

Key risks

Nornickel’s risks are all inherent to its strategic and operational development and business continuity goals. Key risks have a varying degree of effect on Nornickel’s objectives.

Price risk

Potential decrease in sales revenues due to lower prices for Nornickel metals is subject to actual or potential changes in demand and supply in certain metals markets, global macroeconomic trends, and the financial community’s appetite for speculative/investment transactions in the commodity markets.

Key risk factors	Effect on Nornickel's development goals and strategy	Risk assessment	Key mitigants
<ul style="list-style-type: none">Lower demand for metals produced by NornickelA slowdown in the global economy in general and in the economies consuming Nornickel metals in particularSupply and demand imbalance in metals marketsReplacement of metals produced by the Company with alternative materialsUnfavourable monetary policy	Upgrade of the existing and construction of new facilities to ramp up our output of key metals and maintain financial stability	<ul style="list-style-type: none">Effect on objectives: highRisk source: externalYear-on-year change in risk: stable	<p>Nornickel is consciously accepting the existing price risk. To manage this risk, Nornickel:</p> <ul style="list-style-type: none">continuously monitors and forecasts supply and demand dynamics for core metalssecures feedstock supplies for key consumers through long-term contracts to deliver metals in fixed volumesas a member of the Nickel Institute and the International Platinum Group Metals Association, works with other nickel and PGM producers to maintain and expand the demand for these metalssearches for new applications and uses for palladium.

Market risk

Lower competitiveness of Nornickel products in the market may result in their lower liquidity, discounts to the market price, and a decrease in Nornickel’s income.

Key risk factors	Effect on Nornickel's development goals and strategy	Risk assessment	Key mitigants
<ul style="list-style-type: none">Foreign regulators imposing new foreign trade restrictions that impact the Company's activitiesCompetition from producers of cheaper nickelMore aggressive transport electrification programmes, requirements on metals and their formsStricter market requirements for product quality and ESG compliance	Upgrade of the existing and construction of new facilities to ramp up our output of key metals and maintain financial stability	<ul style="list-style-type: none">Effect on objectives: highRisk source: mixedYear-on-year change in risk: stable	<p>To manage this risk, Nornickel:</p> <ul style="list-style-type: none">monitors and analyses changes in market requirements for product quality and forms and for ESG compliancestimulates the demand for its key metalsmonitors changes in the vehicle fleet mix by engine type and requirements for metals useddiversifies its metal product sales across industries and geographiesimproves and diversifies its product rangecooperates with industry institutions to maintain access to relevant sales markets for its metalscooperates with Russian ministries and agencies to prevent/mitigate negative impacts of local or international regulationimplements an ESG roadmapseeks partnership opportunities with key producers of cathodes for lithium-ion batteriesfosters strategic partnerships with key representatives of its consuming industriesengages in joint projects to drive nickel demand in Russiaworks on building and enhancing alternative PGM supply/trading platforms.

Financial risks

This group includes FX, interest rate, and liquidity risks as well as other risks related to the financial security of the Company’s operations and investments.

Key risk factors	Effect on Nornickel's development goals and strategy	Risk assessment	Key mitigants
<ul style="list-style-type: none">Increased debt financing costsDeteriorating market conditionsSharp rouble exchange rate fluctuationsInability to raise debt financing due to deterioration in financial marketsLack of access to key segments of global financial markets (debt and derivatives), limited access to the foreign currency debt marketUnexpected major expensesCounterparty credit riskForeign regulators imposing restrictions that affect Nornickel's operations as well as its key business and infrastructure partners	<ul style="list-style-type: none">A debt portfolio with a well-balanced profile in terms of maturity, currency composition, and sources of financingMaintaining a strong investment case	<ul style="list-style-type: none">Effect on objectives: highRisk source: mixedYear-on-year change in risk: stable	<p>To manage this risk, Nornickel:</p> <ul style="list-style-type: none">maintains a balanced debt portfolioraises additional rouble-denominated debt to prevent a liquidity shortfallholds liquidity reserves on the Group’s balance sheet to ensure timely paymentsmonitors its account balances and existing cash gaps as well as the availability of liquidity reserves on its balance sheetregularly evaluates key potential risk events through scenario modelling and develops prevention and response plansconstantly seeks new potential partners among borrowing and financial institutions, expanding and diversifying its financial infrastructureuses different financial models for various purposes, expands the array of financial risk assessment tools (stress testing and reverse stress testing of all financial risks and risk factors considering their combinations, interrelations, and changes over time).

Technical and production risks

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 result in the need to compensate damage to third parties.

Key risk factors	Effect on Nornickel's development goals and strategy	Risk assessment	Key mitigants
<ul style="list-style-type: none">Harsh natural and climatic conditions, including low temperatures, storm winds, and snow loadUnscheduled stoppages of core equipment caused by fixed assets’ wear and tearRelease of explosive gases and flooding of minesCollapse of buildings or structuresInfrastructure breakdowns	Effective delivery of finished products (metals) in line with the production programme	<ul style="list-style-type: none">Effect on objectives: highRisk source: mixedYear-on-year change in risk: decreased	<p>To manage this risk, Nornickel:</p> <ul style="list-style-type: none">ensures proper and safe operation of its assets in line with the requirements of technical documentation as well as technical rules and regulations as prescribed by local laws across Nornickel’s footprintdevelops ranking criteria and criticality assessment for the Group’s key industrial assetsensures timely replacement of fixed assets to consistently achieve production reliability targetscontinuously monitors the ongoing condition of Nornickel’s buildings and structures via an information system for conducting geotechnical surveysuses satellite technology to monitor Nornickel’s assets and further analyse the dataimplements automated systems to control equipment process flows, uses state-of-the-art engineering controlsimproves its maintenance and repair systemtrains and educates its employees both locally on-site and centrally through its corporate training centressystematically identifies, assesses, and monitors technical and production risks, implements a programme of organisational and technical measures to mitigate relevant riskscontinuously monitors the industrial asset management systemensures risk review by collective bodies at all management levels of the Companydevelops its technical and production risk management system, including by engaging independent experts to assess the system’s performance and completeness of risk datadevelops and tests business continuity plans, which outline the steps that need to be taken by Nornickel’s personnel and internal contractors in case of technical and production risks causing maximum damage. These plans ensure that Nornickel resumes its production operations as soon as possible after any disruptionengages, on a regular basis, independent surveyors to analyse Nornickel’s exposure to disruptions in the production chain and make assessments of related risks.

Investment project risks

Risk related to time and budget overruns as well as to failure to meet performance targets of Nornickel's major investment projects.

Key risk factors	Effect on Nornickel's development goals and strategy	Risk assessment	Key mitigants
<ul style="list-style-type: none">• Changes in forecasts of ore volumes, grades, and properties resulting from follow-up exploration• Changes in investment project timelines• Further changes to budgets of investment projects• Amendments to project performance targets in the course of implementation	<ul style="list-style-type: none">• Strategic goal: growth driven by Tier 1 assets• Developing Nornickel's mining, concentration, and metallurgical assets• Developing the Company's mineral resource base and upgrading core production processes at Nornickel's Tier 1 assets	<ul style="list-style-type: none">• Effect on objectives: high• Risk source: mixed• Year-on-year change in risk: stable	<div>To manage this risk, Nornickel:</div> <ul style="list-style-type: none">• carries out accelerated exploration and updates project performance targets and the mining plan (a long-term production plan) based on the progress of its major investment projects developing the mineral resource base• conducts resource, geomechanical, and hydrogeological modelling• holds external audits of geological data• develops an in-house geological and mining information system• models mining options in geological and mining information systems• as part of the project assurance process, conducts internal (cross-functional) audits of major investment projects at each stage in their life cycle• improves incentives to drive project delivery and build skills and capabilities (including staff certification, identification of improvement areas, and provision of tailored training)• improves project delivery standards, develops project management tools• promotes the use of pilot units across all technically challenging and unique processing stages• redesigns projects and substitutes supply routes to source materials/services from friendly countries• implements a transformation programme for a research institute to improve the quality and reduce the timelines of R&D projects and survey and engineering activities• enhances project management competences of project teams and ensures regular best practice sharing.

Health and safety risks

Failure to comply with Nornickel's health and safety (H&S) rules may result in threats to health and life or temporary suspension of operations, or cause property damage.

Key risk factors	Effect on Nornickel's development goals and strategy	Risk assessment	Key mitigants
<ul style="list-style-type: none">• Suboptimal methods of work organisation• Process flow disruptions• Exposure to hazards	Health and safety	<ul style="list-style-type: none">• Effect on objectives: high• Risk source: internal• Year-on-year change in risk: stable	<div>Pursuant to the Occupational Health and Safety Policy approved by the Board of Directors, Nornickel:</div> <ul style="list-style-type: none">• continuously monitors compliance with H&S requirements• improves the working conditions for its employees and contractors deployed at Nornickel's production facilities, including by implementing new technologies and labour-saving solutions as well as through enhancing industrial safety at production facilities• provides employees with certified state-of-the-art personal protective equipment• improves the system of stationary gas analysers, provides employees with portable gas analysers• carries out preventive and therapeutic interventions and enforces hygiene protocols to reduce the potential impact of work-related hazards• provides regular training and briefings to employees on health and safety, assesses their health and safety performance, and conducts corporate workshops, including by deploying special simulator units• enhances methodological support for H&S functions, including through the development and implementation of corporate standards• improves the risk assessment and management framework across Group enterprises as part of the Risk Control project• reviews the competencies of line managers across Nornickel's production enterprises, develops H&S training programmes, and arranges relevant trainings• holds H&S competitions• communicates the circumstances and causes of accidents to all Nornickel employees, conducts ad hoc safety briefings• introduces frameworks to manage technical, technological, organisational, and HR changes.

Compliance risks

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

Key risk factors	Effect on Nornickel's development goals and strategy	Risk assessment	Key mitigants
<ul style="list-style-type: none">Discrepancies in rules and regulationsConsiderable powers and a high degree of discretion exercised by supervisory bodiesRegulatory instabilityMarket practices driven by business customs and specific to the country	Compliance by the Group with applicable laws, regulatory requirements, corporate standards, and business codes	<ul style="list-style-type: none">Effect on objectives: mediumRisk source: mixedYear-on-year change in risk: stable	<p>To manage this risk, Nornickel:</p> <ul style="list-style-type: none">ensures the development and update of key procedural documents on complianceapplies best practices to further improve the compliance systemtakes measures to ensure its compliance with applicable lawsprotects its interests during regulatory inspections and administrative proceedingsensures that agreements signed by Nornickel contain clauses safeguarding its interestsensures pre-contractual due diligence of counterparties, partners, and supplierstakes measures to prevent and mitigate compliance risks at the Groupconsistently keeps employees up to date on the Company's requirements and measures to mitigate compliance risksensures that the Corporate Trust Line receives and handles reports of corruption, fraud, embezzlement, or other wrongdoing, either planned or committedmaintains and enhances an antitrust compliance systemensures performance evaluation of compliance controls at the Groupincorporates compliance metrics in relevant officers' key performance indicators.

Information security risks

This group includes risks such as potential cybercrimes, a potential unauthorised transfer, modification, or destruction of data assets, disruption or reduced efficiency of Nornickel's IT services as well as business, technological, or production processes.

Key risk factors	Effect on Nornickel's development goals and strategy	Risk assessment	Key mitigants
<ul style="list-style-type: none">Growing external threatsUnfair competitionRapid development of Nornickel's IT infrastructure and automation of technological and business processesUnlawful acts by Nornickel employees and/or third partiesWorking from home / hybrid work schedule and hiring remote employees outside Nornickel's regions of operation	Mitigation of the information security risk and risk of cyberattacks on Nornickel's information systems and automated process control systems	<ul style="list-style-type: none">Effect on objectives: mediumRisk source: mixedYear-on-year change in risk: stable	<p>To manage this risk, Nornickel:</p> <ul style="list-style-type: none">ensures compliance with applicable laws and regulations with respect to the protection of personal data, trade secrets, insider information, and critical information infrastructureimplements MMC Norilsk Nickel's Information Security Policycategorises data assets and makes information security risk assessmentsembeds and monitors compliance with corporate information security standards within information systems and automated process control systemsraises information security awareness among its employeesuses technical means to ensure information security of assets and manage access to data assetsmonitors threats to information security and the use of technical protection means, including vulnerability analysis, penetration testing, cryptographic protection of communication channels, controlled access to removable media, protection against confidential data leaks, and mobile device managementdevelops information security regulationssets up and certifies the Company's information security management systemimplements measures to ensure safe remote access.

Environmental risks

This risk group includes events that result in environmental pollution, are not provided for in approved process flows and Russian laws, and affect the achievement of the Company’s environmental goals.

Key risk factors	Effect on Nornickel's development goals and strategy	Risk assessment	Key mitigants
<ul style="list-style-type: none">Failure to comply with the requirements of environmental laws when operating the Company's facilitiesPoor internal management and controlDelay in implementing environmental programmes and measuresNatural and climate phenomena	Compliance of business with applicable environmental laws, regulations, corporate standards, and business codes related to environmental protection	<ul style="list-style-type: none">Effect on objectives: mediumRisk source: mixedYear-on-year change in risk: decreased	<p>To manage these risks, Nornickel:</p> <ul style="list-style-type: none">develops, implements, and improves environmentally sustainable business processes and introduces advanced practices and approacheshas in place an incentive system and promotes environmental competencies of its employeesimplements its Environmental and Climate Change Strategyimplements environmental initiatives across the Groupoversees environmental compliance and the implementation of environmental programmes and measures.

Social risk

Tensions may escalate among the workforce due to the deterioration of social and economic conditions in Nornickel’s regions of operation.

Key risk factors	Effect on Nornickel's development goals and strategy	Risk assessment	Key mitigants
<ul style="list-style-type: none">Headcount / staff composition optimisation projectsRejection of Nornickel's values by individual employees and/ or third partiesLimited ability to perform annual wage indexation	Social responsibility: <ul style="list-style-type: none">Partnering with regional and local authorities to develop a social infrastructure that supports a safe and comfortable living environment for local communities	<ul style="list-style-type: none">Effect on objectives: mediumRisk source: mixedYear-on-year change in risk: stable	<p>To manage this risk, Nornickel:</p> <ul style="list-style-type: none">strictly adheres to the terms and conditions of collective bargaining agreements between Group companies and employees (the Group has signed a total of 22 collective bargaining agreements)interacts with regional authorities, municipalities, and civil society institutionsfulfils its social obligations under public-private partnership agreementsruns corporate social responsibility programmes and the World of New Opportunities charity programme aimed at supporting and promoting regional community initiatives, including by indigenous peoples of Taimyr, and the Plant of Goodness employee volunteering programme

Key risk factors	Effect on Nornickel's development goals and strategy	Risk assessment	Key mitigants
<ul style="list-style-type: none">Dissemination of false and inaccurate information about Nornickel's plans and operations among Group employeesReallocation of funds originally intended for social programmes and charity	<ul style="list-style-type: none">Facilitating the employees' professional and cultural development and building up talent pools across Nornickel's regions of operationRunning wide-ranging charity programmes and projects		<ul style="list-style-type: none">implements infrastructure projects to support the accelerated development of the service economy and improved living standards across Nornickel's regions of operation through the Norilsk Development Agency, the Second School centre for community initiatives in the Pechengsky District, and the Monchegorsk Development Agencycarries out regular sociological monitoring across its operationssurveys Norilsk residents on living standards, employment, migration trends, and general social sentiment to identify major issuesruns social projects and programmes aimed at supporting employees and their families as well as Nornickel's former employeesmaintains dialogues with stakeholders and conducts stakeholder questionnaire surveys when preparing the Group's public sustainability reportsprovides a range of social support measures to redundant staff under the Kola operations' social programmes and designs the Social and Economic Development Strategy of the Pechengsky District.

Supply chain risks

Supply chain interruption/disruption within the existing transport and logistics system.

Key risk factors	Effect on Nornickel's development goals and strategy	Risk assessment	Key mitigants
<ul style="list-style-type: none">Challenging natural and climatic conditions in the regions of operationLimitations of the transport and logistics systemGrowing inflation, FX rates, pricing pressure from suppliers, poor planning, and other factorsBreach of contracts by contractorsForeign regulators imposing restrictions that affect Nornickel's operations and its key business partners	<ul style="list-style-type: none">Effective delivery of finished products in line with the production programmeTimely supply of products to consumers	<ul style="list-style-type: none">Effect on objectives: mediumRisk source: mixedYear-on-year change in risk: stable	<p>To manage this risk, Nornickel:</p> <ul style="list-style-type: none">actively engages Russian manufacturers to expand competitionuses long-term agreements / contracts / price lists with fixed optimal prices for materials, equipment, and spare parts on terms that are most beneficial for the Companydrafts lists of critical manufacturers of equipment and materials, works to prevent supply disruptions, and monitors the suppliers' performanceimplements its Logistics Infrastructure Development Programmeimplements its Procurement Performance Enhancement Programme.