

Introduction

LIDERSHIP IN COMMODITY MARKETS

According to Russia's Ministry of Economic Development, non-ferrous metals production in the Russian metals industry returned to pre-crisis levels over the last three years. With the nation's abundant raw materials and leading positions in many global markets, Russian industry players are optimistic about their future amid projections of a 3% to 5% annual growth in metals demand until 2030 contained in Russian and global economic growth forecasts.

Despite all the lockdown difficulties, in 2020, Nornickel retained leadership and all the capabilities to support future successful operation.

However, the coronavirus pandemic has impacted on all industries of the economy, with disruptions to operations, issues with exports and raw material deliveries, a marked drop in stainless crude steel output globally, and declining production of vehicles due to the pandemic - all playing a role.

Nickel

No. 1 globally in high-grade nickel production

In 2019, the nickel market was in deficit but moved into surplus in 2020 driven by a significant growth in nickel pig iron production in Indonesia.

In 2020, the consumption of primary nickel, which is used in stainless steel and batteries, remained almost flat. The growth in stainless crude steel output in China, where the industry was supported by a government stimulus package, and Indonesia, where new production capacity came online, was offset by a two-digit production slump in India (30%), the USA and Japan (18%), Taiwan (14%), and Europe (10%).

A steady trend towards road transport electrification continued supporting nickel usage in lithium-ion batteries. In 2020, global sales of electric vehicles (plug-in HEVs and battery electric vehicles) grew by 37%, with

the production of electric vehicles (EV) growing at a CAGR of over 40% since 2016. This led to a 13% growth in nickel consumption by the EV industry in 2020.

Total nickel consumption in other industries slipped 14% due to falling consumer demand amid the COVID-19 pandemic and related restrictions.

Price-wise, nickel declined to USD 11,000/t in Q1 2020 due to the COVID-19 pandemic and falling consumer demand amid suspended production, but as the COVID-19 situation improved nickel surged to USD 15,550/t in early September, supported by a weaker US dollar and the Tesla CEO's call for higher sustainable nickel production. After a brief fall to USD 14,500/t due to a resurgence in coronavirus cases, nickel prices continued trending upwards, reaching USD 17,500/t on the back of higher output of stainless crude steel in China and concerns around ore supply from the Philippines following the suspension of production by a leading ore producer due to COVID-19. At the year end, the price settled at USD 16,500/t.

Copper

No. 11 globally in copper mine production

China is the largest copper consumer in the global market, and the nation's rapid economic recovery following a period of coronavirus restrictions provided a strong support to demand for copper, leading to record low copper exchange inventories by year end. In Europe, where Norrnickel sells the bulk of its copper cathodes, consumption slipped 5.7%, while in Russia, consumption grew by 2%. Global refined copper consumption declined 1% in 2020.

Global copper mine production declined marginally in 2020, but a drawdown from the accumulated semi-product inventories boosted refined copper output by 2%.

Despite the negative impact of the COVID-19 pandemic, copper prices grew from the Q1 lows of about USD 4,600/t to USD 7,964/t at the end of December 2020, supported by the following factors:

- Quick economic recovery starting in Q2 2020 and led primarily by China
- Implementation of government stimulus packages in major economies (USA, European Union, China, etc.)
- The US dollar falling against its benchmark currency basket
- Soft monetary policy of central banks
- Growing investor optimism amid expectations of faster road transport electrification and growth in renewables (driven by the government stimulus

focus on green technology across the EU and plans announced by the new US administration)

- A new policy of copper scrap recategorisation in China, resulting in temporary scrap shortages on the Chinese market
- Strikes at Las Bambas mine in Peru and El Teniente mine in Chile
- Record low exchange inventories of copper.

Platinum group metals (PGMs)

No. 1 globally in refined palladium production, No. 3 in platinum production, No. 4 in rhodium production

The automotive industry is the predominant consumer of palladium, platinum, and rhodium. Early in 2020, car manufacturers and dealerships had to suspend operations due to the pandemic. On the other hand, tighter environmental regulations in key economies led to higher PGM loadings per vehicle, which has partially offset the downward trend.

The supply of PGMs, particularly platinum and rhodium, was also impacted by operational issues at Anglo American Platinum's pyrometallurgical facilities, which significantly reduced refined PGM output in 2020.

On the palladium market, consumption has been outpacing production since 2010, with the deficit covered by inventories.

Prices were highly volatile throughout 2020: an upward trend that emerged in 2019 continued into 2020, followed by a sharp slump amid the pandemic and then a new surge on the back of the market recovery. The average annual price of palladium grew 43% y-o-y in 2020.

In 2020, enough platinum was produced to meet the needs of existing consumers; however, strong investment demand during the year pushed the platinum supply and demand balance into deficit.

The average annual price of platinum grew 2% y-o-y.

Platinum consumption by the jewellery industry (the second-largest platinum consumer after the automotive industry) continued declining due to lower demand for luxury items amid the pandemic and growing competition from gold jewellery.

The rhodium market remained undersupplied in 2020, with production declines outpacing demand fall in the automotive and other industries.

This led to high volatility in rhodium prices, which hit all-time highs twice during the year: USD 13,800/oz in March and USD 17,000/oz in December. The average annual price stood at USD 11,231, up 188% y-o-y.

