

Enhancing Quality of Life—Providing Products Required by Society—



Komatsu announced its endorsement of the TCFD's recommendations in April 2019. Accordingly, we have been assessing the risks and opportunities that climate change presents for Komatsu and conducting related scenario analyses. At the same time, we practice constructive dialogue with stakeholders while advancing initiatives for combating climate change.

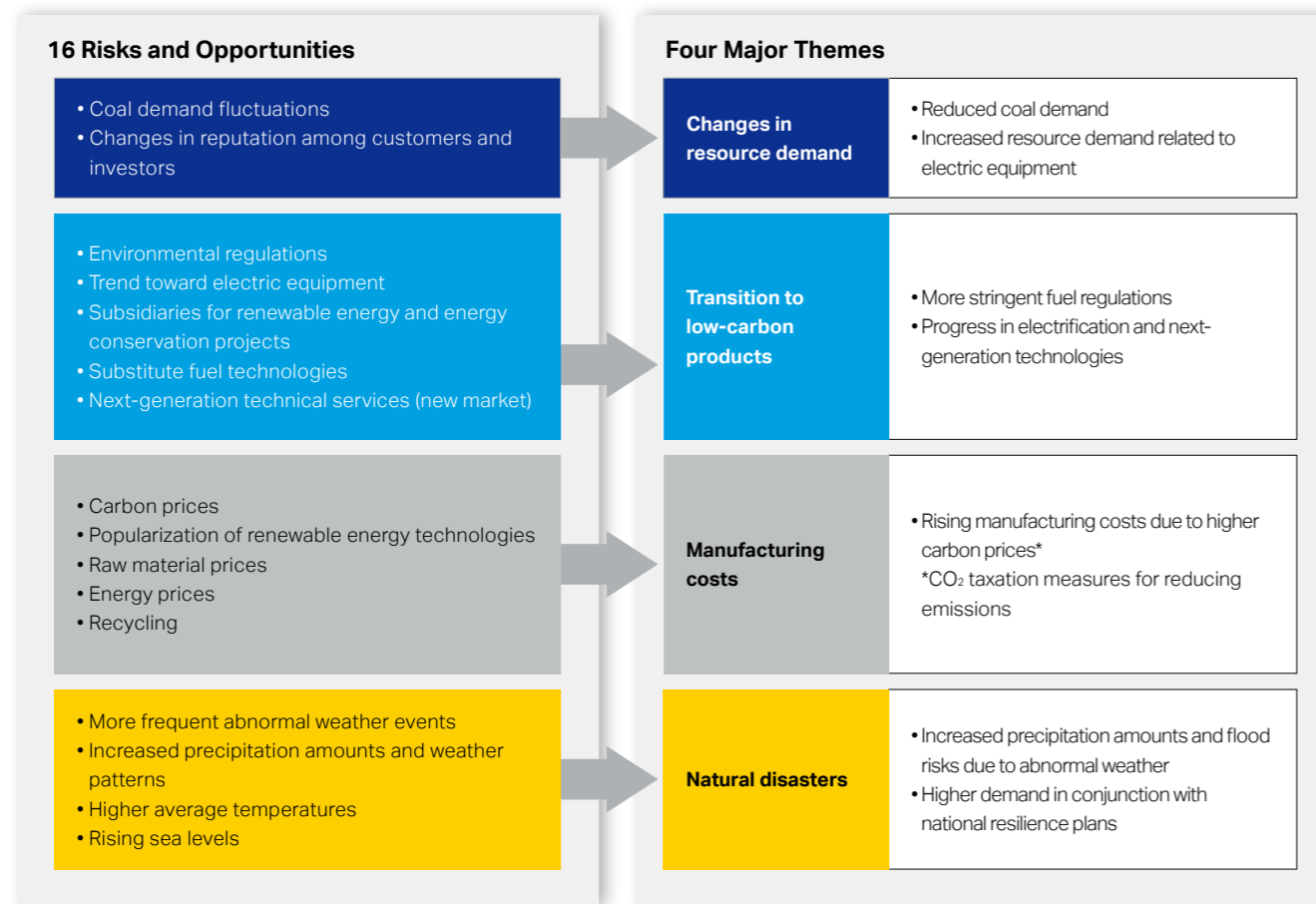
Strategies

Risk and Opportunity Identification

A total of 16 climate change-related risks and opportunities were identified for Komatsu, primarily in relation to construction equipment operations, based on the recommendations of the Task Force on Climate-related Financial Disclosures

(TCFD). We then assessed internal factors, which impact sales and earnings, and external factors, which affect projected scenarios. Through this process, the 16 risks and opportunities were grouped based on four major themes.

Risks and Opportunities and Groupings



Business Risks and Opportunities Based on Climate Change Scenarios

To gauge the potential impacts of climate change-related risks and opportunities on Komatsu's business, we performed scenario analyses of the Company's four major risk and opportunity themes. For these scenario analyses, we defined a 2°C scenario and a 4°C scenario based on the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (Representative Concentration Pathways 2.6 and 8.5) and the

Sustainable Development Scenario and Stated Policies Scenario of the International Energy Agency (IEA).

The risks and opportunities pertaining to specific ESG themes and Komatsu's strategies for addressing these risks and opportunities are described on the following page. Should a scenario targeting more substantial greenhouse gas emissions reductions be issued, Komatsu will be expected to address stricter regulations and accelerate the development of new technologies in accordance with this scenario.

Changes in Resource Demand

	Risks	Opportunities
2°C scenario	<ul style="list-style-type: none"> Regulation of power generation using fossil fuels Massive reductions in coal production volumes under IEA scenarios Reduced sales to coal-related customers by Komatsu 	<ul style="list-style-type: none"> Rapid transition from fossil fuel-powered equipment to electric equipment Higher demand for copper and other resources necessary for electric equipment (motors, batteries, fuel cells, etc.) Increased sales to copper and other relevant mining-related customers by Komatsu in conjunction with trend toward electric equipment
4°C scenario	<ul style="list-style-type: none"> Limited regulation of coal in developing nations Coal production volumes in 2030 in line with current levels under IEA scenarios Reduced appetite for investment in coal mines 	<ul style="list-style-type: none"> Trend toward electric equipment less pronounced than in 2°C scenario Higher demand for copper and other resources necessary for electric equipment Rise in investment for streamlining mine operations
Strategies	Exploration of business opportunities arising from climate change through value creation by means of innovation and growth strategies based on innovation <ul style="list-style-type: none"> Increased metal resource demand in conjunction with transition to electric equipment—Expansion of underground mining equipment operations Contribution to sustainable forestry—Provision of equipment and systems for streamlining processes spanning from afforestation to logging Contribution to rehabilitation of closed mine sites and greenification of deserts—Forest restoration projects at closed mine sites and forest machine operations Transition to circular economies—Expansion of equipment restoration ("Reman") business 	

Transition to Low-Carbon Products

	Risks	Opportunities
2°C scenario	<ul style="list-style-type: none"> Higher development and capital investment costs due to emissions restrictions Reduced sales due to inability to cater to customer electrification demands Substantial changes in technology development and competitive climate including market entry by new competitors Long-term diminishment of technological edge as customers begin leading drive component development and manufacturing projects 	<ul style="list-style-type: none"> Rising demand for electric equipment, fuel-efficient equipment, and biomass fuel-powered equipment Higher sales in traditional areas due to success in developing low-carbon products Higher sales due to ability to swiftly respond to change in focus toward low-carbon products in strategic markets where shift to low-carbon products was slow Growth of equipment restoration (Reman) operations driven by transition to cyclical economy Increased demand for Smart Construction and other solutions with emissions-reducing benefits Increased product reliability due to securing stable supply sources for high-quality components for storage batteries and other major components
Strategies	Komatsu is advancing initiatives aimed at accomplishing its CO₂ emissions reduction targets for 2030 while facilitating the transition to the low-carbon products the world demands. <ul style="list-style-type: none"> Develop electrification systems for construction equipment Develop power sources and high-efficiency components compatible with carbon neutral fuels Develop high-energy-efficiency equipment Deploy Smart Construction and other solutions on a global scale Contribute to cyclical businesses through forestry machinery and Reman businesses <p>Please refer to the following pages for information on Komatsu's efforts to transition to low-carbon products.</p> <ul style="list-style-type: none"> Pages 28–33: Special Feature: Komatsu's Vision for the Workplace of the Future Pages 26, 27, and 43: Examples of low-carbon products 	

Manufacturing Costs

	Risks	Opportunities
2°C scenario	<ul style="list-style-type: none"> Taxation of fossil fuels and CO₂ emissions Transfer of higher product purchase prices to Komatsu Rising power fees and energy costs following investment in power generation facilities with low CO₂ emissions 	<ul style="list-style-type: none"> Increased competitiveness through production technologies that reduce CO₂ emissions
Strategies	<ul style="list-style-type: none"> Mitigation of cost increases by achieving CO₂ reduction and renewable energy targets defined in the mid-term management plan <p>Please refer to the following website for information on recent CO₂ emissions reduction activities:</p>	



Natural Disasters

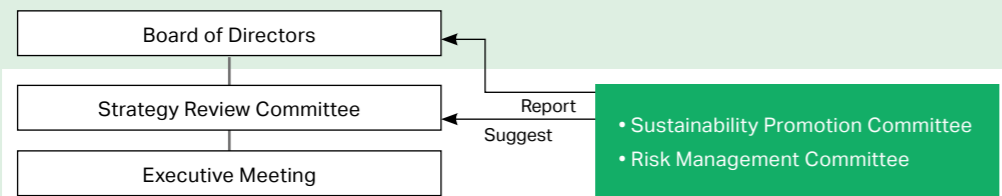
	Risks	Opportunities
4°C scenario	<ul style="list-style-type: none"> Increased frequency of heavy rain and floods due to abnormal weather Risks of disaster damages to Komatsu plants at high risk of flooding Component supply delays following damages to suppliers from disasters 	<ul style="list-style-type: none"> Increased demand for flood-control works
Strategies	<ul style="list-style-type: none"> Institute heavy rain and flood countermeasures across the value chain 	



Governance

Komatsu views climate change as an important management issue, and targets for combating climate change have been incorporated into its business strategies. Discussions regarding climate change are held at meetings of the Sustainability Promotion Committee and the Risk Management Committee, and these committees make suggestions to the Strategy Review Committee and report to the Board of Directors, thereby furnishing a system of appropriate oversight. Meanwhile, the Executive Meeting fulfills the function of managing progress toward targets.

Climate Change-Related Reporting and Deliberation System



Major Discussion Items Related to Climate Change

Name	Chairperson	Major Discussion Items Related to Climate Change
Board of Directors	Chairman of the Board and Representative Director	<ul style="list-style-type: none"> Report from Earth Environment Committee Reports from research, development, and product planning divisions and the Chief Technology Officer Reports from production and procurement division Mid-term management plan progress report
Strategy Review Committee	President	<ul style="list-style-type: none"> Growth strategies for major plants (including climate change-related matters) Report from Environmental Affairs Department
Executive Meeting	President	<ul style="list-style-type: none"> Progress in regard to product development and production system Climate change lectures by external specialists

Name	Chairperson	Major Discussion Items Related to Climate Change
Sustainability Promotion Committee	President	<ul style="list-style-type: none"> Initiatives for addressing ESG issues Deliberations and reports regarding important environmental matters and key performance indicators (KPIs) CSR activity reports
Risk Management Committee	Executive officer supervising general affairs	<ul style="list-style-type: none"> Reports on responses to natural disaster risks

Note: Earth Environment Committee and CSR Committee were integrated from FY2021.

Risk Management

Please refer to page 60 for information on the Company's risk management systems.

Indicators and Targets

Climate Change-Related Indicators and Targets

Indicators	Targets
CO ₂ emissions from product use	Decrease by 50% in 2030 (Base year of 2010, basic unit)
CO ₂ emissions from production	Decrease by 50% in 2030 (Base year of 2010, basic unit)
Rate of renewable energy use	50% in 2030

Examples of Low-Emissions Products

Announcement of Fully Electric and Remote-Controlled Mini Excavator Concept Machine Powered by Lithium-Ion Battery

Komatsu has announced a fully electric (non-hydraulic drive) and exclusively remote-controlled mini excavator powered by lithium-ion battery, as its next-generation concept machine for the future.

Designed to lay the foundations for commercialization of fully electric construction equipment of the future, this concept machine for a fully electric 3-ton class (bucket capacity: 0.09 m³) mini excavator is based on Komatsu's accumulated technological expertise in electric forklifts and mini excavators, and incorporates new technologies, such as lithium-ion batteries and electric cylinders which utilize no hydraulics.



Fully electric and remote-controlled mini excavator concept machine powered by lithium-ion battery

Japanese market's Launch of PC78USE-11 Wired Electric Excavator

In July 2021, Komatsu launched its PC78USE-11 wired electric excavator in the Japanese market. The PC78USE-11 was developed for customers wanting to use an electric hydraulic excavator continuously over long periods of time. This product capitalizes on Komatsu's accumulated technology to deliver the same level of performance as engine-driven equipment while boasting zero emissions along with massive reductions in noise and heat emissions. These features make the PC78USE-11 an eco-friendly wired electric excavator of the small to mid-sized class.



PC78USE-11 wired electric excavator

Voice

Message from the President of the Sustainability Promotion Division

In May 2021, Komatsu celebrated the 100th anniversary of its founding. In conjunction with this momentous occasion, the Company integrated its Corporate Communications Department, Environmental Affairs Department, CSR Department, Diversity Promotion Group, and Demining and Reconstruction Project to form the Sustainability Promotion Division.

Komatsu's basic policy for Corporate Social Responsibility (CSR) has always been to contribute to society through its business. This spirit of pursuing coexistence with communities has been passed down since our founding a century ago. The three-year mid-term management plan slated to conclude with FY2021 describes our goal of achieving sustainable growth through a positive cycle of solving ESG issues and improving earnings, and various initiatives are underway to achieve this goal. Furthermore, we clarified Komatsu's corporate identity in light of the 100th anniversary of its founding, defining our purpose as creating value through manufacturing and technology innovation to empower a sustainable future where people, businesses and our planet thrive together. This move sent a clear message of how we intend to contribute to the realization of a sustainable society while also achieving business growth for Komatsu. Our operating environment is constantly changing, and the pace of this change is accelerating. To respond to this change, I look to further build upon the Komatsu Group's sustainability management approach. By maintaining the strengths we have fostered over the past century, we will position change as an opportunity, boldly tackling new challenges to make Komatsu a more resilient company.

Since establishing the Komatsu Earth Environment Charter in 1992, Komatsu has maintained a proactive stance toward addressing climate change and other environmental issues. Moreover, we put forth the target of halving CO₂ emissions from 2010's level by 2030 in the current mid-term management plan, which was launched in FY2019. Komatsu has also endorsed the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), and we are advancing a strategy for combating climate change based on assessments and scenario analyses of climate change-related risks and opportunities. Furthermore, *Komatsu Report 2021* features our declaration of our goal of achieving carbon neutrality in 2050 and provides information on the new initiatives that this declaration entails.

I also hope to ensure that Komatsu is always a company at which employees can feel proud, motivated, and empowered in their work. For this reason, I believe that promoting diversity and inclusion, the drivers of innovation, is also an important role of the Sustainability Promotion Division. Acting in accordance with Komatsu's management policy of "maximizing the trust given to us by our stakeholders and society through a commitment to quality and reliability," I will continue striving to help us live up to the demands and expectations of society.



Mitsuko Yokomoto
Senior Executive Officer
President, Sustainability Promotion Division