinsky GOK, 2. Assuming 2019 average exchange rate USD/RUB 65.0

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