

Environment

Global environment conservation is a business issue that is important for preserving the opulence of the planet and ensuring that it is sustainable and can be handed down to future generations. Based on this understanding, our operational activities reflect our consideration of the conservation of the global environment in all business domains.

Management Approaches	16
Climate Change	20
Resource Recycling	25
Environmental Risk Management	27
Thorough Chemical Substance Management	28
Biodiversity Conservation	29
Environmental Performance Data	32



Management Approaches

Basic Mindset

For the Isuzu Group's basic mindset related to the environment, it established and is implementing the goals of pursuing its business activities in all areas with conservation of the global environment in mind, and developing and operating its environmental management system to reduce the burden on the environment in all of its business areas.

Framework

Vision Framework

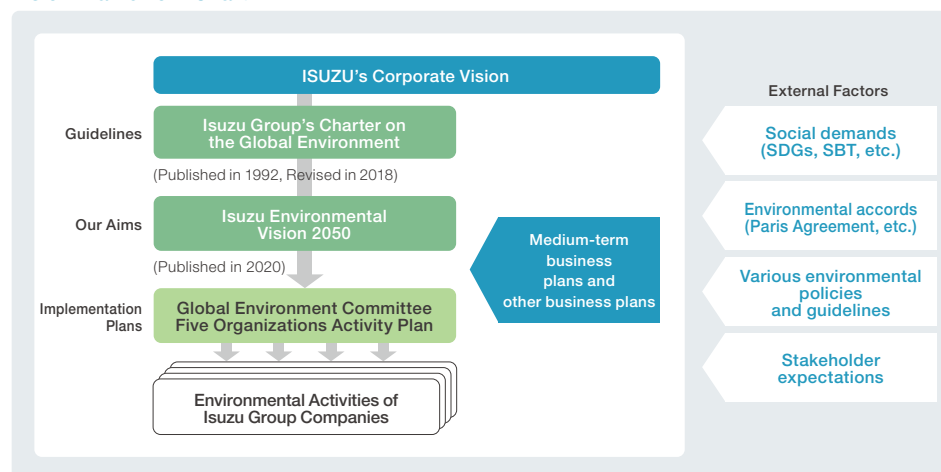
The Isuzu Group regards conserving the global environment and pursuing our business activities in all areas with an environmental awareness as important business challenge. To this end we have established the Isuzu Group's Charter on the Global Environment.

All Isuzu Group members use the Charter as a guideline when engaging in environmental activities. It was first published in 1992, and in line with dramatically changing societal trends and social demands, was revised in 2018.

In addition, in order to realize a sustainable society, and believing it is necessary to clarify the Isuzu Group's environmental aspirations from a longer-term perspective, in March 2020 we published our Isuzu Environmental Vision 2050.

By establishing and operating environmental management systems based on the framework for our Vision, the Isuzu Group will be able to contribute to the reduction of our environmental impact and help build a sustainable society through the promotion of environmental activities in all global business areas.

Vision Framework Chart



Isuzu Group's Charter on the Global Environment

All Isuzu Group members use the Charter as a guideline when pursuing environment activities.

Basic Policy

► Realization of a prosperous and sustainable society

We the members of the Isuzu Group regard it as an important business challenge to preserve the global environment so that our planet remains prosperous and sustainable and can be passed on to future generations. In this regard, we pursue our business activities in all areas with an awareness of environmental conservation.

► Reduced environmental burden for all business operations

The Isuzu Group recognizes our responsibility in supporting transportation, offers enhanced products and services to our global customers through close cooperation with all Group companies, and develops and operates our environmental management system to reduce the environmental burden of all of our business areas.

Action Guidelines

1 Create a sustainable society

We coordinate our business operations and environmental initiatives, thereby offering environmentally-aware, high-value-added products and services to society.

2 Comply with environmental laws and minimize the environmental load

In an effort to minimize the impact on the environment from our business operations, we ensure that we comply with environmental laws and engage in key environmental issues in all of our business areas from development to production, distribution, sales and servicing, addressing climate change, resource recycling, prevention of environmental risks from hazardous substances, environmental measures and conservation of biodiversity.

3 Promote environmental technology

We promote the development of technology to reduce the environmental load applied throughout the product lifecycle.

4 Maintain proactive social communication

We maintain a positive attitude toward the disclosure of product, service, and business activity information on the environment, promoting good communication with members of society and communities, and work toward realizing a prosperous society.

5 Foster environmental awareness as corporate citizen

We engage in perpetual efforts to foster environmental awareness in each Group member as a corporate citizen operating in a local community, encouraging them to learn about and act toward environmental conservation.

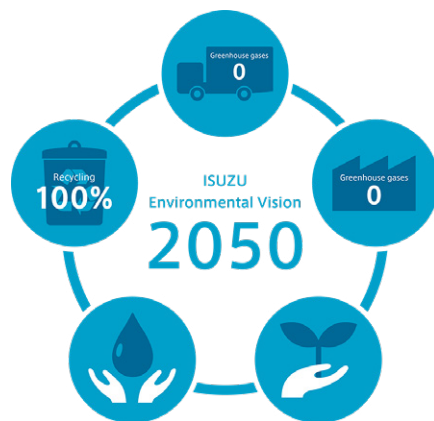
Management Approaches

Isuzu Environmental Vision 2050

Formulating Our Vision

In order for society to be prosperous and sustainable in 2050, and for Isuzu to continue to support transportation, in March 2020 the Isuzu Group published our Isuzu Environmental Vision 2050.

To help ensure a prosperous and sustainable society, each and every member of the Isuzu Group is committed to undergoing the challenge of achieving our Isuzu Environmental Vision 2050 together with our customers and partners.



Strategy Relating to Climate Change

Many different global environmental issues, linked to climate change, are significantly affecting our society and are critical issues that require urgent solutions. This awareness is common worldwide.

Based on this awareness, carbon-neutral strategies are rapidly being introduced in Japan and many other countries. A move toward a decarbonized society is gaining momentum worldwide.

Isuzu considers this as an opportunity for its growth and intensifies its commitment to the issue.

Isuzu performed scenario analysis and specified risks and opportunities on the basis of its long-term environmental scenario up to 2050, based on IPCC's climate scenario and the social economy scenario created by IPCC and IEA.

As a result, we renewed our awareness of the fact that global environmental issues such as climate change gravely affect the Isuzu Group's business activities and its products.

Countering climate change requires the satisfaction of tighter environmental regulations and the development of new technologies. The global climate change also leads to frequent natural disasters that are increasingly severe. They may seriously affect Isuzu's business activities. Meanwhile, the society is increasingly anticipating the creation of an innovation to help achieve a decarbonized society. Addressing the issue properly will lead us to new business opportunities.

To this end, the Isuzu Environmental Vision 2050 regards measures against climate change as one of the priority issues. We also have the Carbon Neutrality Plan for establishing, by 2040, a full lineup compatible with the transition to carbon neutrality, and for expanding the mass production and sales of electric vehicles over our major models in 2030.

Long-term Environmental Scenarios

4°C Scenario

▶ In the 4°C scenario, continued reliance on fossil fuel allows climate change to go unchecked. This entails the aggravation of natural disasters. People and nations scramble for availability of fossil fuel, limited resources. This gives rise to wider gaps and a trend toward anti-globalization, rendering international governance dysfunctional. In the scenario, progression of climate change brings about an undesirable society that is prone to disaster and economically stagnant.

1.5°C Scenario

▶ In the 1.5°C scenario, regulations on GHG emissions are tightened and, because of technological innovation and other factors, the rise in temperature is kept at 1.5 degree C or smaller. This would make the society carbon-neutral. Tighter regulations and advance of technological innovation would greatly change our social and industrial structure.

Isuzu performed a scenario analysis based on IEA's scenario (e.g. 2DS/B2DS/SDS). The 1.5°C scenario would bring significant changes to Isuzu's products depending on their usage, and to our business activities.

▶ Products

● By type of vehicle

- For small commercial vehicles to support short-distance, small-quantity transportation, EVs and other next-generation, power-train vehicles are increasingly developed and offered.
- Electrification and other trends emerge in mid- to large-sized commercial vehicles.
- Internal-combustion engines will continue to play significant roles in mid- and large-sized commercial vehicles which support long-distance, large-quantity transportation.

● Utilization of sustainable, decarbonized clean energy

- We need to develop and market power trains with much greater fuel efficiency and smaller energy loss than conventional ones and the products equipped with such power trains.

▶ Service

- We are currently conducting a demonstration test of automatic driving, platooning and full-trailer trucks, all of which have become popularized.
- More efficient means of transportation become common.

▶ Business Activities

- In production and other business activities, we transition to decarbonized clean energy.
- We thoroughly practice minimization of resource input and efficient use of emissions with an aim to achieve carbon neutrality.

Management Approaches

Risks and Opportunities

Risks brought by climate change are divided into transition risk and physical risks: the former accompanies a transition to a decarbonized society while the latter takes such forms as the aggravation of natural disaster and may exert physical impacts.

Classification	Risks	Opportunities	Action	Impact on our operations
Transition-related Risks and opportunities associated with transition to a decarbonized society	<ul style="list-style-type: none"> Decrease in our market share due to delay in reacting to tighter environmental regulations 	<ul style="list-style-type: none"> Increase in demand for zero-emission vehicles 	<ul style="list-style-type: none"> Advance the efforts to establish a full lineup compatible with the transition to carbon neutrality 	Large
	<ul style="list-style-type: none"> Increase in development and production costs for building compatibility with diverse power trains such as those for EVs and FCVs 	<ul style="list-style-type: none"> Expansion of open innovation Widespread use of reasonably priced clean energy 	<ul style="list-style-type: none"> Utilization of alliance in pursuing efficient, collaborative development Switching to reasonably priced clean energy to achieve low-carbon operations and reduce costs 	Large
	<ul style="list-style-type: none"> Shrinkage of market of internal combustion vehicles using fossil fuel 	—	<ul style="list-style-type: none"> Using next-generation fuel (carbon-neutral fuel) to utilize existing internal-combustion technologies and infrastructure 	Large
	<ul style="list-style-type: none"> Decline in our brand power due to the incapability to address diverse needs of logistics infrastructure 	<ul style="list-style-type: none"> Increase in needs for automatic driving, platooning and full-trailer trucks 	<ul style="list-style-type: none"> Creation of logistics innovation contributing to carbon neutrality through co-creation with customers 	Large
	<ul style="list-style-type: none"> Increase in energy costs and in reputational risks due to delays in the introduction of GHG reduction measures and renewable energy in our business operations overall 	<ul style="list-style-type: none"> Early introduction of renewable energy to reduce costs and boost our corporate image 	<ul style="list-style-type: none"> Expansion of introduction of renewable energy Continued encouragement of energy-saving activities to reduce energy costs 	Moderate
Physical Risks and opportunities concerning phenomena such as the aggravation of natural disasters and depletion of water resources	<ul style="list-style-type: none"> Damage to business operations due to the rising occurrences of abnormal weather (e.g. flood, typhoon) 	<ul style="list-style-type: none"> Increase in demand for disaster-proof vehicles Expansion of needs for infrastructure services resistant to natural disasters 	<ul style="list-style-type: none"> Providing disaster-proof vehicles Repair of flooded vehicles Expansion of BCP to strengthen our corporate culture 	Large

In Pursuit of Our Vision

Isuzu Environmental Vision 2050 is not easy to achieve.

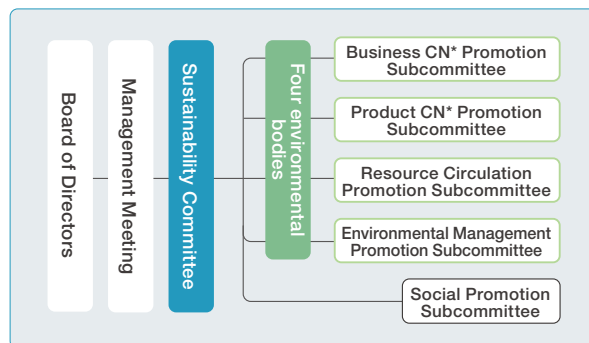
We will gather a variety of wisdom and new technologies and cooperate with customers and business partners to pursue, from the perspective of multi-stakeholder partnership, many different efforts to make our society rich and sustainable.

Management Approaches

Isuzu Group's Structure for Promoting Environmental Activities

The Isuzu Group has established four environmental bodies under the Sustainability Committee to facilitate environmental conservation activities in all of its business operations. These four bodies consist of Isuzu Group affiliate companies operating in environmentally relevant fields. They set and pursue their goals to resolve many different problems and improve their environmental activities. The Sustainability Committee, comprising members of senior management including representative officers from various fields, meets regularly to discuss and make decisions on diverse issues concerning environmental conservation in an effort to solve environmental challenges.

Composition of Sustainability Committee



Role of Four Environmental Bodies

Business CN Promotion Subcommittee	Focusing mainly on production activities, which are the group's main source of CO ₂ emissions, the subcommittee promotes cross-divisional activities to achieve the 2050 carbon neutral goal, aiming to achieve carbon neutrality in the Isuzu Group's business activities.
Product CN Promotion Subcommittee	The subcommittee promotes various activities that contribute to the carbon neutrality of products, including decarbonization technologies and energy, aiming to achieve well-to-wheel carbon neutrality.
Resource Circulation Promotion Subcommittee	The subcommittee promotes waste controls and recycling activities in all Isuzu's business activities including products and services, towards achieving 100% recycling of resources.
Environmental Management Promotion Subcommittee	The subcommittee promotes environmental activities in coordination with group companies, centered mainly on environmental management measures such as ISO 14001 certification acquisition, environmental risk management, and biodiversity preservation.

* CN: Carbon neutral

Contributions to Sustainable Development Goals (SDGs)

For the Isuzu Group to help realize a prosperous and sustainable society, we believe that activities aimed at achieving the Sustainable Development Goals (SDGs) adopted at the UN summit are important. Isuzu will contribute to the achievement of the SDGs through the promotion of environmental activities and taking on the challenge of reducing environmental impacts.



Ensure healthy lives and promote well-being for all at all ages

- Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.



Ensure availability and sustainable management of water and sanitation for all

- Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.
- Target 6.b: Support and strengthen the participation of local communities in improving water and sanitation management.



Ensure access to affordable, reliable, sustainable and modern energy for all

- Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix.
- Target 7.3: By 2030, double the rate of improvement in global energy efficiency.



Ensure sustainable production and consumption patterns

- Target 12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.
- Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.



Take urgent action to mitigate climate change and its impacts

- Target 13.2: Integrate climate change measures into national policies, strategies and planning.
- Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.



Conserve and sustainably use the oceans, seas and marine resources for sustainable development

- Target 14.1: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and eutrophication.



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

- Target 15.2: By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.



Strengthen the means of implementation and revitalize the global partnership for sustainable development

- Target 17.16: Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.
- Target 17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.

Climate Change

Information Disclosure Based on the TCFD Recommendations

Isuzu is committed to the disclosure of climate change-related information in line with the framework recommended by the TCFD. For the specific recommended disclosure items, see the pages indicated below.

	Recommended disclosure item	Page
Governance	a) Explain the system for the organization's board of directors to supervise efforts to address climate-related risks and opportunities.	<ul style="list-style-type: none"> ● Isuzu Group's structure for promoting environmental activities
	b) Explain the roles of management in the evaluation and management of climate-related risks and opportunities.	
Strategy	a) Explain the short-, medium- and long-term climate-related risks and opportunities identified by the organization.	<ul style="list-style-type: none"> ● Strategy relating to climate change ● Long-term Environmental Scenarios ● Risks and opportunities ● Measures to address climate change (products and services) ● Measures to address climate change (operational activities)
	b) Explain the impact of climate-related risks and opportunities on the business, strategic and financial planning of the organization.	
	c) Explain the impact of many different scenarios such as the 2 °C scenario on business, strategic and financial planning.	
Risk Management	a) Explain the process the organization uses to identify and evaluate climate-related risks.	<ul style="list-style-type: none"> ● Isuzu Group's structure for promoting environmental activities ● Long-term Environmental Scenarios
	b) Explain the process the organization uses to manage climate-related risks.	
	c) Explain how the process the organization uses to identify, evaluate and manage climate-related risks is integrated into the organization's general risk management.	
Indicators and Targets	a) Disclose the indicators used to evaluate climate-related risks and opportunities in line with the organization's strategy and risk management processes.	<ul style="list-style-type: none"> ● Environmental performance data ● Operational activities and environmental burden ● Isuzu Green Procurement Guidelines ● Isuzu Environmental Vision 2050
	b) Disclose greenhouse gas (GHG) emissions and related risks in Scope 1, Scope 2 and, if applicable, Scope 3.	
	c) Disclose the goals the organization uses to manage climate-related risks and opportunities and its track record for the achievement of the goals.	

Climate Change

Measures to Address Climate Change (Products and Services)



By 2050, we will aim for zero greenhouse gas emission(GHG) across the entire life-cycle of Isuzu Group products

*Zero GHG emissions: Net zero balance of emissions and carbon sequestration

Efforts to Achieve Carbon Neutrality

Amid the increasing need for measures to slow the progression of global climate change, the achievement of carbon neutrality is the highest-priority social issue. Isuzu is aggressively pursuing carbon neutrality.

The achievement of carbon neutrality, or the net zero balancing of GHG emissions and carbon sequestration, by 2050 requires that Isuzu successfully shift to carbon neutrality by shifting from fossil-fuels to carbon-neutral energy sources to power all of its new vehicles that will be available worldwide before that time. For that purpose, Isuzu is strongly pushing forward with its development of electric cars with a view toward mass production. We are conducting experiments for the introduction of BEVs and FCVs in society in an effort to identify the technologies that will enable us to achieve carbon neutrality. At the same time, we are preparing to introduce some of these products to the market.

We are assuming there will be situations where, for commercial vehicles, internal combustion engines will continue to be necessary. So we will continue to develop high-performance internal combustion engines as we prepare for future carbon-neutral fuels such as biofuels and renewable energy-derived synthetic fuels.

Development and Diffusion of Next-Generations Vehicles

Light Electric Truck

In 2019, we started monitoring the use of the truck in home deliveries, deliveries from convenience stores and waste collection. The truck is being tested in terms of economic rationality and convenience and refined in preparation for the start of mass production in FY2022.



Heavy-duty Fuel Cell Truck

Collaborative development with Honda R&D Co., Ltd. began in 2020. The truck is being developed and will begin monitoring program in FY2022.



Light Hybrid Truck

Efforts to introduce Elf HEVs to the market are continuing. Combined with the most advanced diesel engine, the Elf HEV meets the 2016 exhaust gas regulations and achieves fuel efficiency 15% over the fuel efficiency standards established in 2015.



CJPT (Commercial Japan Partnership Technologies) established

In March 2021, Isuzu announced that it was collaborating with Hino and Toyota in commercial operations, including in the development of EVs and FCVs.

 https://www.isuzu.co.jp/world/company/investor/financial/results/assets/pdf/carbon_neutral_e.pdf

 <https://www.isuzu.co.jp/world/company/investor/financial/results/assets/pdf/all.pdf>

Climate Change

Working Towards Next-Generation Fuels

Recognizing that carbon neutrality is the highest-priority social issue, Isuzu is accelerating its efforts to solve many problems in pursuit of a carbon-neutral society. We are actively working in Japan and overseas to commercialize many different technologies to domestically and internationally facilitate the shift to carbon neutrality. In particular, the electrification of automobiles is important. It is our highest-priority issue. Concurrently, the utilization of carbon-neutral (CN) fuels and other next-generation fuels in automobiles should also be addressed at the same level as electrification.

CN fuels are next-generation fuels made from hydrogen refined from renewable energy sources, and from carbon dioxide captured from the atmosphere or emitted from sources such as factories. In the process synthesizing CN fuels, they are refined using renewable energy. Government-led efforts to introduce CN fuels in society began as an important means of facilitating the shift to carbon neutrality. Society can expect the following benefits from the successful introduction of these next-generation fuels.

- ▶ Utilization of existing internal-combustion engine technologies
- ▶ Immediate contribution to the achievement of carbon neutrality as soon as it begins to be supplied (utilization in already available vehicles)
- ▶ Utilization of existing fuel supply infrastructure such as existing fuel stations

In preparation for the introduction of next-generation fuels in society, we will strongly push forward with our activities to accelerate the practical use and the spread of next-generation vehicles, including assessment and improvement of conformity and demonstration testing of vehicles in terms of performance, durability, reliability and other properties. Further, we will actively work with next-generation fuel manufacturers to identify issues and propose improvements regarding fuel quality and other matters.

Commercial vehicles serving people and their logistics needs, the products that Isuzu manufactures, are available in many different types and are used in many different situations and environments. Some of these vehicles may be hard to electrify. The utilization of CN fuel in these vehicles can accelerate the shift to carbon neutrality. Commercial vehicles are global products that are sold worldwide. Depending on national or regional situations, however, it may be difficult to switch to electric vehicles. In these situations, the use of already available vehicles will continue. In these countries and regions, the availability of CN fuels with the potential to leverage the existing fuel-supply infrastructure would effectively facilitate carbon neutrality.

This led Isuzu to set up a department in April 2021 to advance and accelerate the utilization of next-generation fuels and to push forward with the extensive activities above. In pursuit of a globally carbon-neutral society, Isuzu will encourage the use of next-generation fuels and will continue to support transportation.

Streamlining Physical Distribution Flow

Streamlining logistics will involve the use of connected technology, automated vehicle platooning, and other technologies.

To date, Isuzu has aggressively participated in the government's truck platooning research program, under the belief that the streamlining of logistics would create solutions to social issues like the shortage of commercial truck drivers and the reform of drivers' work styles.

To meet the government's goal of commercializing semi-automated truck platoons by FY2021, we have developed a system combining Adaptive Cruise Control (ACC) and a Lane Keeping Assist System (LKAS).



Giga, an experimental heavy-duty truck

Climate Change

Measures Against Climate Change (Business Activities)



Aiming for zero direct greenhouse gas (GHG)* emissions from Isuzu Group business activities by 2050.

*GHG emitted directly from business activities: Scope1+Scope2

Use Less Energy

We will continue to implement energy conservation initiatives throughout our business activities and continue with our activities to reduce energy consumption by streamlining processes, reviewing and optimizing operational methods and visualizing the energy consumption at all of the Group companies.

We are producing substantial results throughout the Isuzu Group through our review of our conventional ways of using energy to identify more opportunities to conserve energy and deploying these solutions across our companies.

Efforts to Increase the Environmental Friendliness of Our Distributors' Sites

Isuzu is trying to increase the environmental friendliness of its sites through proactive efforts such as the installation of LED lighting and skylights and the introduction of reusable energy systems when renovating or building new sales bases. Our newly built sites employ an effluent treatment system using microorganisms to prevent environmental pollution which may result from the wastewater generated during vehicle maintenance or washing. We are promoting the transition to water treatment facilities that are more environmentally conscious than the existing ones.

Example of new environmentally friendly facility



Niigata Isuzu Motors Ltd. Nagaoka Branch

Creating Clean Energy

To create clean energy through the active utilization of renewable resources, Isuzu Group's companies in Thailand are installing large photovoltaic power generation systems. Since FY2018, Isuzu Motors Company (Thailand) Limited (IMCT) and Isuzu Engine Manufacturing Co., (Thailand) Ltd. (IEMT) have installed solar panel systems with a total output of 2,750 kW.

Other Group companies in Thailand are also planning to introduce energy-saving equipment and photovoltaic power generation systems.



Isuzu Engine Manufacturing Co., (Thailand) (IEMT)

Switching to Clean Energy

We will switch to clean energy derived from renewable sources. Since FY2019 at both our Fujisawa and Tochigi Plants, Isuzu has utilized the Aqua Premium rate plan offered by TEPCO Energy Partner, Inc. where a portion of the electricity purchased is hydroelectric power. Through this plan TEPCO Energy Partner, Inc. sells the CO₂-emission-free electricity that it generates hydroelectrically, offering an option for customers who want a portion of the electricity they purchase to be carbon-free.

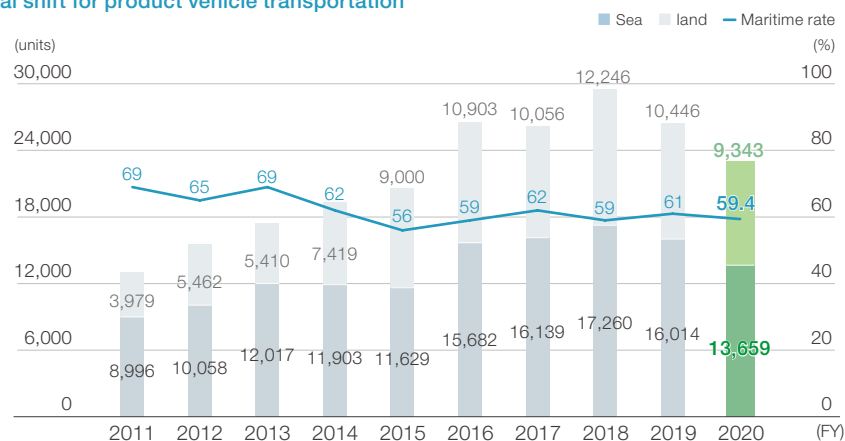
Through this initiative, approximately 20 million kWh of both plants' annual electricity demand in FY2020 was from renewable hydroelectric sources. We are planning to continuously expand our use of clean energy.

Climate Change

Reducing CO₂ Emissions in Logistics Processes

Isuzu is reducing the CO₂ emissions in its logistics processes at the target rate of 1% per year by reviewing the routes it uses to transport parts, promoting fuel-efficient driving during transportation, and adding more shipping routes to increase marine transportation (modal shift).

Modal shift for product vehicle transportation



Main Initiatives for the Reduction of CO₂ Emissions

- ▶ Improved transportation efficiency as a consequence of efforts such as the thorough implementation of load-based truck transport management
- ▶ Increased use of returnable racks that can be folded during return
- ▶ Increased trailer transportation and increased container fill rates

In 2020, a new parts center was added next to the Tochigi Plant, centralizing all of the warehouses that had been scattered around the surrounding area. This centralized transportation between warehouses and improved logistics efficiency. Further, an elevated bridge was installed between two existing parts center warehouses enabling truck transportation to be replaced by automated tractors, which further reduced CO₂ emissions.

Increasing "Container Round Use"

Isuzu works on the Container Round Use (CRU) system which diverts empty import containers to be used as export containers. The increase of CRU eliminates the need to transport empty containers, which reduces the CO₂ emissions from transportation and can also ensure the availability of containers. This helps to stabilize logistics.

Organizing of Green Sales Activities in Japan

Isuzu distributors are doing all they can for the environment in every aspect of their business activities. They are continuously working to implement all possible environmental activities, including the selection of hybrid vehicles and other environmentally friendly vehicles for use as company cars, implementing Cool Biz and Warm Biz campaigns, and taking part in local area cleanup activities.

Holding Fuel Efficient and Safe Driving Seminars

Considering the life cycle of Isuzu products, the majority of CO₂ emissions comes from product (vehicle) use. The Isuzu Group has been holding seminars on fuel-efficient and safe driving in Japan and overseas since 1995, to provide Isuzu vehicles' buyers with tips on fuel-efficient driving in accordance with the performance of their vehicles.



Safe and fuel-efficient driving practice

Seminar participation over the past 3 years

Fiscal year	Courses	Number of participants
FY2020	54	884
FY2019	115	1,535
FY2018	116	1,552

FY2020 Energy-Saving Award

The Isuzu Group Energy-Saving & 3R Awards were initiated in FY2013 for the production-related companies of the Group. Entries detailing energy saving practices are collected from within the Isuzu Group, mainly within its production division, and the best ones receive awards. The entries are shared throughout the Isuzu Group so that they can be horizontally applied across the Group. The goal of the awards is to increase the momentum of the Group's environmental activities.

In FY2020, the Energy-Saving Award was not awarded.

Resource Recycling



We aim for a 100% recycling rate of waste and scrap vehicles produced by the Isuzu Group's business activities by 2050.

Promote Effective Resource Use

Reduced Packaging Materials

We make efforts as a Group toward reducing the amount of materials used through proper management and promoting shifts to returnable items as well as material recycling.

The Group as a whole is in the process of reviewing packaging methods to reduce packaging materials, and in FY2017 we began using the returnable racks that have become the global standard. This is gradually expanding from the ASEAN region and is being promoted worldwide in regions including India and Africa.



Returnable rack

Promoting Rebuilding

We promote the rebuilding of used engines and parts to more effectively use the limited resources that we have. In the rebuilding of engines, used engines are disassembled, the parts are cleaned and inspected and worn parts are replaced with new ones before re-assembly. The Isuzu Group provides customers with genuine Isuzu E-PARTS that have been refurbished to meet the same inspection criteria that new parts straight off the production line must meet. This enables people to use products that are more eco-friendly that have the same high quality.



Rebuilding an engine



Promoting Recycling

The Isuzu Group promotes recycling of the waste generated through its business operations through meticulous sorting on a daily basis and pursues activities to reduce and mitigate the generation of discharge, including by sorting out valuables from the discharge.

Domestically, we also recycle used-cars pursuant to Japan's Act on Recycling, etc. of End-of-Life Vehicles, as well as three designated items (ASR, air bags, and chlorofluorocarbon).

Resource Recycling

FY2020 3R Award

The Isuzu Group Energy-Saving & 3R Awards were initiated in FY2013 for the production-related companies of the Group. Entries detailing 3R practices improvement are collected from within the Isuzu Group, mainly from its production divisions, and the best entries receive awards. The details of the entries are shared and applied throughout the Isuzu Group. Through these awards, the Isuzu Group increases the momentum of its environmental activities for the future.

Using Rainwater to Reduce Consumption of Industrial Water (Isuzu Motors Limited)

Much of the equipment deployed in Isuzu's production divisions uses large quantities of industrial water. Many devices have water tanks storing 3,000 to 5,000 liters of water that is regularly replaced. A lot of water is also used to clean the floors within the plants every day. Water is a limited resource and using water requires the use of both energy and chemicals. Knowing this, we thought about using rainwater as a substitute in areas where it would not affect product quality.

To that point, rainwater had drained from the plant's roof through its gutters before being discharged. We devised a system to efficiently collect rainwater and installed it under the gutters on a trial basis. As a result, about 6,000 liters of rainwater were collected in a three-month period and were used to clean floors and other surfaces. The collected 6,000 liters of rainwater is equivalent to about 5 of the industrial water that the department using the rainwater collection system uses in the plant.

We were surprised at the large volume of rainwater collected. At the same time, we proved that adding more rainwater collection systems would reduce industrial water consumption.

The rainwater collection systems use versatile parts and are structured in way that is simple, low-cost, and maintenance-free, enabling them to be easily installed at Isuzu Group plants in Japan and overseas.

Enabling all of the Isuzu Group companies around the world to use rainwater in this way could lead to a significant reduction of resource consumption. In the past, we unconsciously let rainwater drain away. By beginning to see it as a valuable resource, we have discovered that it has great potential.



Awardees

Environmental Risk Management



We strive for safe and secure operations and products throughout the Isuzu Group's value chain.

Effective utilization of water resources

Isuzu's business activities entail the consumption of a large quantity of water in vehicle manufacturing, plant maintenance, effluent treatment and many other situations. Isuzu endeavors to conserve these finite water resources by, for example, encouraging the reuse of treated wastewater and the water used in processes and efforts to consume less water.

Understanding and Responding to Water Related Risks

In recent years, climate change is increasing concern about the ability to secure water resources and about water-related risks such as flooding. In light of this, Isuzu began surveying water-related risks in FY2015 using Aqueduct, a global water risk evaluation tool. The survey showed that Isuzu faced no problems requiring urgent action in its use of groundwater or clean tap water. However, we also identified risks dependent on geographic and other conditions that could affect plant operations and supply chains in the event of torrential rains or extreme weather. In response to these findings, we are pushing forward with activities to reduce water resource consumption and to mitigate water-related risks in view of the risks faced in plant and business operations.

Building a Society Free of Water Stress

The Isuzu Group contributes to building a society free of water stress, where all people can have access to safe water without concern.

Isuzu Gives Water...for Life

Since 2013, 21 Isuzu Group companies in Thailand have been participating in the Isuzu Gives Water...for Life project. As of March 2021, the project has held 38 events. The goals of the project are to install water treatment systems and provide access to drinkable water at schools that are dealing with polluted water in outlying areas of Thailand. Through the project, teachers and students learn how to manage and maintain the system so they are able to sustainably secure access to drinking water. This program is a collaboration with Thailand's Department of Groundwater Resources and regional authorities.

The COVID-19 pandemic has threatened the continuation of the project, but the enthusiasm of the people involved and the representatives from the Isuzu Group has enabled the resumption of the project, starting with the efforts that are possible. We will continue to actively participate in these activities to pursue the achievement of the SDGs and the ideals that the Isuzu Group believes deeply in.



With the schoolchildren

Thorough Chemical Substance Management

We take thorough measures to minimize the environmental risks associated with chemical substances used in our business activities and products.

Managing Chemical Substances and Promoting Alternatives

Paints, component materials and other chemicals used in-house are carefully examined before they are adopted to ensure the safety of employees, reduce environmental risk and determine their suitability for use. We maintain a database of these materials. We use this data to make PRTR (Pollutant Release and Transfer Register) notifications and also encourage Isuzu Group companies to switch to substances with less environmental impact and review manufacturing processes to reduce the use of chemical substances. No chemical spills were reported in FY2020.

For chemicals contained in our products, from the design and development stages, we exercise great care when evaluating the chemicals contained in components and take action to meet the chemical substance regulations in the countries they will be used. Chemical substance regulations are tightening, and to address them we are utilizing the International Material Data System (IMDS). The IMDS is the automotive industry standard, a global system for the communication of data regarding the chemicals contained in products, to ensure that the chemicals contained in our products are controlled based on the data obtained from our business partners and to reduce the use of regulated chemicals.

Activities to Control Emission of Ozone Depleting Substances

Isuzu promotes activities aimed at controlling the emission of ozone depleting substances by reinforcing the inspection of facilities using CFCs and installing non-CFC equipment during facility upgrades.

Together with Our Stakeholders

We request that our business partners submit Environmental Management Self-Evaluation Reports which also include chemicals management data. We talk with our business partners to confirm the status of their chemicals management systems and exchange related information. In this way, we strive to improve chemicals management throughout our supply chain.

Biodiversity Conservation



Based in the areas around the Isuzu Group companies' locations, we collaborate with NGOs and other stakeholders in preserving the biodiversity inherent in the local communities.

In FY2018, Isuzu formulated an Isuzu Group Policy on Biodiversity while referring to materials such as the Ministry of the Environment's Guidelines for Private Sector Engagement in Biodiversity and the Keidanren Declaration of Biodiversity. Based on this policy, the offices of each company within the Group conducts activities to help protect their unique regional natural environments and promote the conservation of biodiversity.

Since January 2020, we have endorsed the Keidanren Declaration of Biodiversity and have renewed our determination to work to conserve biodiversity through our business activities.

Isuzu Group Policy on Biodiversity

Basic Vision

- ▶ We, the Isuzu Group, understand the relationship all of our business activities have with the ecosystem. We support action that helps achieve a sustainable society through a harmony of business activities and biodiversity.

Action Guidelines

- ▶ Each employee learns and has an understanding that our business activities are enabled by biodiversity and, at the same time, are affecting it.
- ▶ We engage in activities that reduce our impact on biodiversity and protect it in all of our business activities.
- ▶ We protect biodiversity from a global perspective, taking into account the diversity of local communities.
- ▶ We promote cooperation and collaboration with our stakeholders in order to improve our conservation activities.
- ▶ We contribute to local communities, placing valuing on communication and cooperation with stakeholders through disclosing information on activities and other initiatives.

Promoting Biodiversity Conservation Efforts

We strive to conserve biodiversity around our business sites so that the sites work in harmony with the natural environment.

Isuzu conducted expert-led biodiversity surveys on the sites of its Fujisawa and Tochigi Plants.

The results revealed that the forests were poorly cared for at both sites, which negatively impacted their function as habitats for local species. Consequently, the ecosystem was losing its equilibrium while invasive species were thriving.

In response to these results, volunteer employees began working on site maintenance in FY2016. Since then, efforts have continued to develop the areas for native species to thrive, and to restore the healthy forest environment.

A recent investigation has found that these efforts have helped to reduce invasive species at the sites and that the ecosystem is gradually regaining its equilibrium.

We will continue these initiatives in the future, leveraging expert opinions to restore the ecosystem to its natural state and even enrich it. In this way we will maintain an environment for Isuzu to continue its operations as it has always been.



Fujisawa Plant: Maintaining the site's forest (Left: Before, Right: After)



Tochigi Plant: Maintaining the site's greenery area (Left: Before, Right: During maintenance)

Biodiversity Conservation

Promoting Efforts to Protect Local Ecosystems

We promote efforts to protect regional ecosystems in local communities where we conduct business, working to conserve them along with their biodiversity. In addition, by encouraging these activities across the entire Isuzu Group, we will remain committed to protecting global biodiversity.

Watarase Reservoir Conservation Activities

Since 2016, Isuzu has been involved in conservation activities at the Watarase Reservoir near its Tochigi Plant. The Watarase Reservoir is the largest reservoir in Japan and has an important role in preventing flood damage in the area. Registered under the Ramsar Convention on Wetlands, the reservoir is inhabited by an abundance of flora and fauna, including endangered species. The biodiversity needs to be properly taken care of by humans in order to keep it enriched for future generations. Based on this understanding, volunteers from the Tochigi Plant continue activities such as cutting reeds, removing invasive species, and collecting garbage every year. The efforts have involved neighboring companies of the Isuzu Group. Eleven staff members from three companies participated in the Watarase Reservoir Invasive Plant Removal Activity sponsored by Tochigi City in October 2020 to help eliminate non-native species from the expansive reservoir area.



Participants in the invasive species removal activity

Participating in Activities to Develop Forests That Supply Water in Kanagawa Prefecture

Since FY2018, the Isuzu Fujisawa Plant has been participating in Kanagawa Prefecture's Forest Restoration Partner project. To protect the woodlands that are the source of the groundwater used by the plant, we continue with the work of preserving the Yadoriki Water Source Forest in Ashigarakami District.

Group companies at the Fujisawa Plant have also taken part in the effort starting in FY2019, with 64 employees and their families representing four companies participating in the conservation activities held in June and September 2019. While being reminded of the importance of biodiversity and preserving the forests that act as water sources, participants observed nature and helped thin neglected forest, helping return it to its natural state.

The activity was not held in FY2020 due to COVID-19.



Thinning the forest

Promoting Sustainable Procurement

In sourcing raw materials, we take into account sustainability and the conservation of biodiversity. Isuzu has established the Isuzu Green Procurement Guidelines to promote environmental conservation activities in collaboration with our business partners. We ask them to engage in environmental conservation activities through annual production briefings and individual briefings.

Our production briefings in FY2020 took place in June and November (biannual). To prevent the spread of COVID-19, they took the form of distribution of handouts which explained topics such as our activity plan for the business period, results of evaluation of business partners' efforts based on the Environmental Management Self-Evaluation Report in the first half and requests on the creation of the report.

Developing Human Resources to Build a Society in Harmony with Nature

The Isuzu Group pursues good environment-related communication with its various stakeholders, including its customers, business partners, the surrounding community, shareholders, investors and employees. To this end, we participate in environmental activities in the local communities around where we operate and release many environmental data.

Enhancing its environment-related communication, the Isuzu Group endeavors to obtain more understanding about its environmental activities in pursuit of continued improvements. By proactively sharing information within the Group, we develop human resources that will help build a society in harmony with nature.

Training Employees

Isuzu has been providing all employees with common educational programs on the environment since FY2016.

This environmental education initiative, covering all Isuzu employees, is held once every three years. It raises awareness of environmental issues among employees and promotes a better understanding of the company's environmental activities. The program combines e-learning and group training, reducing the CO₂ emissions generated by the transportation needs of participating employees.

Similarly, the introductory training programs for new and mid-career recruits includes this environmental education, where they learn the reasons behind Isuzu's environmental initiatives and consider what they should do as Isuzu employees.

We also provide training regarding environmental laws and regulations as well as internal environmental auditor training to deepen employees' understanding and make them more competent.

Biodiversity Conservation

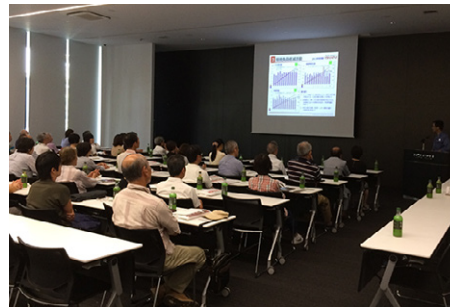
Presenting Our Environmental Initiatives to Members of the Local Community

Every year, the Isuzu Fujisawa Plant invites key members of local residents' associations from six neighboring areas. The visitors receive an explanation about the environmental initiatives of Isuzu and the Fujisawa Plant and take part in a tour of the assembly lines.

This annual event is a valuable opportunity to promote a better understanding of Isuzu's environmental initiatives and what we actually do for the cause, among people in the local community to whom we usually owe so much.

In October 2019, 46 local residents visited the plant and gave favorable responses, saying that the tour helped deepen their understanding about Isuzu's efforts. It serves as an important opportunity to improve communication with local people.

The annual plant tour was not held in FY2020 due to COVID-19.



A presentation on our environmental conservation activities

Environmental Performance Data

FY2020 Activity Results (Isuzu Group)

CO₂ Emissions Mitigation Activities

Medium- and long-term target:

[Japan] Bring total CO₂ emissions down to 460,846 tons-CO₂ or lower by FY2020

[Overseas] Each company pursues its own initiatives

FY2020 results:

[Japan] Total CO₂ emissions: 409,227 tons-CO₂

We actively pursue mitigation of CO₂ emissions both in Japan and overseas, consistently meeting our targets. In FY2017, production-related companies of the Isuzu Group in Japan changed their target index to absolute volume, which is more suitable for showing the results of CO₂ reduction measures. In the first half of FY2020, energy consumption by the Isuzu Group overall decreased significantly given factors such as a shutdown of operations to prevent the spread of COVID-19. As our production recovered in the second half, the total CO₂ emissions from the production-related companies of the Isuzu Group in Japan were down approximately 9% compared to FY2019 and we achieved the target. We will continue our efforts to achieve our target by streamlining facility operations, selecting energy-efficient models whenever we introduce new facilities and consistently striving to reduce energy consumption.

Waste Reduction Activities

Medium- and long-term target:

[Japan] Bring total waste down to 81,684 tons or less by FY2020

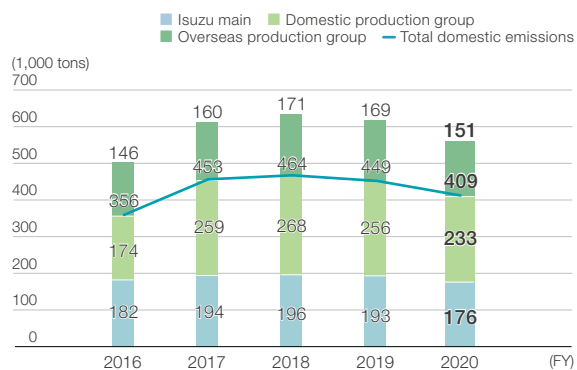
[Overseas] Each company pursues its own initiatives

FY2020 results:

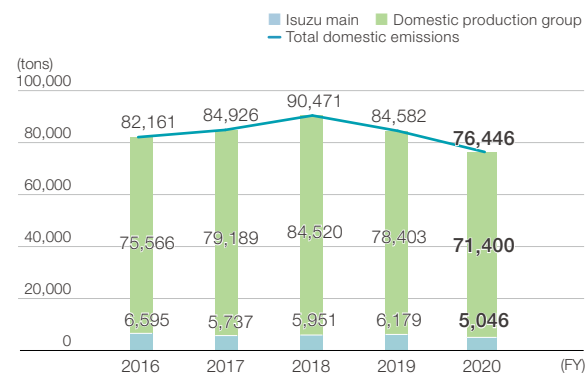
[Japan] Total waste generated: 76,446 tons

In FY2017, production-related companies of the Isuzu Group in Japan changed their target index to absolute volume, which is more suitable for illustrating the results of waste reduction measures. In the first half of FY2020, waste generation from our production activities significantly decreased given factors such as a shutdown of operations to prevent the spread of COVID-19. As our production recovered in the second half, waste generation from production-related companies of the Isuzu Group in Japan decreased approximately 10% compared to FY2019 and we achieved the target. We will step up our efforts to encourage recycling and review production methods for reducing waste generation in an effort to meet the targets.

[Japan & Overseas] Trends in CO₂ Emissions



[Japan] Trends in Waste Generation



Environmental Performance Data

FY2020 Activity Results (Isuzu)

Isuzu's Environmental Management Systems

In the past, Isuzu operated its environmental management systems on a site-by-site basis. With the revision of ISO 14001 in FY2015, the systems were integrated on a group-wide basis. In December 2016, we expanded ISO 14001 certification to all Isuzu sites, and shifted to ISO 14001:2015.

At present, Isuzu is carrying out uniform environmental initiatives at all sites. Moreover, all companies of the Group work together to reduce the environmental burdens resulting from our business operations and to bolster our environmental management.

All Isuzu Group companies with ISO 14001 certification have also finished updating their certification to the 2015 versions.

Violations and Accidents related to Environmental Laws and Regulations in FY2020

Isuzu had no violations or environmental accidents related to environmental laws and regulations during FY2020.

Initiatives to Control Chlorofluorocarbon Emissions

In response to the Act for Control of Chlorofluorocarbon Emissions (Act on Rational Use and Proper Management of Fluorocarbons) effective from April 2015, Isuzu is promoting proper refrigerant management for business-use refrigeration air conditioning equipment and other equipment using chlorofluorocarbons at all of its bases, and is implementing inspections of all such equipment.

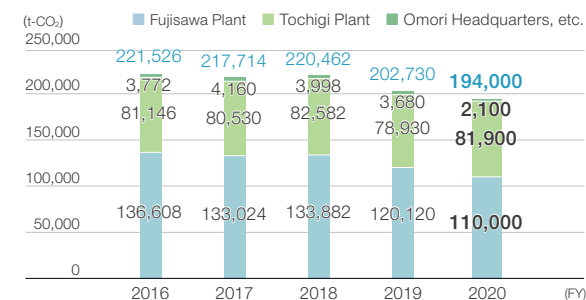
While this act requires business operators to report if their estimated leakage of chlorofluorocarbon exceeds 1,000 tons-CO₂/year, Isuzu has verified that its leakage volume for FY2019 was lower than this level.

CO₂ Emissions Mitigation Activities

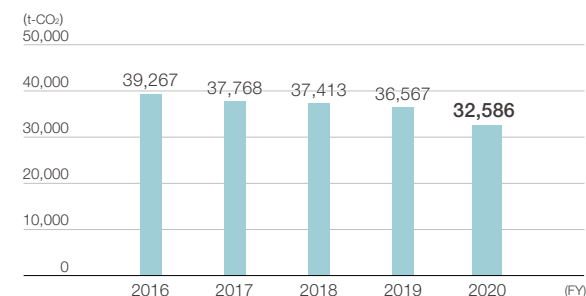
In efforts to reduce the energy consumption and mitigate total CO₂ emissions, both the Fujisawa and Tochigi Plants have put in place measures to enhance efficiency, such as reviewing the production conditions and streamlining production lines.

By promoting a modal shift in the distribution of parts and products and having all affiliate companies engaged in logistics work to improve transportation efficiency, we are striving to reduce our CO₂ emissions.

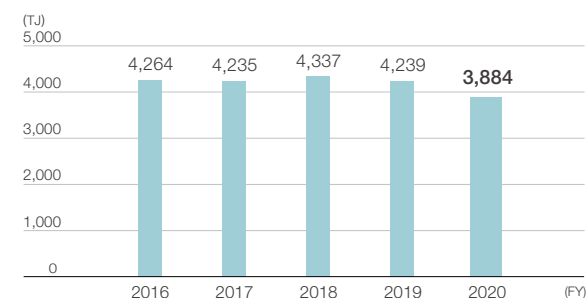
Trends in CO₂ Emissions from Energy



Trends in CO₂ Emissions from Logistics



Trends in Energy Consumption



Environmental Performance Data

Enhancement of Environmental Information Disclosure

Replies to CDP2020

With an aim of properly disclosing its measures on climate change, Isuzu has provided information since FY2016 to the CDP, an organization that evaluates corporate efforts related to climate change.

Isuzu received the highest score, A, in CDP2020 and, for the first time, has been included in the A list of companies fighting climate change. To our understanding, Isuzu was included in the A list because of its pursuit of CO₂ reduction throughout the product lifecycle from production to disposal. Based on this, in 2020 Isuzu was named to the Supplier Engagement Leaderboard, the highest rating in the CDP's Supplier Engagement Rating.

In addition to climate change, we also started taking initiatives on water security and forest management in FY2017 and FY2018, respectively. We extensively disclose our environmental management activities.

Third-party Audits of Environmental Data

As demand for transparency and reliability in environmental information grows, Isuzu has been conducting third-party audits of its environmental data since FY2017. The audits are performed in compliance with ISO 14064-3 for CO₂ and with ISAE 3000 for waste and water resources. We have completed verification for both. We will remain aware of the importance of environmental data and will disclose such data in a reliable manner.

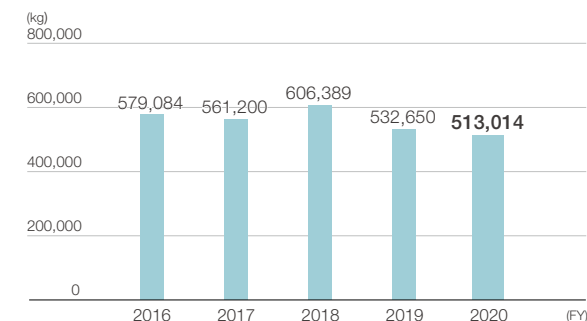
Participation in Project for Arrangement of Infrastructure for Environmental Information Disclosure

Since FY2016, Isuzu has been participating in the Ministry of the Environment's Project for the Arrangement of Infrastructure for Environmental Information Disclosure with the aim of promoting dialogues with investors and other stakeholders. We publish our environmental information on the project's portal site. Participating in this project has enabled us to have more frequent individual dialogues with investors and other entities, helping us to promote our environmental initiatives.

VOC Emission Reduction Activities

Isuzu is reducing emissions through the recovery of volatile organic compounds (VOC), has reduced VOC emissions from its plants and reviewed and improved its painting processes, which entail particularly large VOC emissions.

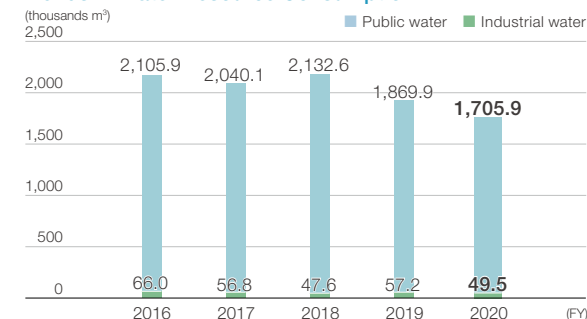
Trend in Total VOC Emissions



Water Consumption Reduction Activities

As the processes of vehicle manufacturing, plant maintenance, and effluent treatment consume a large volume of water, Isuzu engages in efforts to conserve these finite water resources, such as encouraging the reuse of treated wastewater and water used in processes and reducing the consumption of water.

Trends in Water Resource Consumption



* Excluding Omori Headquarters

Managing Land Contamination

To prevent health hazards resulting from land contamination, Isuzu surveys land contamination conditions based on the Soil Contamination Countermeasures Act and ordinances whenever it performs construction of a certain scale or constructs a new building.

In FY2020, lead in excess of the standard value was detected in the soil when maintenance construction of existing buildings was commenced in the Fujisawa area in Kanagawa. We undertook procedures for conducting soil clean-up work in compliance with the law. Under the government's supervision, the soil clean-up work will be commenced in FY2021.

► Lead content: 650 mg/kg (legal standard: 150 mg/kg) *No groundwater pollution detected

Isuzu will continue efforts to unfailingly investigate pollution in its construction projects and will take appropriate measures where necessary.

Environmental Performance Data

Proper Management of Emissions and Wastewater

By properly maintaining boilers and other smoke-generating facilities, we ensure that the amount of air pollutants from emissions such as NOx (nitrogen oxides) and SOx (sulfur oxides) is within regulatory standard values*.

Further, wastewater from our factories is processed in a wastewater treatment facility before being discharged to sewer systems or public water areas. The discharged water is analyzed on a regular basis to ensure that it is within regulatory standard values.

* Regulatory standard values are determined in accordance with laws or ordinances, whichever is stricter.

Fujisawa Plant: 8 Tsuchidana, Fujisawa City, Kanagawa Prefecture

[Air]

Item	Equipment	Regulation Value	Measured Value	
			Maximum	Average
NOx(ppm)	Boilers	60	26	21.8
	Metal melting furnaces	180	66	34.2
	Paint baking furnaces	230	121	105.5
Soot and dust g/Nm ³	Boilers	0.3	0.005	0.005
	Metal melting furnaces	0.2	0.006	0.003
	Paint baking furnaces	0.2	0.002	0.002

* Since all facilities producing soot and smoke use city gas as their fuel, SOx is excluded from the scope of measurement.

[Water Quality] Discharge Destination: Hikiji River

Item	Regulation Value	Maximum	Minimum	Average
pH	5.8-8.6	8.0	7.2	7.8
COD(mg/L)	60	36.0	4.1	19.1
BOD(mg/L)	60	26.0	2.8	10.0
SS(mg/L)	90	10.0	2.0	5.1
Oil content(mg/L)	5	3.0	1.0	1.3

Tochigi Plant: 2691 Hakuchu, Ohira-Machi, Tochigi City, Tochigi Prefecture

[Air]

Item	Equipment	Regulation Value	Measured Value	
			Maximum	Average
NOx (ppm)	Boilers	150	53	24
	Metal melting furnaces	180	110	62
	Gas engines	600	191	191
SOx (Nm ³ /h)	Total volume regulation	14.5	0.6	0.3
Soot and dust g/Nm ³	Boilers	0.1	0.001	0.001
	Metal melting furnaces	0.2	0.004	0.001
	Gas engines	0.05	0.001	0.001

[Water Quality] Discharge Destination: Nagano River

Item	Regulation Value	Maximum	Minimum	Average
pH	5.8-8.6	7.5	7.1	7.3
BOD(mg/L)	20	14.3	1.1	2.8
SS(mg/L)	40	6.8	1.2	1.4
Oil content(mg/L)	5	0.0	0.0	0.0

* The COD is excluded from the scope of measurement since plant wastewater is discharged into rivers.

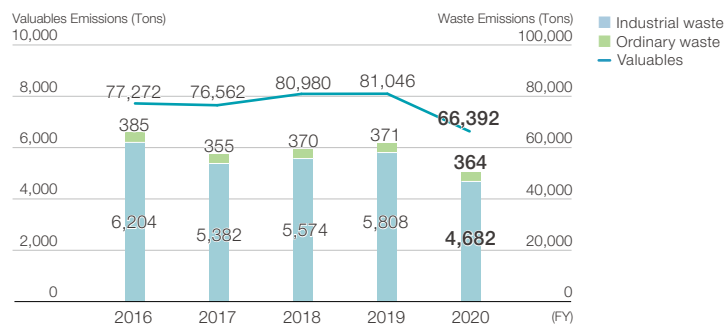
Environmental Performance Data

Waste Minimization Activities

Trends in Waste Production

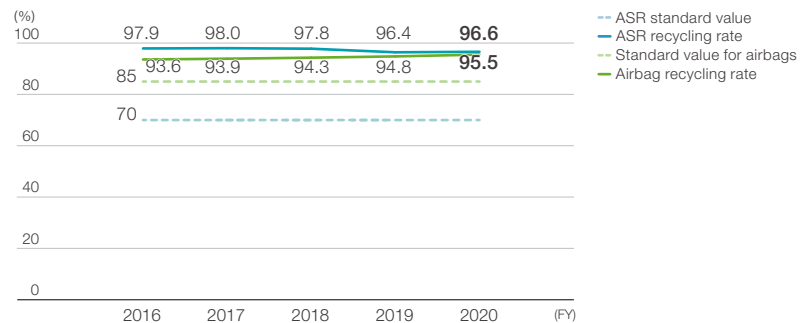
In addition to encouraging the effective use of waste generated from its business operations, Isuzu takes step to reduce and mitigate waste which includes valuable waste.

* Isuzu has already achieved zero emissions, with no landfill disposal since 2011.



* Excluding Omori Headquarters

Trends in Recycling Performance Based on Automobile Recycling



Recycling Isuzu Vehicles (Japanese only)

https://www.isuzu.co.jp/company/sustainability/recycle_info.html



Initiatives Related to the Automobile Recycling Law (Japanese only)

<https://www.isuzu.co.jp/company/sustainability/recycle.html>

Environmental Performance Data

Environmental Accounting

To conduct environmental activities efficiently and continuously, Isuzu has calculated the costs and effects of environmental conservation.

We have disclosed information with the aim of helping to make management decisions for carrying out efficient investments in environmental activities, and as an evaluation index for businesses as well.

Environmental Conservation Costs (Target Period: April 1, 2019 to March 31, 2020)

Total investment was 1,235 billion yen, a 5,393 billion yen decrease YOY.

Total expenses were 43,586 billion yen, a 4,051 billion yen decrease YOY. Details are shown in the table below.

(Unit: 1 million yen)

		Investment	Expenses	Major activities
Business area costs	Pollution prevention costs	0	110	Prevention of air, water and other kinds of pollution
	Global environmental conservation costs	4	610	Implementing energy-saving activities, climate change measures, etc.
	Resource recycling costs	7	488	Proper disposal of waste, development and improvement of waste disposal sites, etc.
Upstream/downstream costs		0	3,796	Encouraging the recycling of used automobiles, 3Rs for waste, etc.
Management costs		0	315	Promoting environmental management, updating systems for gathering information such as environmental data, etc.
R&D costs		1,224	38,223	R&D for eco-friendly products compliant with emissions regulations, etc.
Social activity costs		0	28	Supporting environmental conservation activities such as tree planting, donating to environmental conservation organizations, etc.
Environmental damage costs		0	16	Pollution load levy, conservation measures against soil and groundwater pollution, etc.
Total		1,235	43,586	

Environmental Conservation Effects(Period: April 1, 2020 to March 31, 2021)

Category	Effect details	Effect
Economic effect (millions of yen)	Reduction in energy costs through energy conservation	10
	Profit on sale of valuables	1,063
Quantitative effect (tons)	CO ₂ reduction (tons of CO ₂)	134

Environmental Performance Data

Business Activities and Environmental Hazards

Isuzu reduces the burden on the environment throughout the product lifecycle (development/design, procurement, manufacturing, logistics, product operation, and disposal). We track the effects with a focus on processes that have a greater environmental footprint. Since FY2018, we have calculated GHG emissions according to Scope 1, 2, and 3 of the Greenhouse Gas Protocol (GHGP) as well as for each of the Scope 3 categories. We have also obtained external third-party certification of our GHGP-based calculation results.

FY2020 material flow (Isuzu only)

