Insurance

Insurance is one of the most important tools for managing risks and finances and protecting the assets of the Company and its shareholders against any unforeseen losses related to our operations, including due to external hazards.

Nornickel has centralised its insurance function to consistently implement uniform policies and standards supporting a comprehensive approach to managing insurance policies and fully covering every risk at all times. The Company annually approves a comprehensive insurance programme that defines key parameters by insurance type and key project.

We have implemented a corporate insurance programme that covers assets, equipment failures and business interruptions across the Group. Our corporate insurance policies are issued by major Russian insurers in cooperation with an international broker. This helps the Company make sure that its risks are underwritten by highly reputable international re-insurers.

The same principles of centralisation apply to our freight, construction and installation, aircraft and ship insurance arrangements. The Group, as well as its directors and officers, carry business and third-party liability insurance.

To optimise terms of coverage and better manage covered risks, we follow the best mining industry practices.

KEY RISKS

Strategic risks

Price risk (decrease in market prices for Nornickel metals)

Potential decrease in revenues due to lower prices for metals (nickel, copper, platinum, palladium, etc.) subject to the actual or potential changes in demand and supply on certain metal markets, global macroeconomic trends, and the financial community's interest in speculative/investment transactions in the commodity markets.

Key risk factors	Mitigants
• Lower demand for metals produced by the Company; • inventory liquidation by market participants; • speculative price decrease; • supply and demand imbalance in metal markets	To manage this risk, the Company: • continuously monitors and forecasts changes in key metals supply and demand; safeguards feedstock supplies for key customers through long-term contracts to supply metals in fixed volumes; • as a member of the global Nickel Institute and the International Platinum Group Metals Association, works with other nickel and PGM producers to maintain and increase the demand for these metals. Should the price risk materialise, the Company will consider cutting capital expenditures (revising the investment programme for projects that do not have a material impact on the Company's development strategy)

Market risk (the appeal of the Company's products going down)

Inability of the Company's products to successfully compete in the market may result in discounts to the market price and a decrease in the Company's income.

Key risk factors	Mitigants
• Higher market standards for product quality; • competition from producers of cheaper nickel; • car manufacturers switching out the main type of catalyst (palladium getting substituted with platinum in petrol car catalysts)	To manage this risk, the Company: • cooperates with other market players to monitor changes in the market's requirements to product quality; • makes sure its metal product sales are diversified across industries and geographies; • improves and diversifies the product range; • considers partnerships with key producers of batteries for electric cars; • enters into strategic partnerships with car makers built on guarantees of long-term palladium supplies

Tighter environmental requirements

Tightening environmental legislation may have a number of consequences for the Company:

- need to reissue environmental permits;
- need to upgrade and install additional waste treatment equipment;
- restrictions on the operations for up to 90 days.

Key risk factors	Mitigants
• Emphasis placed by domestic and international communities on environmental protection and sustainable development; • changes in environmental laws and regulations. For example, on 1 January 2019 the environmental permits framework was amended with requirements on an integrated environmental permit and a new system of standards that sets out technological limits	To manage this risk, the Company: • carries out an environmental action plan to reduce emissions and discharges, as well as to ensure timely waste management; • involves its employees in working groups of dedicated committees, regional ministries and government agencies; • takes part in joint projects with nature reserves located in the Company's regions of operation

FX risk

USD depreciation against RUB, including due to changes in the Russian economy and the policy of the Bank of Russia, may adversely affect the Company's financial performance, as most of its revenues are denominated in USD, while most of its expenses are denominated in RUB.

Key risk factors	Mitigants
• Increase in Russia's balance of payments, higher oil exchange prices and lower imports; • different country macroeconomics; • change in ratings; • lower volatility in financial markets of Russia and other developing countries	To manage this risk, the Company: • maintains a balanced debt portfolio where USD-denominated borrowings prevail to ensure a natural hedge; • implements regulations that limit fixing of prices in foreign currencies in expenditure contracts; • uses derivatives to mitigate the exposure by balancing cash flows between revenues (denominated in USD) and liabilities (denominated in other currencies)

Investment risk

Failure to meet timeline and technological indicator targets for the Company's major investment projects.

Key risk factors	Mitigants
• Uncertainty associated with the occurrence of ore bodies; • changing forecasts of ore composition and properties in the course of follow-up exploration; • obsolescence of technologies and equipment included in the design documents	To manage this risk, the Company: • updates the mining plan (a long-term production plan) based on the current status of its major investment projects developing the mineral resource base; • holds external audits of geological data; • improves the risk management process for investment projects; • develops mining and geological information systems; • as part of the project assurance process, conducts internal audits of large investment projects at each stage in their life cycle; • provides better incentives when it comes to the project work; • ensures that short-term, mid-term and long-term planning processes are in synch; • implements an integrated system for managing mining operations

Operational risks

Workplace injury risk

Failure to comply with the Company's health and safety rules may result in threats to employee health and life, temporary suspension of operations, and property damage.

Key risk factors	Mitigants
• Unsatisfactory organisation of work execution; • disruptions in technological processes; • exposure to hazardous factors	Pursuant to the Occupational Health and Safety Policy approved by the Company's Board of Directors, the Company: • continuously monitors compliance with the health and safety requirements; • improves the working conditions for employees of the Company and its contractors deployed at the Company's production facilities, including by implementing new technologies and labour saving solutions, and enhancing industrial safety at production facilities; • provides staff with certified state-of-the-art personal protective equipment; • carries out preventive and therapeutic interventions to reduce the potential impact of hazardous and dangerous production factors; • regularly trains and instructs employees and assesses their health and safety performance, and conducts corporate workshops, including by deploying special simulator units; • enhances methodological support for health and safety functions, including through the development and implementation of corporate health and safety standards; • improves the risk assessment and management framework at the Group's companies and production facilities as part of the Risk Control project; • analyses the competencies of line managers at the Company's production facilities, develops health and safety training programmes and arranges relevant training sessions; • provides training for managers under the programme to determine root causes of accidents using best international practices ("Tree of Causes and Hazards", 5-why, etc.); • provides information about the circumstances and causes of an accident to all employees of the Company, conducts ad hoc instruction sessions; • introduces frameworks to manage technical, technological, organisational and HR changes

Information security risks

Potential cyber crimes may result in an unauthorised transfer, modification or destruction of information assets, disruption or lower efficiency of IT services, business, technological and production processes of the Company.

Key risk factors	Mitigants
• Growing external threats; • unfair competition; • rapid development and automation of IT infrastructure, technological and business processes; • employee and third party wrongdoing	To manage this risk, the Company undertakes to: • comply with Russian laws and regulations with respect to personal data and trade secret protection, insider information, and critical information infrastructure; • implement MMC Norilsk Nickel's Information Security Policy; • categorise information assets and assess information security risks; • raise awareness in information security; • use technical means to ensure information security of assets and manage access to information assets; • ensure information security of the process control system; • monitor threats to information security and use technical protection means, including vulnerability • analysis, penetration testing, cryptographic protection of communication channels, controlled access to removable media, protection from confidential data leakages, mobile device management; • draft information security rules and regulations; • set up and certify the Information Security Management System

Technical and production risk

Technical, production, or natural phenomena, which, once materialised, could have a negative impact on the implementation of the production programme and cause equipment breakdown or reimbursable damage to third parties and the environment.

Key risk factors	Mitigants
• Harsh weather and climatic conditions, including low temperatures, storm winds, snow load; • unscheduled stoppages of key equipment; • release of explosive gases and flooding of mines; • collapse of buildings and structures; • infrastructure breakdowns	To manage this risk, the Company undertakes to: • properly and safely operate its assets in line with the requirements of the technical documentation, technical rules and regulations as prescribed by the local laws across the Company's footprint; • develop ranking criteria and criticality assessment for key industrial assets; • timely replace its fixed assets to achieve production safety targets; • implement automated systems to control equipment's process flows, use state-of-the-art engineering controls; • improve the maintenance and repair system; • train and educate its employees both locally, on site, and centrally, through its corporate training centres; • systematically identify and assess technical and production risks, implement a programme of organisational and technical actions to mitigate such risks; • develop the technical and production risk management system, including by engaging independent experts to assess the system efficiency and completeness of data; • develop and test business continuity plans which set out a sequence of actions to be taken by the Company's personnel and internal contractors in case of technical and production risks causing maximum damage and aimed at the earliest resumption of the Company's production operations; • engage, on an annual basis, independent surveyors to analyse the Company's exposure to disruptions in the production and logistics chain and assess related risks. In 2018, key technical and production risks were insured as part of the property and business interruption (downtime) insurance programme, with emphasis placed on best risk management practices in the mining and metals industry

Compliance risk

The risk of legal liability and/or legal sanctions, significant financial losses, suspension of production, revocation or suspension of a licence, loss of reputation, or other adverse effects arising from the Company's non-compliance with the applicable regulations, instructions, rules, standards or codes of conduct.

Key risk factors	Mitigants
• Changes in legislation and law enforcement practices;	To manage this risk, the Company: • makes sure the Company complies with the applicable laws; • defends the Company's interests during surveillance inspections or in administrative offence cases;

Key risk factors	Mitigants
• discrepancies in rules and regulations; • considerable powers and a high degree of discretion exercised by regulatory authorities; • potential violation of legal requirements by the Company's business units	• uses pre-trial and trial remedies to defend the Company's interests; • includes conditions defending the Company's interests in the contracts signed by the Company; • implements anti-corruption, anti-money laundering and counter-terrorist financing initiatives; • takes actions to prevent unauthorised use of insider information and market manipulation; • ensures timely and reliable information disclosures as required by the applicable Russian and international laws; • has the Company's employees attend a course on dealing with insider information. In 2018, the Company developed and approved the following documents: • Regulation on the Antitrust Compliance System of MMC Norilsk Nickel and similar documents; • Procedure for Interaction of the Legal Teams of MMC Norilsk Nickel and Russian Entities Comprising the Norilsk Nickel Group (for better identification and assessment of legal risks); • Procedure for Notifying Persons Discharging Managerial Responsibilities at MMC Norilsk Nickel, and for Disclosing Information on Transactions by Such Persons and Their Closely Associated Persons; • updated version of the Company's List of Insider Information based on the changed requirements of the Russian law

Power blackouts at production and social facilities in the Norilsk Industrial District (NID)

The failure of key equipment at the generating facilities and transmission networks may result in power, heat and water shortage at key production facilities of the Company's Polar Division and social facilities in the NID.

Key risk factors	Mitigants
• The isolation of the NID's power system from the national grid (Unified Energy System of Russia); • harsh weather and climatic conditions, including low temperatures, storm winds, snow load; • length of power, heat and gas transmission lines; • wear and tear of key production equipment and infrastructure	To manage this risk, the Company: • operates and maintains generating and mining assets as required by the technical documentation, industry rules, regulations, and laws; • timely constructs and launches transformer facilities, timely replaces transmission towers; • timely upgrades (replaces) TPP and HPP power units' equipment; • timely upgrades and renovates trunk gas and condensate pipelines and gas distribution networks

Social risk

Escalating tensions among the workforce due to the deterioration of social and economic conditions in the Company's regions of operation.

Key risk factors	Mitigants
• Headcount / staff composition optimisation projects; • rejection of the Company's values by some employees and third parties; • limited ability to perform annual wage indexation; • dissemination of false and inaccurate information about the Company's plans and operations among the Group's employees; • reallocation in spending on social programmes and charity	To manage this risk, the Company: • strictly abides by the collective bargaining agreements made between the Group's companies and employees. In 2018, MMC Norilsk Nickel signed a new collective bargaining agreement for 2018–2021; • actively interacts with regional and local authorities, and civil society institutions; • fulfils its social obligations under public-private partnership agreements; • implements the World of New Opportunities charity programme aimed at supporting and promoting regional public initiatives; • implements the Norilsk Upgrade project to introduce innovative solutions for sustainable social and economic development of the region; • implements monitoring across the Group's operations; • conducts opinion polls among Norilsk's communities to learn more about their living standards, employment, migration trends and general social sentiment, and identify major challenges; • implements social projects and programmes aimed at supporting employees and their families, as well as the Company's former employees. • engages in dialogues with stakeholders and conduct opinion polls while preparing public sustainability reports of the Group

Changes in legislation and law enforcement practices

Adverse consequences arising from the Company's non-compliance with the applicable regulations, instructions, rules, standards or codes of conduct.

Key risk factors	Mitigants
• Unstable legal environment (including lack of codified/uniform regulations in various areas); • frequent changes to legislative acts; • complicated geopolitical situation; • budget deficit (need to boost tax and other proceeds)	To manage this risk, the Company: • continuously monitors changes in legislation and law enforcement practices in all its business areas; • performs legal due diligence of draft regulations and amendments; • participates in discussions of draft regulations, both publicly and as part of the expert groups; • engages its employees in relevant professional and specialist training programmes, corporate workshops, and conferences; • cooperates with government agencies to ensure that new laws and regulations take into account the Company's interests.

Climate change risks

Lack of water resources

Water shortages in storage reservoirs of the Company's hydropower facilities may result in failure to achieve necessary water pressure at HPP turbines leading to limited power production and drinking water shortages in the Norilsk Municipality territory.

Key risk factors	Mitigants
• Abnormal natural phenomena (drought) caused by climate change	To manage this risk, the Company: • implements a closed water circuit to reduce water withdrawal; • carries out regular hydrological examinations to forecast water levels in rivers and water bodies. • cooperates with the Federal Service for Hydrometeorology and Environmental Monitoring (Rosgidromet) on setting up permanent hydrological and meteorological monitoring stations in order to improve the accuracy of water level forecasts in the Norilsk Municipality territory; • dredges the Norilskaya River and reduces energy consumption at the production facilities, should the risk materialise; • replaces equipment at hydropower plants to increase power output through improving the performance of hydroelectric units (implementation in 2012–2021)

Soil thawing

Loss of bearing capacity of pile foundations, deformation of buildings and structures leading to their destruction.

Key risk factors	Mitigants
• Climate change, average annual temperature increase (over the last 15–20 years); • increased depth of seasonal thawing	To manage this risk, the Company: • regularly monitors the condition of foundation beds for buildings and structures built on permafrost; • runs geodetic control of changes in buildings' positions; • monitors soil temperature at buildings' foundations; • monitors the facilities' compliance with operational requirements for crawlspaces; • develops recommendations and corrective action plans to ensure safe operating conditions for buildings and structures