

# RISK MANAGEMENT

Nornickel continuously manages risks that can affect its strategic and operational goals. This process comprises the following stages:

- Identification of risks that have external and (or) internal sources
- Risk assessment based on their impact on key financial and non-financial metrics
- Development and implementation of measures to prevent risks and (or) minimise their implications.

Nornickel pursues the following key risk management objectives:

- Increase the likelihood of achieving the Group's goals
- Improve resource allocation
- Boost Nornickel's investment case and shareholder value.

The risk management framework is based on the principles and requirements set out in Russian and international laws, as well as professional standards, including the Corporate Governance Code recommended by the Bank of Russia, GOST R ISO 31000–2010 (Risk Management), and COSO ERM (Enterprise Risk Management: Integrating with Strategy and Performance).

To manage production and infrastructure risks, Nornickel develops, approves and updates business continuity plans which in case of emergency consecutively set out:

- 1/ a procedure for interaction between business units in rescuing people, minimising property damage, and ensuring process sustainability
- 2/ a current operations support or resumption plan
- 3/ a rehabilitation or retrofit plan for affected assets.

## RISK MANAGEMENT FRAMEWORK



In 2017–2019, Nornickel improved its risk management framework as follows.

- 1/ Relevant risk management documents were developed and approved (risk management policies, regulations and procedures by function, guidelines for development of business continuity plans).
- 2/ Nornickel's key risks were identified and are presented to the Audit and Sustainable Development Committee on a regular basis as a strategic risk map and Top 20 risks. Based on risk assessment, mitigation measures are adopted, in particular, risk management action plans are developed and approved.
- 3/ The corporate risk management framework was extended to the Group's key subsidiaries. Subsidiaries' risk reports are now regularly reviewed at all levels and consolidated at the Head Office level.
- 4/ A risk appetite statement was developed, approved and updated annually by the Board of Directors.
- 5/ Business continuity plans covering the most critical production and infrastructure risks were developed and approved.
- 6/ A decision was taken to replicate quantitative risk assessments for investment projects and regularly review them at Nornickel's investment committees to enable risk-based decision making.
- 7/ In-person risk trainings for employees of the Head Office, Polar Division, Kola MMC and Gipro-nickel are offered on a regular basis.
- 8/ An interactive online training course in operational risk management was developed for Nornickel employees.
- 9/ A set of documents was developed to design an automated risk management system (ARMS) based on a GRC system.
- 10/ Audits of the risk management framework's performance are conducted annually, and the risk management development roadmap is updated. In addition, performance self-assessment of the corporate risk management framework (CRMF) is conducted on an annual basis.

Qualitative indicators of the Risk Management Service's performance in 2019 cover the following activities:

- Rollout of quantitative risk assessment methods for investment projects
- Implementation of measures to improve the business continuity management system
- Corporate risk management trainings for Nornickel employees
- Automation of internal control and risk management processes based on a GRC system
- Technical and production risk management system improvement, including risk register updates and quantitative assessment / scoring methods testing.

2020+ Development Roadmap envisages the following activities to improve the risk management framework:

- Launch of activities to automate the risk management process
- Refinement of algorithms for prompt communication of all emerging risks using a GRC system
- Regular CRMF self-diagnostic and assessment for compliance with global best practices
- Launch of activities to define key risk indicators as part of the project to implement a GRC system
- Improvement of risk management practices in strategic and operational planning
- Rollout of the approach implying the use of simulation modelling for investment project risk assessment
- Enhancement of the methodology to analyse and manage various categories of technical and production risks
- Extending the business continuity management perimeter to cover non-production processes: information technology, security, staffing, etc.

## NEW EMERGING RISKS

Nornickel's new emerging risks typically have external sources. These risks are often hard to analyse and prevent due to the lack of information. Effective management of new emerging risks is critical to fostering Nornickel's long-term sustainability, managing change and maintaining Nornickel's competitive edge in the metals market. Nornickel assesses and manages new emerging risks based on their potential implications and on how fast they can materialise, as well as considering its actual capabilities to prevent and/or curb their impact.

New emerging risks are identified and tracked early on by relevant internal experts. For example, a team of risk champions is involved in reviewing new emerging risks, identifying and assessing risks

related to all activities of Nornickel. Once the severity of a new emerging risk is assessed and mitigation measures are identified, risk owners become responsible for managing the risk.

New emerging risk management focuses on preventing risk occurrence and mitigating their potential negative implications. Nornickel's approach includes controls such as business continuity plans to manage external risks that can have a disastrous effect on Nornickel's operations and business processes. These controls increase Nornickel's resilience to external shocks. New emerging risks are assessed on a regular basis, including their reassessment and evaluation of their criticality to Nornickel.

## CLIMATE CHANGE

Global warming and other repercussions of climate change may affect Nornickel's operations in the longer run. Their impact may include abnormal weather or lasting changes in weather patterns. The physical implications of climate change can include drought and permafrost thawing, which can have a material adverse effect on Nornickel's operations. As part of its risk management strategy, Nornickel implements a range of measures

to monitor and control these risks. A significant share of renewables in Nornickel's energy consumption, the high share of recycled water, and one of the industry's lowest CO<sub>2</sub> emission levels suggest that the risk remains within tolerance limits. Climate-related risks may also unlock additional opportunities for Nornickel driven by the strong demand for metals required in a future low-carbon economy.

## INSURANCE

Insurance is an essential tool used by Nornickel to manage its risks and finances, as well as to protect its property interests and shareholders against any unforeseen losses related to operations, including due to external effects.

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. Nornickel annually approves a comprehensive insurance programme that defines key parameters by insurance type and key project. Nornickel has implemented a corporate insurance programme that covers assets, equipment failures and business interruptions across the Group.

Nornickel maintains corporate insurance policies with major Russian insurers under the corporate insurance programme, involving an international broker to ensure that Nornickel's risks are underwritten by highly reputable international re-insurers.

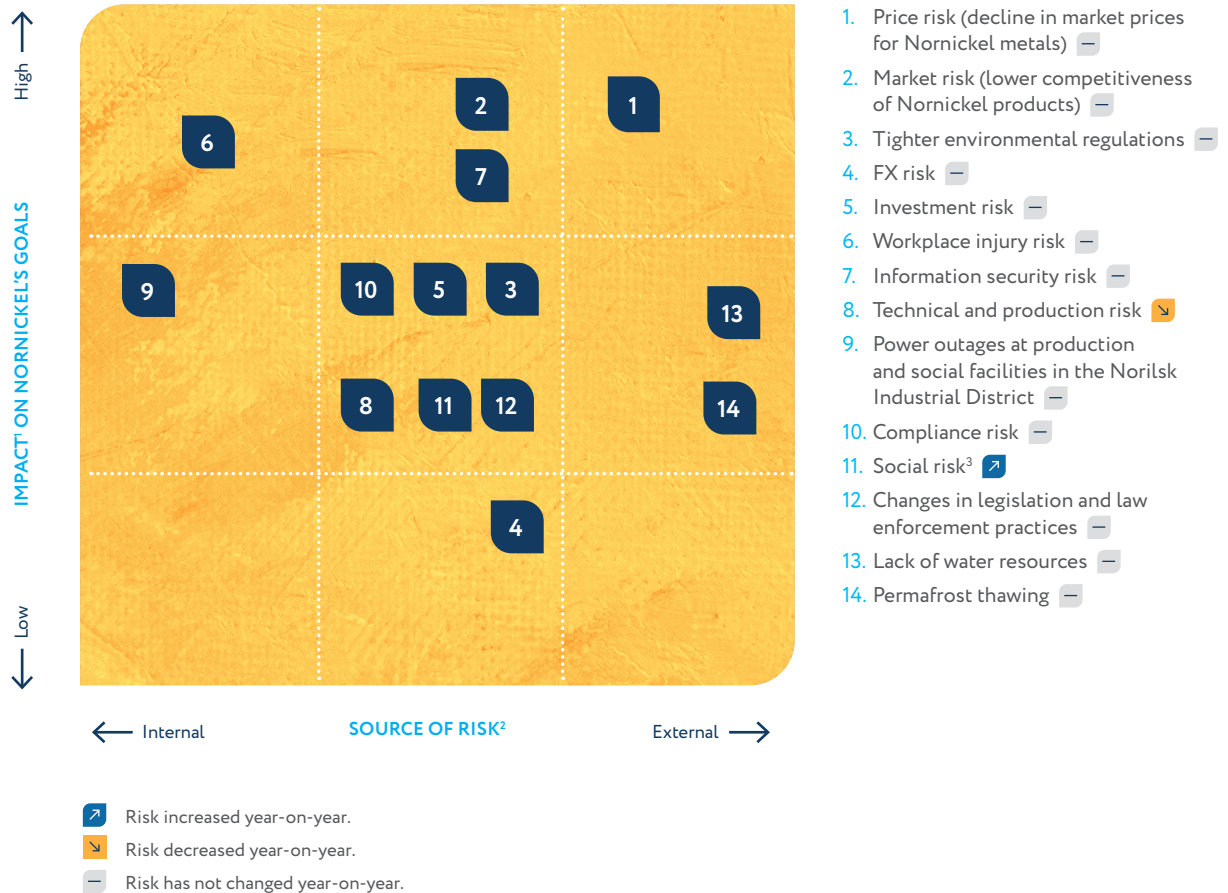
The same principles of centralisation apply to Nornickel's freight, construction and installation, aircraft and watercraft insurance programmes. The Group's entities, directors and officers carry relevant liability insurance. Nornickel applies the industry's best practices to negotiate the best insurance and insured risk management terms.

## MAP OF NORNICHEL'S MATERIAL RISKS WITH YEAR-ON-YEAR CHANGE IN 2019

Below is a high-level map of Nornickel's material risks reflecting global best practices in risk management.

The risk map ranks material risks by their impact on the Group's goals and by source.

### RISK MAP – NORNICHEL'S 2019 ANNUAL REPORT



1/ Risk: an impact of uncertainty on the goals (ISO/GOST R 31000).  
 2/ Source of risk: an element which, alone or in combination with other elements, may cause a risk (ISO/GOST R 31000).  
 3/ Nornickel implements a range of additional measures to mitigate the risk (see risk description).