

Climate Risks & Opportunities

Table 1 of Climate-Related Risks and Potential Financial Impacts

Type	Climate-Related Risks	Potential Financial Impacts
Transition Risks	Policy and Legal	Policy and Legal
	<ul style="list-style-type: none"> Increased carbon pricing Enhanced emissions-reporting obligations Mandates on and regulation of existing products and services Exposure to litigation 	<ul style="list-style-type: none"> Increased operating costs (e.g., higher compliance costs, increased insurance premiums) Early retirement of existing assets due to policy changes Increased costs and/or reduced demand for products and services resulting from fines and judgments
	Technology	Technology
	<ul style="list-style-type: none"> Substitution of existing products and services with lower emissions options Unsuccessful investment in new technologies Costs to transition to lower emissions technology 	<ul style="list-style-type: none"> Early retirement of existing assets Reduced demand for products and services Research and development (R&D) expenditures in new and alternative technologies Capital investments in technological development Costs to adopt/deploy new practices and processes
	Market	Market
	<ul style="list-style-type: none"> Changing customer preferences Uncertainty in market signals Increased cost of raw materials 	<ul style="list-style-type: none"> Reduced demand for goods and services due to shift in consumer preferences Increased production costs due to changing input prices (e.g., energy, water) and output requirements (e.g., waste treatment) Abrupt and unexpected shifts in energy costs
Physical Risks	Reputation	Reputation
	<ul style="list-style-type: none"> Shifts in consumer preferences Increased stakeholder concern 	<ul style="list-style-type: none"> Reduced revenue from decreased demand for goods/services Reduced revenue from decreased production capacity (e.g., delayed planning approvals, supply chain interruptions) Reduced revenue from negative impacts on workforce management and planning (e.g., employee attraction and retention) Reduction in capital availability
	Acute	<ul style="list-style-type: none"> Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions, operation disruptions) Reduced revenue and higher costs from negative impacts on workforce (e.g., health, safety, absenteeism) Early retirement of existing assets (e.g., damage to property and assets in “high-risk” locations) Increased operating costs Increased capital costs (e.g., damage to facilities)
	Chronic	
<ul style="list-style-type: none"> Changes in precipitation patterns and extreme variability in weather patterns Rising mean temperatures Rising sea levels 		

Table 2 of Climate-Related Opportunities and Potential Financial Impacts

Type	Climate-Related Opportunities	Potential Financial Impacts
Resource Efficiency	<ul style="list-style-type: none"> • Use of more efficient modes of transport • Use of more efficient production and distribution processes • Use of recycling • Move to more efficient buildings • Reduced water usage and consumption 	<ul style="list-style-type: none"> • Reduced operating costs (e.g., through efficiency gains and cost reductions) • Increased production capacity, resulting in increased revenues
Energy Source	<ul style="list-style-type: none"> • Use of lower-emission sources of energy • Use of supportive policy incentives • Use of new technologies • Participation in carbon market • Shift toward decentralized energy generation 	<ul style="list-style-type: none"> • Reduced operational costs (e.g., through use of lowest cost abatement) • Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon • Returns on investment in low-emission technology • Reputational benefits resulting in increased demand for goods/service
Resilience	<ul style="list-style-type: none"> • Participation in renewable energy programs and adoption of energy- efficiency measures • Resource substitutes/diversification 	<ul style="list-style-type: none"> • Increased reliability of supply chain and ability to operate under various conditions • Increased revenue through new products and services related to ensuring resiliency