Tackling Climate Change

The Fifth Assessment Report by the Intergovernmental Panel on Climate Change (IPCC), states that the "warming of the climate system is unequivocal," and that it is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century. Moreover, a new phase of the Paris Agreement—an international framework for tackling climate change—kicked off in 2020. With countries declaring their intentions to achieve net-zero CO_2 emissions and carbon neutrality, the movement driving society's transition to a carbon-free society is gaining momentum, which certainly indicates that the initiatives of individual companies to reduce greenhouse gases are growing increasingly important.

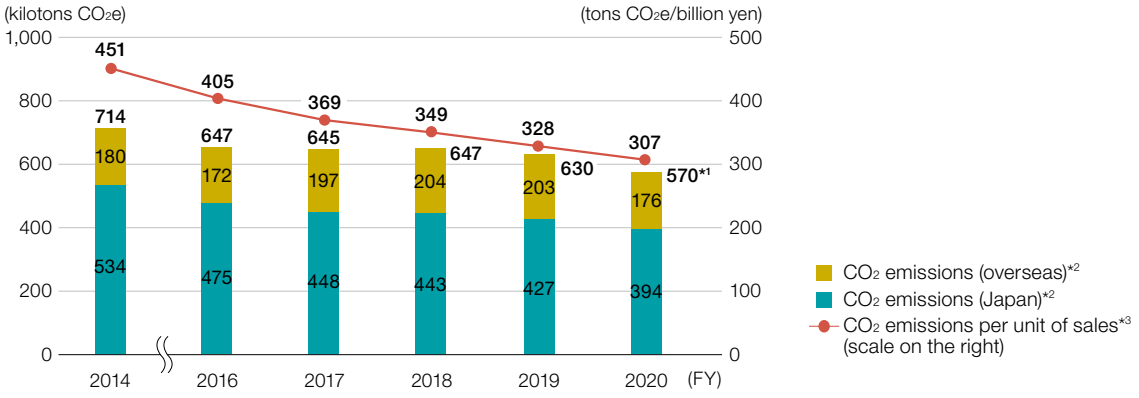
The Kubota Group sees tackling climate change as one item of materiality and has been advancing initiatives toward the "mitigation" of climate change by reducing greenhouse gas emissions mainly through energy-saving activities and the introduction of renewable energy sources and "adaptation" to be prepared for the impact of climate change.

Mitigation of Climate Change

CO_2 Emissions (Scope 1 and Scope 2)

In FY2020, CO_2 emissions were 570 kilotons CO_2e, a decrease of 9.5% compared to the previous year. Additionally, CO_2 emissions per unit of sales improved by 6.3% compared to the previous year. These results mainly reflect suspended production due to the COVID-19 pandemic, lower production volume at cast iron production sites, the implementation of emission reduction measures such as switching to LED lighting and fuel conversion, and improvements in emission coefficients for each electricity utility.

Trends in CO_2 Emissions and Emissions per Unit of Sales



*1 CO_2 emissions (570 kilotons CO_2e) include portions of CO_2 that were not released into the atmosphere but absorbed as carbon into products such as iron pipe (18 kilotons CO_2e).
*2 CO_2 emissions include greenhouse gases from non-energy sources.
*3 CO_2 emissions per unit of consolidated net sales. The Kubota Group adopted International Financial Reporting Standards (IFRS) instead of accounting principles generally accepted in the United States of America from FY2018.

Measures to Reduce CO_2 Emissions

The Kubota Group has established its Medium- and Long-Term Environmental Conservation Targets (p.46-49) and is devoting efforts to reducing CO_2 emissions and energy use associated with its business activities.

We have also established medium-term reduction measure implementation plans, which are reviewed every year by each production site. When the plans are reviewed, Internal Carbon Pricing* is introduced to calculate their effect on reducing CO_2 emissions and energy consumption, as well as the investment cost for the amount of CO_2 reduced, in the capital expenditure plans. The effectiveness and economical rationality of each project are identified from an environmental standpoint and used as resources for making investment decisions.

Some of the specific reduction measures that have been implemented include eliminating loss in energy consumption through a switch to equipment with higher energy efficiency and proper operation management, and promoting the visualization of power consumption in each process. At the same time, we have expanded the use of LED lighting at all our global sites—as of end-FY2020 the ratio of LEDs as a percentage of all lights at production sites had increased to 85%. In FY2020, initiatives included a change in fuel for production equipment and compressed air energy-saving measures.

We are also accelerating the introduction of renewable energy. In FY2020, a new large-scale solar power generation system came online at Kubota Agricultural Machinery (Suzhou) Co., Ltd. (China). This brought the renewable energy consumption of the entire Group to 5,683 MWh (roughly equivalent to a 3,280-ton reduction in CO_2 emissions), a more than two-fold increase compared to FY2019.

As a result of the efforts toward achieving the Medium-Term Environmental Conservation Targets 2020 for CO_2 reduction, global production sites achieved a reduction of 42.2 kilotons CO_2e in FY2020 compared with the case where countermeasures were not implemented from the base year (FY2014). The economic effects of these measures reached 0.91 billion yen compared to FY2014. CO_2 emissions per unit of production in FY2020 improved by 18.6% compared to FY2014.

We will continue to implement measures to save energy on production equipment and air-conditioning/lighting, as well as promote measures to reduce waste and loss in the use of energy based on the concept of the Kubota Production System (KPS) and expand the use of renewable energy.

* Refers to the placing of an internal monetary value on carbon by an organization

At the Kubota Sakai Plant, a gas cogeneration system has been installed to effectively utilize the waste heat generated during in-house power generation and to reduce the consumption of steam boiler fuel on production lines. This initiative reduced CO_2 emissions by some 370 t-CO_2 in FY2020.

Kubota Agricultural Machinery (Suzhou) Co., Ltd. (China) has installed solar panels with an output of 3.59 MW on the roof of its plant. In FY2020 they generated an amount of electricity equivalent to approximately 2,400 t-CO_2.

VOICE

Making Energy Efficiency Part of Tractor Casing Processing Line Upgrade

Kubota Tsukuba Plant made the reduction of energy consumption part of the upgrade of its tractor casing processing line, undertaken to maintain and enhance production capacity.

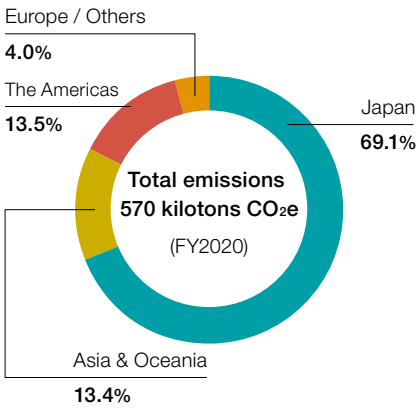
Our plant makes tractors and industrial engines. We manufactured roughly 68,000 tractors in 2020, and anticipate a similar manufacturing and shipping volume going forward. After several years of operation, the plant was facing issues such as dwindling production capacity due to aging facilities. To address this, we upgraded the processing line for casing components, which is part of the tractor manufacturing process.

Kubota Tsukuba Plant
From the left: Daisuke Kaneko
Yuji Ueno
Keita Fukasawa
Hiroshi Ichikawa (foreman)
Tomoya Okada (foreman)

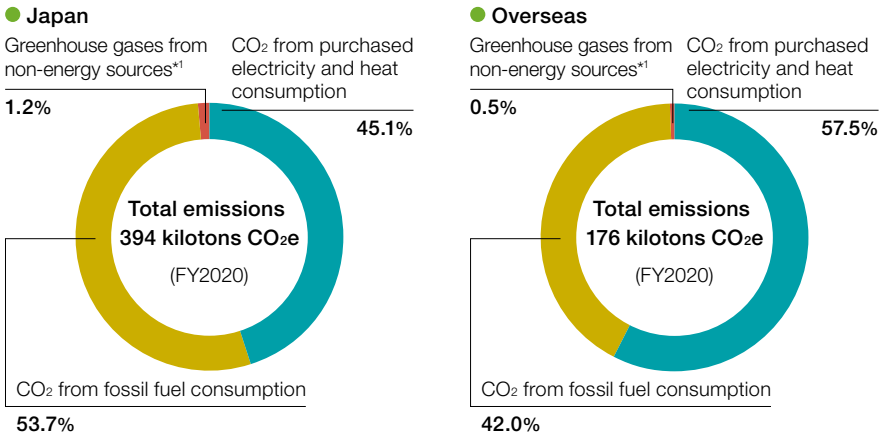
In the upgrade, we deployed sensing technology and other new technology and equipment to boost equipment utilization rates, and reorganized the plant layout to enable more efficient production. The upgrade also cut energy consumption by installing the latest energy-saving equipment, such as inverter-type processing machines and energy-efficient mist collectors, in addition to adding the capacity to reduce air supply volume. The revamped processing line started up full-scale production in August 2020, achieving a roughly 9% decrease in energy costs.

We will continue efforts to reduce energy use and costs.

CO_2 Emissions by Region

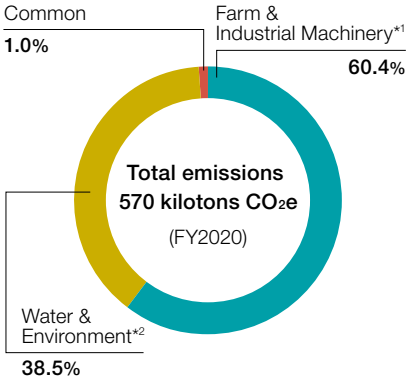


CO_2 Emissions by Emission Source



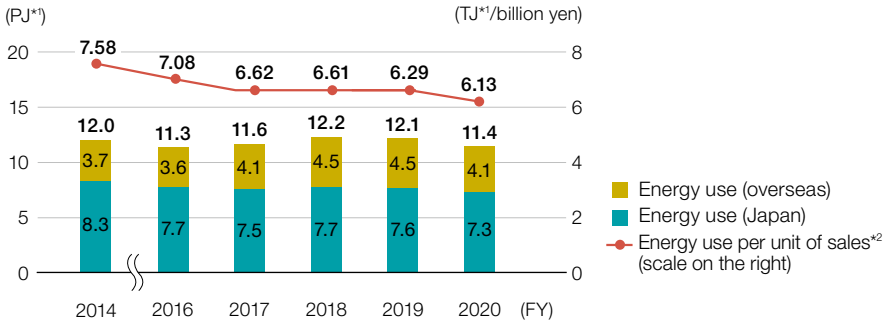
*1 Greenhouse gases from non-energy sources include the following: CO_2 4.1 kilotons CO_2e, CH_4 0.8 kilotons CO_2e, N_2O 0.4 kilotons CO_2e, HFC 0.4 kilotons CO_2e, PFC 0 kilotons CO_2e, SF_6 0.03 kilotons CO_2e, and NF_3 0 kilotons CO_2e

CO_2 Emissions by Business



*1 CO_2 emissions generated from the production of products such as agricultural machinery, construction machinery, and engines.
*2 CO_2 emissions generated from the production of products such as ductile iron pipes and cast steel.

Trends in Energy Use at Business Sites and Energy Use per Unit of Sales

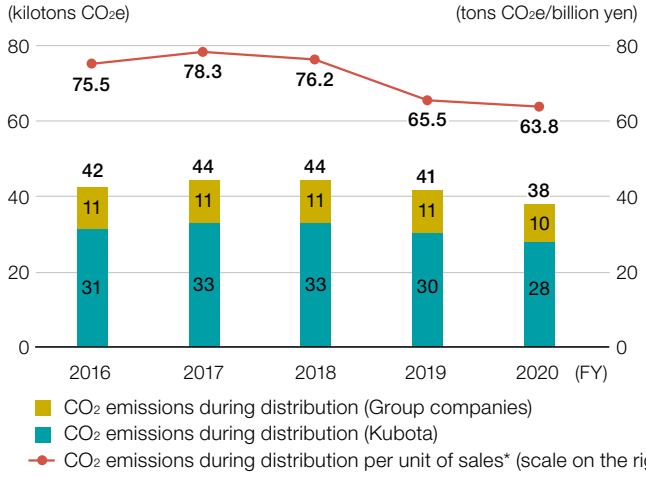


*1 PJ = 10^{15}J, TJ = 10^{12}J
*2 Energy use per unit of consolidated net sales. The Kubota Group adopted International Financial Reporting Standards (IFRS) instead of accounting principles generally accepted in the United States of America from FY2018.

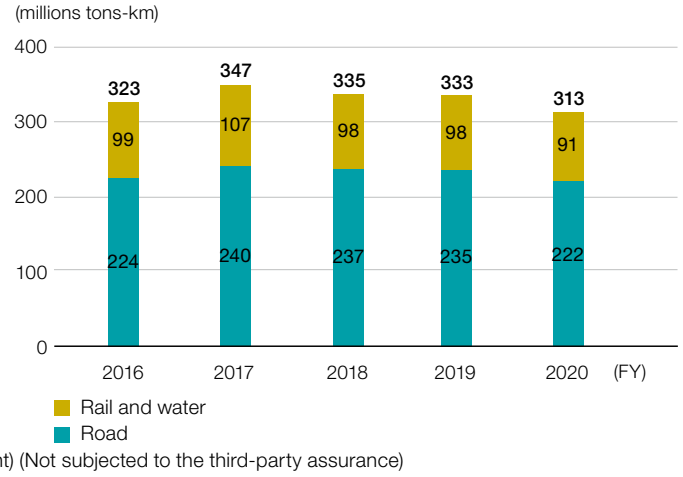
CO_2 Emissions during Distribution

In FY2020, CO_2 emissions during distribution were 38 kilotons CO_2e, a decrease of 7.3% compared to the previous year. Additionally, CO_2 emissions during distribution per unit of sales improved by 2.6% compared to the previous year. The Kubota Group continuously promotes various initiatives, including such as improving loading efficiency and realizing a modal shift through the use of ships.

Trends in CO_2 Emissions during Distribution and Emissions per Unit of Sales (Japan)



Trends in Freight Traffic (Japan)



CO_2 emissions during distribution (Group companies)
CO_2 emissions during distribution (Kubota)
CO_2 emissions during distribution per unit of sales* (scale on the right) (Not subjected to the third-party assurance)
Rail and water
Road

* CO_2 emissions during distribution per unit of consolidated net sales. The Kubota Group adopted International Financial Reporting Standards (IFRS) instead of accounting principles generally accepted in the United States of America from FY2018.

For the calculation method of each item of environmental data, see the Calculation Standards of Environmental Performance Indicators (p.98).

CO_2 Emissions throughout the Value Chain

The Kubota Group makes concerted efforts to figure out CO_2 emissions throughout the value chain in addition to its business sites. Following guidelines*, we calculate CO_2 emissions based on Scope 3, and continue to expand the categories in the Scope of its calculation of CO_2 emissions.

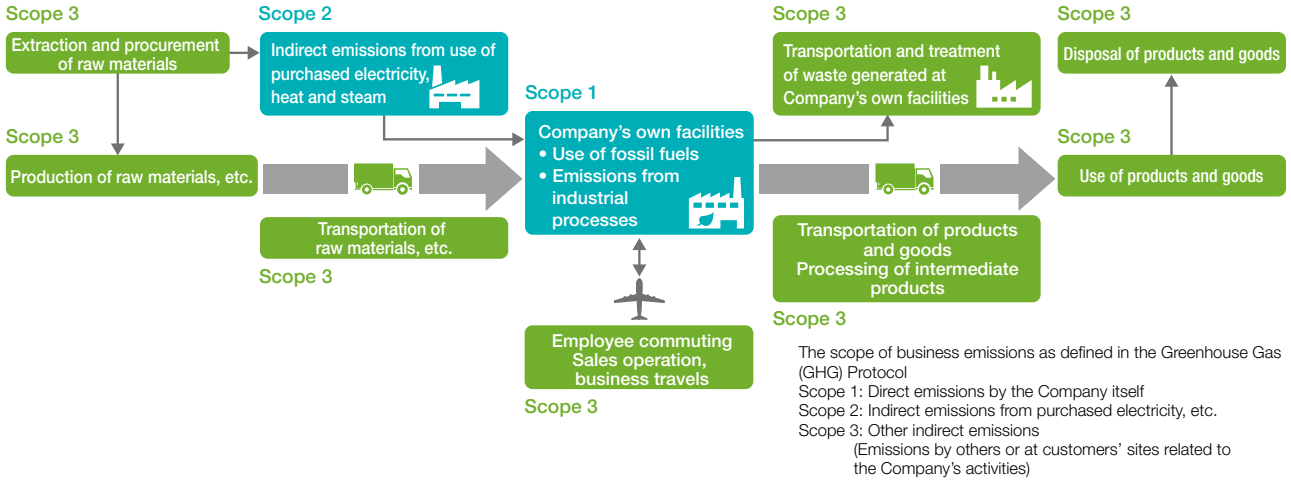
* Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain issued by the Japanese Ministry of the Environment and Ministry of Economy, Trade and Industry

CO_2 Emissions in Each Stage of Value Chain

Classification				Scope of calculation	CO_2 emissions (kilotons CO_2e)*4		
					2018	2019	2020
Emissions of the Kubota Group's business sites	Direct emissions (Scope 1)			Use of fossil fuels	309	303	285
				Non-energy-derived greenhouse gas emissions	7	7	6
	Indirect emissions (Scope 2)			Purchased electricity and heat use	331	320	279
Upstream and Downstream emissions	Other indirect emissions (Scope 3)	Category	1	Resource extraction, manufacturing and transportation related to purchased goods/services	2,391	2,446	2,322
			2	Manufacturing and transportation of capital goods such as purchased equipment	215	290	292
			3	Resource extraction, manufacturing and transportation related to purchased fuels/energy*1	27	27	105
			4	Transportation of purchased products, etc.	Not calculated	Not calculated	Not calculated
			5	Disposal of wastes discharged from business sites	20	26	28
			6	Employee business travels	10	10	11*7
			7	Employee commuting*2	3	6	10*7
			8	Operation of assets leased to the Kubota Group	Not applicable*5	Not applicable*5	Not applicable*5
			9	Transportation of sold products*3	192*6	184	199
			10	Processing of intermediate products	173	320	148
			11	Use of sold products	21,060	21,176	20,590
			12	End-of-life treatment of sold products	42	42	41
			13	Operation of assets leased to other entities	Not applicable*5	Not applicable*5	Not applicable*5
			14	Operation of franchises	Not applicable*5	Not applicable*5	Not applicable*5
			15	Investments	Not applicable*5	Not applicable*5	Not applicable*5
		Total of Scope 3			24,133	24,526	23,745
Total of Scopes 1, 2, and 3					24,780	25,156	24,315

*1 From FY2020, fuel is included along with purchased electricity in the scope of calculation.
*2 In addition to the data for Japan, CO_2 emissions from overseas subsidiaries have been included from FY2019.
*3 In addition to the data for Japan, CO_2 emissions associated with the overseas shipping of certain products from Japan have been included from FY2018.
*4 Totals shown may differ from the simple sum of values shown due to rounding.
*5 CO_2 emissions shown as "not applicable" correspond to zero.
*6 Calculation of CO_2 emissions associated with the transportation of sold products in FY2018 was revised to improve accuracy.
*7 The increase in CO_2 emissions is due to an increase from the previous year in the CO_2 emission unit per monetary value used in the calculation.

Example Activities of Each Scope



For the calculation method of each item of environmental data, see the Calculation Standards of Environmental Performance Indicators (p.98).

Adaptation to Climate Change

Measures to Adapt to Climate Change

It is likely that the progression of climate change will have a negative impact on our lives. For example, the frequent occurrence of weather disasters, changes in agricultural practices, and an increase in the number of heat stroke cases. Our response to climate change needs to include ongoing measures aimed at reducing greenhouse gas emissions, as well as policies for avoiding or reducing damage brought on by climate change.

As part of its strategy to adapt to climate change, the Kubota Group is implementing a number of initiatives at its business sites and in its products and services.

▶Initiatives on Products and Services

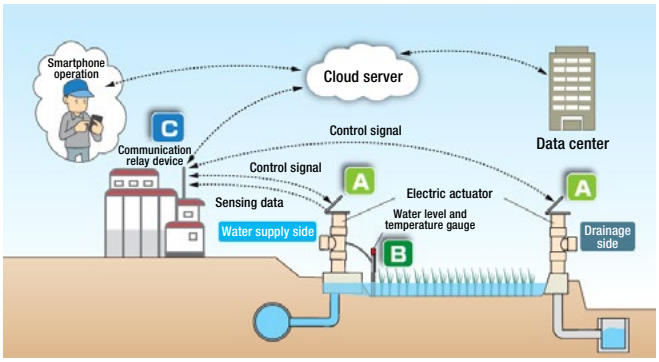
Category		Major initiatives
Food		• Provision of tractors that are capable of deep plowing necessary for growing rice in abnormally high temperatures without lowering the quality/yield, and the provision of information useful for soil cultivation, such as the proper distribution of fertilizers appropriate for high-temperature conditions • Provision of the Kubota Smart Agri System (KSAS), which uses ICT and robot technology, and high-performance machinery that lightens the workload in fields such as agriculture, where workers often labor in scorching heat • Provision of information for farmers on changes in temperature, precipitation, and the amount of solar radiation, as well as the impact thereof on crops
Water	Flooding	• As a measure for floods or other disasters caused by abnormal climate, provision of disaster-relief pumper vehicles, ultra-light, emergency sump pump units, rainwater storage and filtration products, and piping systems for manhole toilets, and so on • Provision of ductile iron pipes with tough tube body and excellent joint performance, which are highly effective during disasters such as typhoons and torrential rainfall
	Drought	• To address water shortage, the provision of management systems using IoT, which contribute to the efficient operation of water supply and sewage treatment systems and treatment plants • Provision of tank-submerged-type ceramic membrane filtering equipment and submerged membranes that purify wastewater for reuse
	Management systems	• Provision of the Kubota Smart Infrastructure System (KSIS) that leverages IoT technology to manage a variety of facilities, from dams to drainage locations, using weather information in collaboration with the NTT Group • Provision of the WATARAS farm water management system that allows accurate water management for remote rice paddies
Living environment		• Provision of diesel engines for use as generators for emergency power supply during disasters and power outages • Provision of construction machinery to contribute to disaster prevention, as well as recovery and reconstruction • Provision of highly efficient air-conditioning equipment that creates a clean and comfortable indoor environment, even amid abnormal weather conditions

Provision of Farm Water Management System WATARAS

WATARAS is a farm water management system that allows users to remotely and automatically control water flowing in and out of rice paddies while monitoring water levels on a smartphone or PC.

So-called “smart rice paddy dam” demonstrations are underway in which rice paddies are temporarily made to fill up with rainwater by remotely raising the drainage level setting when rivers are at risk of flooding during heavy rainfall. These “rice paddy dams” have the potential to help prevent flooding.

agriculture.kubota.co.jp/product/kanren/wataras/
(only in Japanese)



WATARAS system overview

▶Initiatives taken at Business Sites

Efforts at our business sites include the formulation of BCPs and disaster response manuals. To be prepared for high tides and torrential rain, the sites have also installed sump pumps, hold emergency drills, and are equipped with water tanks for use during water shortages.

Installation of Weather-Resistant Roofing Material

As a measure against from heavy rainfall and rising daytime temperatures on rooftops, Kubota Manufacturing of America Corporation (US) installed roofing materials (polyisocyanurate insulation material and thermoplastic olefin sheets) on its Building No.2 (following installation on Building No.1) to bolster long-term weather resistance and conserve air-conditioning energy use.


Installation on Building No.1 (2019)


Installation on Building No.2 (2020)

Disclosure in Accordance with the TCFD Recommendations

The Kubota Group expressed its support for the TCFD* recommendations in January 2020.

* The Task Force on Climate-related Financial Disclosures established by the Financial Stability Board (FSB).

TCFD Recommendations

The various risks and opportunities arising from climate change could have a significant impact on companies' financial statuses. The TCFD recommendations released in 2017 present a framework for corporations to disclose climate-related information to the financial markets. They recommend disclosure of information about the status of the company's response to climate change, which could have a damaging effect on stabilization of financial systems, and about the impact on business and so forth. The recommendations call for companies to autonomously ascertain and disclose information related to Governance, Strategy, Risk Management, and Metrics and Targets, such as the financial impact of risks and opportunities engendered by climate change and the status of the company's response.

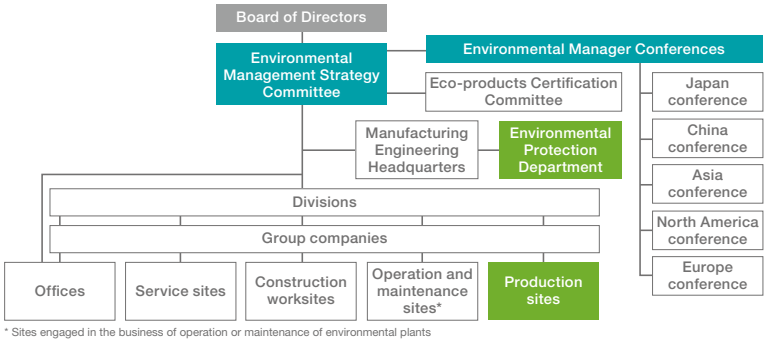
The status of the Company's disclosures related to the TCFD recommendations is as follows.

Disclosure Items in the TCFD Recommendations	Relevant Section	Page
Governance		
a. Describe the board's oversight of climate-related risks and opportunities.	Environmental Management Promotion System, Corporate Governance Structure	P50 P156
b. Describe management's role in assessing and managing risks and opportunities.	Environmental Management Promotion System	P50
Strategy		
a. Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	Environmental Management Approach—Materiality, Environmental Management Approach —Risks and Opportunities	P38 P39
b. Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	Environmental Management Approach —Risks and Opportunities, Environmental Management Approach—Key Measures	P39 P40
c. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Environmental Vision, Tackling Climate Change, Expanding Environment-friendly Products and Services	P41 P52 P74
Risk Management		
a. Describe the organization's processes for identifying and assessing climate-related risks.	Environmental Management Approach—Materiality	P38
b. Describe the organization's processes for managing climate-related risks.	Environmental Management Approach—Materiality, Environmental Management Promotion System, Expanding Environment-friendly Products and Services, Internal Control—Internal Control System, Internal Control—Internal Control System Operation Activities (Risk Management Activities)	P38 P50 P74 P162 P162
c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	Environmental Management Promotion System, Corporate Governance Structure, Internal Control—Internal Control System	P50 P156 P162
Metrics and Targets		
a. Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	Medium- and Long-Term Environmental Conservation Targets and Results, Tackling Climate Change —Measures to Reduce CO_2 Emissions	P46 P52
b. Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	Tackling Climate Change —CO_2 Emissions throughout the Value Chain, Environmental Data	P55 P93
c. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	Medium- and Long-Term Environmental Conservation Targets and Results	P46

Governance

The Kubota Group considers conservation of the earth's environment to be a material issue. The Company has established the Environmental Management Strategy Committee to realize strategic, speedy environmental management under a promotion framework led by management. In addition, Environmental Manager Conferences are held in each of five regions—Japan, China, Asia, North America, and Europe—to promote environmental management of the entire Group globally.

Environmental Management Promotion System



* Sites engaged in the business of operation or maintenance of environmental plants

The Environmental Management Strategy Committee is comprised of the President and all inside Directors, the General Manager of Planning and Control Headquarters, the General Manager of Manufacturing Engineering Headquarters, the General Manager of Research and Development Headquarters, the General Manager of Procurement Headquarters, and the General Manager of Corporate Compliance and Risk Management Headquarters. The Committee discusses the medium- and long-term direction of the Company's environmental management, such as medium- and long-term targets and key measures in light of global environmental issues such as climate change and the business environment. It determines priority items and plans that should be carried out in order to reduce environmental impacts and risks, and to enhance the lineup of environment-friendly products. The results of the committee meetings are reported to the Board of Directors and the Executive Officers' Meeting, and are distributed throughout the Group. It also promotes management based on the plan-do-check-action (PDCA) cycle by assessing and analyzing the progress of the entire Group's environmental conservation activities and reflecting the results when formulating new plans and policies.

At the Environmental Manager Conferences, the Kubota Group policy and promotion items are communicated and the status of progress on medium-term environmental conservation targets is shared, along with case studies of energy-conservation measures, environmental risk countermeasures, and so forth. The conferences discuss matters such as how to solve issues related to environmental conservation activities.

Moreover, the Company has set out environmental conservation targets taking medium-term (five-year activity period) and long-term (15-year activity period) perspectives, based on social trends and regulations in each country related to the environmental issues. Medium-term environmental conservation targets are revised every five years. Medium-term plans are made individually by each site among all of the production sites globally. The Environmental Protection Department checks the status of progress on targets twice a year. In the same way, medium- to long-term targets for Eco products are set in proportion with net sales, and the department checks the status of progress once a year. The details of the plan and the status of progress are reported at the Environmental Management Strategy Committee, which discusses issues and measures for achieving the targets.

Related pages "Environmental Management Promotion System" (p.50), "Corporate Governance Structure" (p.156)

Strategy

The Group has formulated its "Environmental Vision," which presents the direction for its business activities from an environmental perspective towards 2050, having made an analysis of future society based on the scenarios for 2°C and 4°C temperature rises by the Intergovernmental Panel on Climate Change (IPCC), the International Energy Agency (IEA), and others. The Environmental Vision calls on us to challenge to achieve zero environmental impact through efforts to reduce CO_2 emissions in production activities. It also aims to contribute to solving various social problems such as controlling greenhouse gas emissions in the fields of food, water, and living environments through the provision of environment-friendly products and solutions. In doing so, we will help to realize a carbon-neutral and resilient society. In 2021, the Company established the Carbon Neutral Promotion Department, which will propose and implement strategies for realizing carbon neutrality from a long-term perspective.

▶Scenario Analysis

The scenario analysis in the TCFD recommendations will be used to examine the financial impact on business due to long-term, highly uncertain climate change problems and the impact on future business strategy. The Company's businesses may be heavily impacted by climate change. We have conducted analysis using scenarios published by the IPCC and the IEA, based on forecasts for population growth and economic development.

Looking ahead, we will proceed to discuss analysis of risks and opportunities due to climate change using each scenario, along with the expected impacts on business activities and the methods of evaluating financial evaluations. We will work to further enhance our disclosure.

Setting scenario		Reference scenario
Transition aspect	2°C scenario	The IEA's 2°C scenario (2DS)*1 and the Sustainable Development Scenario (SDS)*2
	4°C scenario	The IEA's Reference Technology Scenario (RTS)*1 and New Policy Scenario (NPS)*2
Physical aspect	2°C/4°C scenario	IPCC's Representative Concentration Pathways scenario*3 RCP2.6, RCP8.5

*1 Source: IEA "Energy Technology Perspective 2017" *2 Source: IEA "World Energy Outlook 2018" *3 Source: IPCC "Fifth Evaluation Report"

Related page "Environmental Vision" (p.41)

▶Risks and Opportunities from Climate Change

		Envisaged scenario	Impact on the Company	Time horizon*		
				Short term	Medium term	Long term
Risks	Policy and regulation risk	Stricter regulations for companies related to energy saving and controls on the emissions of greenhouse gases, etc.	Increase in regulatory compliance cost			→
	Market and technology change risk	High energy prices due to structural changes in energy driven by accelerating moves towards decarbonization and expanded use of renewable energy, etc.	Increase in product development and manufacturing costs			→
		Adoption of electrification along with removal of low energy-saving products as a result of greater interest in climate change among the market and customers	Increase in product development cost Loss of selling opportunities			→
		Changes in agricultural style due to more pests, lower crop yields, and relocation of suitable farming land, etc.	Loss of selling opportunities			→
	Physical risk	Increasing frequency and severity of weather disasters such as typhoons and torrential rains driven by climate change	Negative impact on the Company and its suppliers			→
Opportunities	Sales opportunity increase, competition increase	Launch of products and services, etc., that enable energy savings and energy creation	Expansion of selling opportunities			→
		Expansion in needs for agricultural solutions that correspond to changes in agricultural styles	Expansion in business related to adapting to climate change		→	→
	Efficiency gains and cost reductions	Acceleration of resource conservation measures at business sites	Increase in productivity			→

* The time horizon is as follows.
Short term: Within three years.
Medium term: Between three and five years. The activity period for medium-term environmental conservation targets.
Long term: Over five years. The activity period for long-term environmental conservation targets and the future beyond that.

Related page “Environmental Management Approach” (p.37)

▶Response to Climate-related Issues

The Company’s Environmental Vision is stated as “While challenging to achieve zero environmental impact, we will contribute to realizing a carbon neutral and resilient society in the fields of ‘food, water, and the environment.’” This shows our intention to contribute to realizing a sustainable society by controlling society’s CO_2 emissions through the reduction of greenhouse gas emissions in our business activities and the provision of environment-friendly products and solutions. Looking ahead, we will continue to promote the following activities, while proposing strategies to counter climate change based on the impacts on individual businesses.

Action item	Summary of initiative
Promoting the reduction of CO_2 emissions at business sites (p.52)	The strengthening of energy saving-related regulations and the increase in energy procurement costs due to the expansion of renewable energy may have an impact on our business activities. In its medium- and long-term environmental conservation targets, the Kubota Group has set improvement targets for reduction of Scope 1 and 2 CO_2 emissions, CO_2 emissions per unit of production, and energy use per unit of production. At our production sites, we are promoting strategies to mitigate climate change, such as reducing waste or loss of energy based on the Kubota Production System (KPS), expanding the use of renewable energy, and introducing LED lighting.
Adaptation to climate change (p.56)	There are concerns of an increase in damage caused by weather disasters as climate change progresses. At the Kubota Group’s business sites, we have established business continuity plans (BCPs) and disaster response manuals. We conduct disaster response drills, and we have established wastewater pumps and so forth in an effort to mitigate the damage due to natural disasters. Furthermore, Kubota supplies products and services including ductile iron pipe that is resilient to typhoons and torrential rains and water pump vehicles that can be rapidly deployed for disaster recovery to remove water in the event of a flood. We will also focus on strategies for adapting to climate change so that we can support people’s lives and contribute to the creation of disaster-resilient towns.
Environment-friendly products and services (p.74)	Following the launch of the Paris Agreement in 2020, we expect to see an acceleration in efforts to save energy and reduce CO_2 emissions, along with increasing interest in climate change among markets and customers. As a result, needs related to energy saving, decarbonization, and electrification are expected to expand. In the market, products that do not respond to society’s needs are weeded out, and this could lead to the loss of selling opportunities. The Kubota Group is expanding its products that offer a high level of environmental performance, such as climate change response. Looking ahead, we will continue to work to control Scope 3 CO_2 emissions by advancing the development of products and services that have strong environmental performance.

Risk Management

The Kubota Group conducts periodic revision of climate change risks and opportunities. We constantly evaluate the status of our response to risks and opportunities, primarily based on our progress on medium- and long-term environmental conservation targets. We formulated our Long-Term Environmental Conservation Targets 2030 in 2016. We formulate medium-term environmental conservation targets every five years, and in 2021 we formulated the Medium-Term Environmental Conservation Targets 2025. We have formulated plans for reduction targets at all global production sites based on the medium-term environmental conservation targets, and these are revised each year. The performance of our initiatives is evaluated and managed for each site. For environment-friendly products and services, we also conduct product assessments at the design and development stage, during which time we evaluate their environmental performance. Products whose environmental performance is recognized in terms of saving energy and so forth are recognized as "Eco products," under the Company's proprietary standard and the sales ratio of these products is evaluated and managed.

Evaluation results are collected by the Environmental Protection Department, and where particularly important risks and opportunities are recognized, these are discussed by the Environmental Management Strategy Committee, and reported to the Board of Directors and the Executive Officers' Meeting. Proper countermeasures are taken afterwards.

Related pages "Environmental Management Approach" (p.37), Environmental Management Promotion System" (p.50),
"Expanding Environment-friendly Products and Services" (p.74), "Corporate Governance Structure" (p.156), "Internal Control" (p.162)

Metrics and Targets

The Kubota Group has set medium and long-term environmental conservation targets aiming to reduce the risks and expand the opportunities due to climate change and is working to achieve these targets. Furthermore, we collected performance data on CO_2 emissions (Scopes 1 and 2) at the Group's global sites (production and non-production sites) and upstream and downstream CO_2 emissions (Scope 3) and disclose our results for the past years. We have obtained third-party verification for our main disclosure items and we are working to improve our accuracy.

Looking ahead, we will promote initiatives that lead to solutions for the issues of climate change by promoting environmental conservation activities and expanding our environment-friendly products and services globally.

▶Climate Change-related Metrics and Targets

	Action item	Metric	Base FY	Target
Long-Term Environmental Conservation Targets 2030	Reduce CO_2 emissions	CO_2 emissions for the Kubota Group in Japan	2014	30% reduction
	Expand Eco-Products	Sales ratio of Eco-Products	—	More than 80%
Medium-Term Environmental Conservation Targets 2025	Reduce CO_2 emissions	CO_2 emissions per unit of production*	2014	25% improvement
		[New] Ratio of renewable energy usage*	—	More than 1%
	Save energy	Energy consumption per unit of production*	2014	18% improvement
	Expand Eco-Products	Sales ratio of Eco-Products	—	More than 70%

* For global production sites

Related pages "Medium- and Long-Term Environmental Conservation Targets and Results" (p.46), "Tackling Climate Change" (p.52), "Environmental Data" (p.93)