



Responses to Climate Change (TCFD)

Disclosure in Line with TCFD Recommendations: Governance

GRI 201-2

The NOF Group analyzes the risks and opportunities posed by climate change based on the 1.5°C and 2°C scenario as well as the 4°C scenario. The key risks and opportunities are as follows.

Category	Scenario	Major risks and opportunities	Overview	Level of impact (2030)	Countermeasures
Transition risks	1.5°C	Tighter domestic and international regulations	Increased financial burden due to introduction of carbon tax, etc.	Large	• Promotion of measures toward reducing greenhouse gas emissions
		Sharp rise in raw material prices	Sharp rise in prices of raw materials such as petrochemicals and vegetable and animal-based oils due to a decrease in the supply of petroleum, etc. and an increase in demand for biofuels	Large	• Securing stable raw materials through multiple purchases and long-term contracts • Switching from petrochemical-based raw materials to plant-based raw materials • Utilization of biomass chemicals • Carbon recycling (solvent recycling, etc.)
	2°C	Sharp rise in energy and transportation costs	Sharp rise in prices of oil and natural gas	Medium	• Introduction of energy-saving equipment, review of processes • Promotion of joint delivery and modal shifts
		Changes in the sales destination environment due to the shift to a decarbonized market	Decrease in sales due to decline in market share of gasoline and diesel vehicles	Medium	• Strengthening our response to decarbonized markets, such as electric vehicles and renewable energy
		Deterioration of evaluation/reputation	Deterioration of evaluation from investors in ESG investment and reputation among customers due to delay in climate change countermeasures	Small	• Active promotion of measures to reduce greenhouse gas emissions and information communication
Physical risks	4°C	Natural disasters such as torrential rains, floods, typhoons, storm surges, etc.	Increased risk of business interruption in production sites and supply chains due to increased torrential rainfall, sea level rise, and storm surges caused by stronger typhoons as a result of climate change	Large	• Rain water countermeasures and disaster prevention measures for buildings and facilities • Review the business continuity plan (BCP) and conduct education, training, and audits • Multiple purchases of raw materials
		High temperatures and heat waves	Impact of rising temperatures on refrigeration, air-conditioned storage, etc. in warehouses	Medium	• Ongoing review of capital investment plans
Opportunities	1.5°C	Growing needs for products that contribute to climate change solutions	Expanding needs for products that contribute to climate change mitigation and adaptation (see p. 092-094 for details)	Large	• Development and provision of products that contribute to climate change mitigation and adaptation
	2°C	Improvement of evaluation and reputation	Improve evaluation from investors in ESG investment and reputation among customers through active climate change countermeasures	Small	• Development and provision of products that contribute to climate change solutions and communication of information on promotion of greenhouse gas reduction

* 1.5°C and 2°C scenario: A decarbonization scenario that assumes that necessary measures will be implemented to limit temperature increase to 1.5°C or 2°C or less compared to pre-industrial times (International Energy Agency (IEA) "Net Zero Emissions by 2050" (NZE2050), "Stated Policies Scenario" (STEPS), etc.)

* 4°C scenario: A scenario in which climate change has progressed to the point where the average global temperature has increased by 4°C at the end of the 21st century compared to pre-industrial times (UN Intergovernmental Panel on Climate Change (IPCC) "RCP8.5," etc.)

* Level of impact: **Financial amount of impact of risks** - over 1 billion yen (large), less than 1 billion yen and over 100 million yen (medium), less than 100 million yen (small)
Market scale of opportunities - over 30 billion yen per year (large), less than 30 billion yen and over 3 billion yen (medium), less than 3 billion yen (small)