

SASB content index

Topic	SASB code	SASB metric	Metric or section and page of the report	Comments
GHG emissions	TR-RA-110a.1.	Gross global Scope 1 emissions, CO ₂	Climate action – GHG emissions. P. 54	
	TR-RA-110a.2.	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Environmental management – Environmental strategy. P. 44 Climate action – Management approach, Prospects for reducing GHG emissions. P. 50, 51	
	TR-RA-110a.3.	1. Total fuel consumed, J	Annex to the Energy Efficiency section. P. 190	
		2. Percentage renewable, %	0.003	
Air quality	TR-RA-120a.1.	Air emissions of the following pollutants: 1. NO _x (excluding N ₂ O), t; 2. Particulate matter (PM10), t	1. from stationary sources: 3,987.3; from all types of sources: 110,653.5; 2. from stationary sources: 1.9; from all types of sources: 1.9;	NO _x expressed as N ₂ O
Employee health and safety	TR-RA-320a.1.	1. Total recordable incident rate (TRIR)	N/A	
		2. Fatality rate	Health and safety – Occupational injuries. P. 111	
		3. Near miss frequency rate (NMFR)	N/A	The Analysis and Assessment of Occupational Risks section (p. 110) describes the process to assess professional risks and activities to prevent emergencies and mitigate risks
Competitive behaviour	TR-RA-520a.1.	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behaviour regulations	Not disclosed	

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Accident and safety management	TR-RA-540a.1	Number of accidents and incidents	Health and safety – Traffic safety, Non-occupational injuries. Traffic safety, Non-occupational injuries. P. 120	
	TR-RA-540a.2	Number of accident releases and nonaccidental releases (NARs)	There were no confirmed accident releases and nonaccidental releases (NARs)	
	TR-RA-540a.3	Number of violations identified by state inspections or audits		
	TR-RA-540a.4	Frequency of internal railway integrity inspections	Railway integrity inspections in 2023 covered the following distances: <ul style="list-style-type: none"> 3,005.7 thousand km using track monitoring equipment, 2,228.6 thousand km using defect detection tools The frequency of inspections is set by Russian Railways' regulations based on the type and functional category of the railway tracks: <ul style="list-style-type: none"> for mobile track monitoring equipment, the inspection frequency is set in the Regulation on the Monitoring of Main and Station Tracks approved by Russian Railways' Order No. 678/r dated 7 April 2017, ranging from once a year to twice a month; for mobile defect detection tools, the inspection frequency is set in the Methodology for Establishing the Frequency of Non-Destructive Testing of Rails Based on the Type and Functional Category of Railway Tracks approved by Russian Railways' Order No. 1067/r dated 21 May 2020, ranging from twice a year to four times a month. 	

TCFD compliance

Recommended disclosures	Report section and page / comments
Corporate governance Disclose the organisation's governance around climate-related risks and opportunities.	a. Describe the board's oversight of climate-related risks and opportunities. Participation of the Board of Directors in sustainable development management, p. 20 b. Describe management's role in assessing and managing climate-related risks and opportunities. Sustainable development management at Russian Railways, p. 22
Strategy Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.	a. Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term. Climate action, p. 50–58 b. Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning. Climate action, p. 50–58 Annexes, Additional Information on TCFD Compliance, p. 188 c. Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2 °C or lower scenario. The Company is not currently assessing such scenarios
Risk management Disclose how the organisation identifies, assesses, and manages climate-related risks.	a. Describe the organisation's processes for identifying and assessing climate-related risks. Risk management process, p. 143–144 Annexes, Additional Information on TCFD Compliance, p. 188 The Company discloses information about risks in line with Decree No. 1102 of the Russian Government dated 4 July 2023 b. Describe the organisation's processes for managing climate-related risks. Climate change risks, p. 52–53 Annexes, Additional Information on TCFD Compliance, p. 189 The Company discloses information about risks in line with Decree No. 1102 of the Russian Government dated 4 July 2023 c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management. The Company discloses information about risks in line with Decree No. 1102 of the Russian Government dated 4 July 2023

Recommended disclosures	Report section and page / comments
Metrics and targets Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	a. Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process. The Company discloses information about risks in line with Decree No. 1102 of the Russian Government dated 4 July 2023 b. Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks. GHG emissions, p. 54 c. Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets. Environmental Strategy targets, p. 44 Annexes, Additional Information on TCFD Compliance, p. 189

Additional Information on TCFD Compliance

Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.

Natural climate factors can significantly affect the interaction between railway tracks and rolling stock. The main factors influencing the resilience of rail transport operations are temperature and precipitation, which can lead to several negative consequences for railway infrastructure:

- snowfall disrupts transportation, damages communication and power lines, affects the normal operation of turnouts, and increases the risk of avalanches; rapid melting can also lead to flooding;
- low temperatures increase the likelihood of rail fractures, the formation of cracks in metal bridge span structures, and breaks in power and communication lines;

- high temperatures are particularly dangerous in areas with continuous welded rails, where spontaneous thermal stress relief can cause rail buckling;
- rain and heavy downpours create risks of mass washouts, landslides on embankments and cuts, track erosion, and damage to engineering structures.

In addition, the territory of Russia is exposed to various hazardous natural phenomena, including earthquakes, hurricanes, storms, tornadoes, blizzards, snowstorms, mudslides, landslides, and wildfires.

It is important to note that the total number of hazardous meteorological events has roughly doubled over the past two decades. These meteorological anomalies pose significant risks to rail transport, especially as they become increasingly prolonged. The most critical changes involve fluctuations in average annual temperatures, particularly during

the hot season, as well as the intensity of precipitation that occurs within short time frames.

The risks are associated with the climate change and the resulting increase in the frequency and intensity of adverse natural processes and phenomena, which can damage infrastructure and disrupt or limit the operations of Russian Railways.

These adverse events may result in damage or destruction of buildings, structures, and communications, potentially leading to emergencies, including those with environmental repercussions. Such impacts can lead to decreased transportation volumes and reduced revenue from core operations, as well as higher costs for mitigating the negative effects of climate risks. Additionally, they may indirectly affect the funding allocated for ongoing environmental protection projects.