

Degree of impact:Medium impact:100 million JPY to 1 billion JPY;Large impact:1 billion JPY or more
Occurrence period:Medium-term:Through about 2030;Long-term:Through about 2050

Scenario	Category	Driver	Impact	Degree of impact	Occurrence period	Related Initiatives
1.5°C scenario	Transition risks	Policies/legal regulations	Increase in carbon pricing/Tighter regulations <ul style="list-style-type: none"> • Costs increase when new carbon-related taxes are introduced • Costs increase due to the installation of renewable energy and energy-saving equipment • Energy procurement costs increase when purchasing renewable energy • Costs increase due to energy transition 	Large	Medium to long term	<ul style="list-style-type: none"> • Introduction of renewable energy power generation facilities and energy-saving equipment for self-consumption using the ICP system • Substantial shift to renewable energy through the use of FIT Non-Fossil Certificates with tracking • Promoting carbon offset initiatives through forest absorption in company-owned forests • Gathering information on fuel conversion and electrification of heavy machinery
		Technology	Development of new technologies <ul style="list-style-type: none"> • Demand for limestone decreases when alternative materials and technologies are developed 	Large	Medium to long term	<ul style="list-style-type: none"> • Developing new demand for limestone and promoting overseas exports
		Market	Expansion of Electrification Demand <ul style="list-style-type: none"> • Investment costs increase due to intensified competition for copper mine development projects 	Large	Medium to long term	<ul style="list-style-type: none"> • Continuous information gathering and risk management
	Opportunities	Technology	Development of new technologies <ul style="list-style-type: none"> • Demand for low-GHG emission products increases 	Large	Medium to long term	<ul style="list-style-type: none"> • Developing new manufacturing methods and products for POLYTETSU • Promoting research and development that helps reduce GHG emissions
		Market	Expansion of Electrification Demand <ul style="list-style-type: none"> • Demand for copper used in power transmission lines and other applications increases • Profitability of copper mines improves due to expanding copper demand 	Large	Medium to long term	<ul style="list-style-type: none"> • Development of the Arqueros Copper Mine • Exploring and entering in new development projects • Increasing ore reserves through exploration around existing mines
			Expansion of Renewable Energy Demand <ul style="list-style-type: none"> • Greater possibilities for new development in geothermal power generation, solar power generation, and other areas 	Large	Medium to long term	<ul style="list-style-type: none"> • Promoting geothermal development in Shiramizugoe • Promoting the introduction of solar, wind, and small hydroelectric power generation facilities (including for self-consumption)
4°C scenario	Physical risks	Acute	Intensification of meteorological disasters (e.g. typhoons, floods) <ul style="list-style-type: none"> • Costs increase as we undertake disaster control measures and disaster recovery at production locations • Sales decrease due to supply chain interruptions 	Medium	Medium to long term	<ul style="list-style-type: none"> • Strengthening and continuously reviewing the Business Continuity Plan (BCP) • Sustaining our stable supply system through decentralization of limestone mines
		Chronic	Increase in mean temperatures <ul style="list-style-type: none"> • Risk of flood damage at coastal locations due to sea level rise • Operations impacted by the increased risk of drought • Productivity declines due to negative impacts on worker health 	Medium	Long term	<ul style="list-style-type: none"> • Promoting and continuing to use recycled water • Automating and improving efficiency of high-intensity work using AI and IT

【Reference scenarios】

1.5°C scenario
 • IEA,NZE scenario

4°C scenario
 • IPCC,RCP 8.5 scenario