

# 3

## Environment

### Material issues

- Responding to climate change and energy issues
- Ensuring clean air
- Advancing powertrain electrification
- Utilizing resources efficiently
- Conserving water resources
- Preserving biodiversity
- Managing chemical substances and preventing pollution

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# Basic Approach

## Honda Environmental and Safety Vision/Honda's Environment Statement

Ever since the 1960s, Honda has actively endeavored to solve environmental issues. In the 1970s, Honda developed the low-pollution CVCC\* engine, which successfully reduced carbon monoxide, hydrocarbon and nitrogen oxide (NOx) emissions, making Honda the world's first automaker to comply with the U.S. Clean Air Act – a regulation considered to be the most stringent in the world at the time.

In 1992, Honda established the Honda Environment Statement, serving as the Company's guideline for all environmental initiatives. The statement articulates the basic stance towards reducing the environmental impact at every stage in the life cycle of its products, from product procurement to the design, development, production, transportation, sale, use and disposal stages.

In addition, for Honda to further promote the above-mentioned environmental initiatives and continue to be a company society wants to exist, the Honda Environmental and Safety Vision was established in 2011. Aimed at the realization of the joy and freedom of mobility and a sustainable society where people can enjoy life, as is declared in this vision, each of Honda's global business sites is engaging in the reduction of an array of environmental impacts. Such initiatives include the reduction of greenhouse gas (GHG) emissions, which are considered to be a cause of climate change, as well as energy use; the efficient use of resources, including water and minerals; and the appropriate treatment and reduction of waste, with the aim of conserving the global environment and biodiversity.

Honda will realize this vision by conducting these activities while sharing Honda's Environment Statement with everyone associated with Honda, including suppliers and distributors in addition to Honda Group companies.

### Honda Environmental and Safety Vision

Realizing the joy and freedom of mobility and a sustainable society where people can enjoy life

Established in 2011

### Honda's Environment Statement

As a responsible member of society whose task lies in the preservation of the global environment, the Company will make every effort to contribute to human health and the preservation of the global environment in each phase of its corporate activities. Only in this way will we be able to count on a successful future, not only for our company, but also for the world.

We should pursue our daily business under the following principles:

1. We will make efforts to recycle materials and conserve resources and energy at every stage of our products' life cycle—from research, design, production and sales to service and disposal.
2. We will make every effort to minimize and properly dispose of the waste and contaminants generated at every stage of a product's life cycle.
3. As a member of both the company and society, each associate will focus on the importance of making efforts to preserve human health and the global environment, and will do his or her part to ensure that the company as a whole acts responsibly.
4. We will consider the influence that our corporate activities have on the local people's health, environment and society, and endeavor to improve the social standing of the company.

Established and announced in June 1992

\* CVCC: Compound Vortex Controlled Combustion



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# Global Management

## Environmental Management Promotion Structure and Management Cycle

Honda recognizes that environmental issues such as climate change and energy/resource issues, which require global responses, are material issues that impact Honda's business operations. Based on this recognition, Honda established the Environmental Committee in 1991, chaired by the president and attended by the management, which became the World Environmental Committee in 1995 to discuss and formulate plans for environmental conservation activities at the global level. Since then, it has continued to be held every year as the World Environment and Safety Strategy Committee. This re-established Committee, chaired by the Chief Executive Officer (CEO), deliberates on the risks and opportunities concerning climate change, energy and resources, as well as short-, medium-, and long-term environmental strategies based on them. The Committee formulates global medium- to long-term environmental policies and plans based on company-wide policies and medium- to long-term management plans. All executives are involved in the decisions made by the Committee.

At respective Business Operations, an environmental manager and an environmental secretariat have been in place, and a PDCA cycle has been implemented for the promotion of environmental measures, based on the establishment of a system that covers all functions within the Business Operations. In each Region, the Six Region Environmental Secretariat Committee has been held, bringing together the environment-related divisions of each Regional Operation. After sharing information at this Committee, these divisions formulate their own specific action plans and implement necessary measures.

The progress of environmental initiatives and globally relevant themes discussed and coordinated between Business Operations and Regional Operations are consolidated in the Corporate Planning Supervisory Unit, which serves as the secretariat, and reported at the World Environment and Safety Strategy Committee. These are reflected in the next medium-term management plan and policies, and PDCA cycles are implemented at Business Operations, Regional Operations, and environment-related divisions, thereby continuously strengthening environmental management.

Risks related to environmental regulations and natural disasters caused by climate change are also identified as management and monitoring items, reflected in risk management activities, and integrated into company-wide priority risks (➡ p. 128).

## Environmental Management System

Honda's existing global vehicle assembly and product assembly plants have acquired ISO 14001, an international certification for environmental management systems (as of March 2023).

Therefore, coverage of environmental management systems is virtually 100%. Honda is in the process of obtaining certification for newly built plants.

## Current Status of Compliance with Environmental Regulations

In accordance with Honda's Environment Statement, the Company has introduced environmental management systems at all business sites and in each division. Along with promoting continuous efforts to improve environmental performance, it strives to comply with its own voluntary environmental standards, which are more stringent from an environmental perspective than any national or local regulations.

In the last five years, Honda has not committed any serious noncompliance with environmental laws and regulations, paid substantial fines/sanctions in breach thereof, or recorded any major chemical releases.

In addition, no environment-related complaints were received through the official complaint resolution program.

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# Global Management

## Environmental Accounting

### Environmental Accounting in Japan

To facilitate efficient environmental management, Honda tabulates the cost reduction and profit attributable to its environmental protection activities, thus working to keep abreast of their economic impact.

Going forward, Honda will continue to improve the accuracy of this data, considering it as an indicator of corporate value and as a tool for making environment-related management decisions.

Cost of environmental conservation activities and investments → p. 142

Economic benefits (effect on revenue and expenses) → p. 142

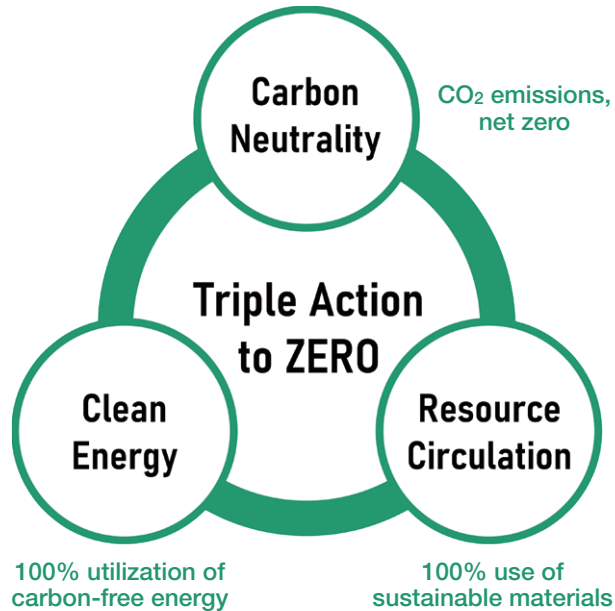
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# Material Issues in the Environmental Dimension

## Honda's Material Issues

Through Honda's proprietary technologies and business activities, the Company will work to tackle climate change and energy issues, the effective utilization of resources and the preservation of clean air, which are outlined as challenges in the materiality matrix, aiming to realize a zero environmental impact society in the future.



## Triple Action to ZERO

In order for people to live on Earth in a sustainable manner, Honda seeks to realize a society with zero environmental impact. Accordingly, the Company established the Triple ZERO initiative, a concept for environmental initiatives, and in 2021, it set Triple Action to ZERO, which defines specific target years and actions.

Efforts will be centered around the Triple Action to ZERO, which integrates three elements, namely carbon neutrality, clean energy and resource circulation, into one concept. Under this concept, Honda is considering and implementing measures while taking into account a linkage of the three elements. The Company recognizes that this will lead to the acceleration of initiatives in international frameworks and to Nature-based Solutions (NbS)\* that are attracting increasing interest from stakeholders.

### CO2 emissions, net zero by 2050

To address climate change issues, Honda will work toward a target of limiting the global average temperature rise to 1.5°C above pre-industrial levels by reducing carbon emissions from corporate activities and throughout the product life cycle.

### 100% utilization of carbon-free energy by 2050

To address energy issues, Honda will go a step beyond its conventional initiative of reducing energy risks and aim to use clean energy both during product use and in corporate activities.

### 100% use of sustainable materials by 2050

To address the effective utilization of resources, Honda will go beyond its previous initiative aimed at reducing the risks related to resources and waste disposal by taking on the additional challenge of developing products and creating systems that use sustainable materials and have zero environmental impact.

In the area of corporate activities, Honda aims to achieve “zero” industrial water intake and industrial waste at Honda plants by 2050.

\* Nature-based Solutions (NbS): Initiatives that address social issues while preserving and restoring natural ecosystems



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# Responses to Climate Change and Energy Issues

## Climate Change: Risk and Opportunity Analysis Based on Multiple Scenarios

Honda performs scenario analysis, noted as an important tool in the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), and creates strategies based on multiple scenarios for today and for the future.

Each scenario contains uncertainty caused by changes in various factors, which makes it important to conduct analysis and verification assuming different situations. Honda believes that identifying risks and opportunities in respective scenarios will enable more sustainable corporate management.

Accordingly, Honda has developed strategies based on multiple scenarios. The Company utilizes these strategies in undertaking business and promoting products and seeks to reduce risks and create opportunities, thereby ensuring that it offers services and products with greater resilience.

The Honda Report 2022 discloses Honda's initiatives to address risks and opportunities. In response to the risks and opportunities identified, Honda is enhancing the resilience of its strategies and implementing a variety of initiatives.

Integrated Report "Honda Report 2022" p. 55, p.56

■ [https://global.honda/sustainability/integratedreport/pdf/Honda\\_Report\\_2022-en-all-m.pdf#page=29](https://global.honda/sustainability/integratedreport/pdf/Honda_Report_2022-en-all-m.pdf#page=29)

## Honda's Approach

While the mobility environment is currently undergoing a period of dramatic changes, Honda is moving forward with its response to climate change through initiatives that link Honda's business strategy to its environmental strategy. The Company is proactively striving to reduce its environmental impact while foreseeing changes in the global marketplace and among customers as well as making contributing to the lives of customers its priority.

In October 2020, Honda announced its intent to realize carbon neutrality. Going a step further, in April 2021 the Company announced its vision to "realize carbon neutrality for all products and corporate activities Honda is involved in by 2050" in order to achieve a circular society with zero environmental impact. The concept behind this vision is to reduce carbon emissions based on the targets laid out in the Paris Agreement to keep the temperature rise below 1.5°C.

In order to make steady progress toward carbon neutrality by 2050, Honda has defined corresponding targets and has been promoting efforts accordingly. In the area of products, in addition to the respective ratios of electrified products for motorcycles, automobiles, and power products in global sales, Honda has selected another 2030 milestone concerning the reduction rate of CO<sub>2</sub> emissions intensity from the use of its products.

In the area of corporate activities, Honda aims to reduce its total CO<sub>2</sub> emissions by 46% from FY2020.

Honda plans to realize its first carbon-neutral plant in FY2026 at the Saitama Factory's assembly plant to achieve the 2050 carbon neutrality target.

Honda has started operating an internal carbon pricing (ICP) system from 2023 to further accelerate the reduction of CO<sub>2</sub> emissions at its Japanese business sites. The carbon price is set at 15,000 yen per metric ton of CO<sub>2</sub>, and the amount of carbon reduction is converted into a monetary value that can be used as one of the factors when making capital investment decisions. The Company will continue to revise the system and apply it to its global sites in light of social conditions and internal performance.

There is more than one approach to the protection of the global environment, and efforts to maximize the use of renewable energy are also crucial. Recognizing that there are diverse approaches to reducing CO<sub>2</sub> emissions, Honda has formulated a "multi-pathway" concept to proactively offer environmentally friendly products matched to each region.



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# Responses to Climate Change and Energy Issues

## Product Initiatives

### Three Initiatives to Reduce GHG Emissions

Emissions from the “use of products” account for approximately 80% of CO<sub>2</sub> emissions in Honda’s entire product life cycle. In light of this, Honda works to reduce CO<sub>2</sub> emissions during the usage of all of its products, and manufactures and sells items that can be supplied with confidence as environmentally friendly products.

To date, Honda has carried out the following three initiatives to reduce GHG emissions, most notably CO<sub>2</sub> emissions, while expanding production and sales globally.

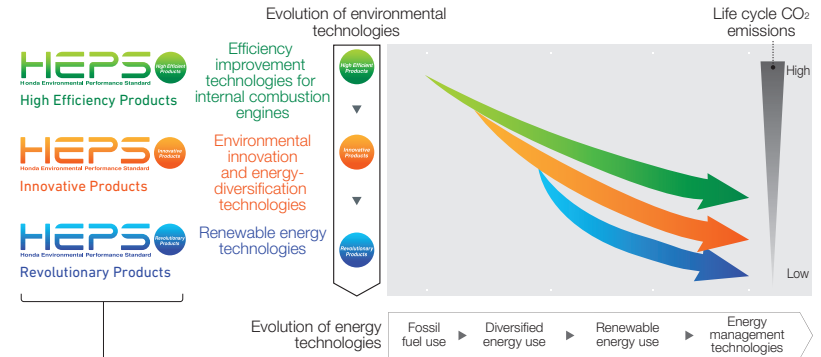
- (1) Reducing CO<sub>2</sub> emissions by improving the efficiency of internal combustion engines
- (2) Reducing CO<sub>2</sub> emissions by applying environmentally innovative technologies and diversifying energy sources
- (3) Eliminating CO<sub>2</sub> emissions through the use of renewable energy and total energy management

By implementing these initiatives in phases, Honda will steadily and ultimately reduce CO<sub>2</sub> emissions to net zero.

Honda has been undertaking the three initiatives in accordance with the Honda Environmental Performance Standard (HEPS), which is a set of unique and advanced-level product guidelines formulated in 2011. As a result of the certification of products that were launched in FY2023, 21 motorcycle models, 26 automobile models and 2 power product models — a total of 49 models — were HEPS-certified. This brings the number of HEPS-compliant products to 218 motorcycle models, 94 automobile models and 64 power product models, or 376 models in total.

In addition, there were no violations in product and service information or labeling in general.

DATA Global Number of HEPS-compliant models → p. 141



#### ● High-Efficiency Products

Products that emit less CO<sub>2</sub> emissions thanks to improved internal combustion engine efficiency. This category includes products that incorporate technologies for improving fuel combustion and transmission efficiency and reducing friction between engine parts. Compliance is determined based on how well a product reduces or helps reduce CO<sub>2</sub> emissions during use compared to preceding models.

#### ● Innovative Products

Products that emit less CO<sub>2</sub> by using an environmentally innovative technology or an alternative energy source. This category includes motorcycles that incorporate Honda’s patented Idling Stop System, automobiles that incorporate hybrid technologies or direct injection engine technologies, and power products with electronic fuel injection (FI). Alternative energy technologies include motorcycles and automobiles that can run on ethanol and power products that can run on gaseous fuels. Compliance is determined based on how well a product reduces or helps reduce CO<sub>2</sub> emissions during use compared to preceding models.

#### ● Revolutionary Products

Products that reduce or eliminate CO<sub>2</sub> emissions by harnessing renewable energy or facilitating total energy management. This category includes products that incorporate electromotive technologies or technologies for using renewable energy.

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## Responses to Climate Change and Energy Issues




### Advancing Powertrain Electrification

Honda views changes in social needs and the social structure induced by climate change and energy diversification as key challenges and actively promotes product electrification. Increasing the lineup and use of electrified products will contribute to reducing CO<sub>2</sub> emissions when in use, which in turn will lead to lower climate change risks, while addressing energy issues by making use of renewable energy.

In addition, the battery mounted on electrified vehicles can be used as a power source for leisure activities or during an emergency, thereby improving the quality of customers' lives.

Based on this belief, Honda has set the target of electrifying 15% of motorcycles, 30% of automobiles and 36% of power products, respectively, as a ratio of global sales in 2030, and to reduce the rate of CO<sub>2</sub> intensity\*<sup>2</sup> by 34.0% for motorcycles, 27.2% for automobiles and 28.2% for power products (compared to FY2020).

To achieve this goal, the Company is seizing all new business opportunities by enhancing and upgrading its product lineup.

	Motorcycles	Automobiles	Power products
			
Targeted sales ratio of electrified products* <sup>1</sup>	15%	30%	36%
Targeted reduction rate of the CO <sub>2</sub> emissions intensity of product use	34.0%	27.2%	28.2%

\*1 Sales ratio of battery-powered electric motorcycles and electric bicycles for motorcycle products; battery-powered electric vehicles and fuel cell vehicles for automobile products; and electrified products for power products.

\*2 Global average by product

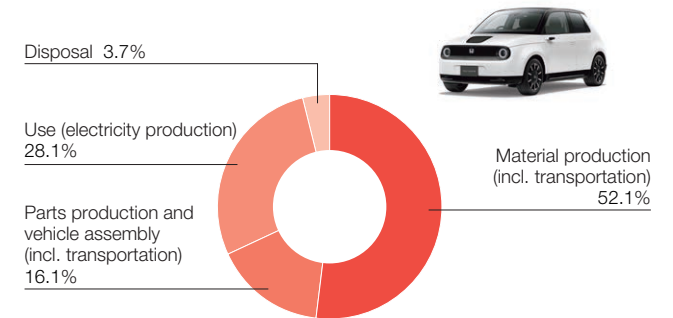
### Promoting Life Cycle Assessment (LCA)

Honda recognizes that the promotion of LCA is an important initiative not just in reducing CO<sub>2</sub> emissions across product life cycles, from raw material procurement to product disposal, but also in implementing efforts for Triple Action to ZERO.

Honda has been quantitatively calculating and assessing CO<sub>2</sub> emissions from all business activities by using its original Life Cycle Assessment (LCA) system. Accordingly, the production, purchasing, sales and service, administration and transportation departments have been carrying out activities geared toward lower carbon emissions.

Honda has established procedures for calculating the environmental impact of its products during their life cycle and obtained third-party certification by TÜV Rheinland in Germany in 2023. This certification is based on the ISO 14040 and ISO 14044 standards. In the future, Honda will utilize LCA more broadly while making more proactive efforts in devising low-carbon solutions at the development stage and also reducing the environmental impact through resource circulation.

Total CO<sub>2</sub> emissions calculated by Honda's LCA system





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# Responses to Climate Change and Energy Issues

## Corporate Activities Initiatives

With the aim of achieving net zero CO<sub>2</sub> emissions and wholly deriving power from carbon-free energy sources in corporate activities by 2050, Honda is focusing on a reduction in energy consumption and CO<sub>2</sub> emissions while giving consideration to the potential for expanding production and sales globally.

Toward the realization of these targets, Honda has been promoting the reduction of carbon emissions by making efforts in terms of increasing production efficiency, encouraging energy-saving initiatives, shifting to low-carbon energy sources and utilizing renewable energy.

Honda plans to realize its first carbon-neutral plant in FY2026 at the Saitama Factory's assembly plant to achieve the 2050 carbon neutrality target.

In deploying the technology built at the plant globally, the Company has built a mechanism for promoting information sharing among business sites and regions while at the same time enhancing technical support from Japan.

In addition, Honda is actively introducing renewable energy around the world. Honda preferentially adopts a method that can directly contribute to the reduction of CO<sub>2</sub> in local communities. More specifically, the Company focuses on installing new power generation facilities, first examining the installation within its premises and then gradually expanding the scope to outside the premises for greater use of the facilities.

Honda's business sites across the world used 1,498GWh of power derived from renewable energy sources, such as solar and wind, in FY2023.

This is an increase of 694 GWh or 86% over the previous fiscal year.

Going forward, Honda will continue to use renewable energy matched to local conditions, including plans to expand solar power generation system capacity to 20 MW at the Kumamoto Factory by 2030.



Kumamoto Factory (5.35 MW)



Saitama Factory's assembly plant (2.0 MW)



Boiling Springs Wind Farm (120 MW)



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# Efficient Utilization of Resources

## Honda's Approach

Honda believes that the increasing difficulty in obtaining rare metals and other resources, as well as their depletion, could pose a significant risk to the continuation of its business, as they would affect the procurement of materials and parts necessary for the production of its products. Therefore, the Company considers the efficient utilization of resources as one of the material issues.

To ensure harmonious coexistence on Earth, Honda will reduce its consumption of limited resources, including mining and disposal, and strive to shift to a recycling-based value chain. In addition to preparing for the risks of resource procurement and price hikes, the Company aims to enhance customer value, contribute to stakeholders, and create economic value. Aiming for zero environmental impacts related to resources and disposal across the various stages ranging from resource procurement to disposal, Honda is tackling this issue through cooperation/partnership with internal/external stakeholders.

## Product-based Approach

Honda has been actively promoting 3R (reduction/reuse/recycling) activities as well as ensuring proper processing when disposing of end-of-life products.

In addition, Honda has established internal milestones and has begun working to achieve its goal of the 100% use of sustainable materials by 2050, while promoting the creation of systems and technological research on reused, recycled and biomass materials of all parts and materials that make up its products.

## Corporate Activities' Approach

Giving consideration to the risks involved in resource depletion and waste disposal that could potentially lead to environmental pollution, Honda aims to reduce the overall amount of waste generation. Accordingly, the Company has set the goal of reducing the total waste generation by 14.5% as compared to BAU in all corporate activities in FY2031.

For water resources as well, Honda is giving consideration to the water supply risk that affects its businesses and the depletion risk that impacts local communities. Honda has thus established the target of reducing the total industrial water intake by 14.5% as compared to BAU in all corporate activities in FY2031. In both areas of waste generation and water intake, the Company will remain committed to minimizing the environmental impacts.

### Initiative for zero environmental impact related to resources and disposal

	Development	Resource Procurement and Production	Sales and Use	Collection, Recycling and Disposal
Reduction	Reduction of the number of parts, etc.	Initiatives for saving resources		
Reuse/repurpose*1/refurbish*2	Easy replacement of parts, prolonging lifespan, etc.		Reuse (repurpose) (refurbish) of products	
Recycling	Easy to dismantle, separate, and recycle	Recycling of by-products	Recycling of end-of-life products	
	Development, application, and procurement of recycled materials			Compliance with the recycling law for end-of-life products
	Reduction of substances of concern			
Biomass	Development, application and procurement of biomass materials			

\*1 Re-purpose: The act of utilizing one's own products (e.g., primary use) for various secondary purposes.  
 \*2 Refurbish: Adding new value to used vehicles by improving performance and service through the latest updates.



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# Efficient Utilization of Resources

## Initiatives in the Development Stage

### Design Focusing on Reduction

Honda is making efforts in downsizing and weight reduction by considering alternative structures and materials for all components in each product, such as the body framework, engine and bolts. For example, the Company used thinner structural bumpers in the N-WGN as part of a reduction-oriented design geared toward creating a lighter product. The availability of materials with higher rigidity and fluidity along with advances in manufacturing technologies allowed Honda to reduce the weight of the previous design, which had an average thickness of 3.0 mm, by using less resin in bumper production. In Japan, Honda is progressively expanding the use of these enhanced structural bumpers in new models launched after the N-WGN. Overseas, it has begun rolling them out globally with the Civic. The Company expects to further reduce material use by applying the new design worldwide.

### Design Focusing on Reuse/Recycling

Honda is engaging in structural design that takes into account easier recycling and maintenance, the use of easily recyclable materials and recycled resins, and the display of the material contents of resin/rubber components, etc. For automobiles, the Company uses easily recyclable materials for a wide array of exterior/interior components, such as inner weather-stripping and the outer surface of instrument panels, and at the same time has enabled the use of recycled materials for air conditioner ducts. In addition, Honda labels resin and rubber parts with their constituent materials wherever possible to facilitate recycling.

Honda has also conducted a preliminary recyclability assessment for each newly developed model since 1992 for motorcycles and since 2001 for automobiles. As a result of the activities mentioned above, with regard to the recyclable rate\*1 for all new and redesigned vehicles sold in FY2022, Honda is maintaining more than 95% for both automobiles and motorcycles. Meanwhile, the recoverability rate for components/materials\*2 used in power products was more than 95%.

\*1 Index based on the "Definition of the Recyclable Rate for New Vehicles and Guidelines on the Calculation Method" issued by Japan Automobile Manufacturers Association, Inc. (JAMA)  
 \*2 Recyclable rate including the thermal energy recovered; in accordance with calculation methods for the recyclable rate for cars in ISO 22628, etc.

## Initiatives in the Resource Procurement and Manufacturing Stage

Through strong partnerships with resource recycling companies such as Ascend Elements, Server Solutions, and POSCO Holdings, we actively utilize recycled resources to stabilize material procurement and strive for zero environmental impact.

### Application of recycled aluminum

For motorcycles, Honda started applying recycled materials to aluminum casting for vehicle bodies at Kumamoto Factory in June 2023.

As for automobiles, materials using recycled aluminum sheets for vehicle bodies have been applied to several models, including Civic, at the production sites in the North America since April 2022.

## Initiatives at the Product Use Stage

In January 2023, refurbishment initiative in the used car business started at some dealers in Japan.

Recovering and improving product value through refurbishing, adding new product value, and providing utilization services will lead customers to use up the products to the end, and increase opportunities to collect end-of-life vehicles, thereby making more efficient use of resources.



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# Efficient Utilization of Resources

## Recycling of End-of-Life Components

Honda collects and recycles end-of-life components generated from repair, replacement, etc., from dealers nationwide. In FY2023, the Company collected and recycled approximately 134,000 end-of-life bumpers. Collected bumpers are recycled and used for undercovers and other components of the Freed model. Honda will continue to recycle end-of-life components, including the collection/recycling of end-of-life hybrid vehicle drive batteries.

We have initiated horizontal recycling demonstration experiments for acrylic resin since August 2021 and have established the technology to manufacture tail light lenses from recovered tail light lenses from end-of-life vehicles.

## Initiatives at the Disposal Stage

### Initiatives for Automobiles

The Act on Recycling, etc., of End-of-Life Vehicles (automobile recycling law) requires automakers to collect and properly treat three items: fluorocarbons, airbags and shredder dust (Automobile Shredder Residue (ASR)).

In FY2023, the number of Honda automobiles collected was approximately 360,000 for fluorocarbons (-15.1% from the previous fiscal year), approximately 360,000 for airbags (-15.1%) and approximately 390,000 for ASR, the final phase in the end-of-life vehicle processing (-16.9%). The recycling rates for gas generators and ASR were 95.4% and 96.7%, respectively, both of which satisfy the recycling rates specified by the ordinance of the relevant ministry (at least 85% for gas generators and at least 70% for ASR).

## Initiatives for Motorcycles

Honda joined hands with other motorcycle manufacturers in Japan and participating motorcycle importers and started to implement the voluntary recycling of motorcycles in October 2004. With the cooperation of related dealers, various companies in the motorcycle industry started this scheme to provide a safety net for the treatment of end-of-life motorcycles, the world's first of its kind. End-of-life motorcycles are collected at dealers and designated points of collection free of charge and are properly recycled at recycling facilities.

Regarding end-of-life motorcycles collected at designated collection points, there were 1,128 Honda products in FY2023, accounting for 69.3% of all units collected. The recycling rate of Honda products came to 97.8% on a weight basis, enabling it to achieve the target recycling rate of 95% since FY2014.

## Corporate Activities Initiatives

Honda is making efforts to reduce the volume of waste generated through its business activities.

The Company is stepping up its 3R efforts, which include resource reduction initiatives, such as the reduction of by-products through an increase in throughput yields. Honda properly manages the import and export of waste deemed hazardous under the terms of Annexes I, II, III, or VII of the Basel Convention. In addition, the Company is striving to eliminate all use of ozone-depleting substances (ODS) at business sites in accordance with the Montreal Protocol and local laws and regulations in the countries in which it operates.



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# Preservation of Clean Air

## Honda's Approach

Honda recognizes that air pollution has been a critical issue since the 1960s when the pollution problem became serious and believes that air pollution in cities has a negative effect on people's health. The Company, therefore, has sought to resolve this issue through the development of technologies that clean the gases emitted from its products.

To date, Honda has achieved cleaner exhaust emissions from motorcycles by switching the engines of all its motorcycles on the market to four strokes, with the Honda Programmed Fuel Injection (PGM-FI) system being applied to more than 88% of models sold worldwide for better combustion efficiency.

With regard to automobiles, the Accord Plug-in Hybrid has become the first in the world to certify to SULEV\*1 20 of California's LEV III\*2 emissions regulations, deemed to be the toughest in the world.

In addition, Honda has introduced technologies to reduce emissions in advance of other advanced emission regulations, such as Euro 6 in Europe and Stage 6 in China, as well as particulate matter (PM) emissions, which are becoming increasingly stringent worldwide.

Honda is also contributing to the global effort toward cleaner exhaust emissions by progressively expanding the same technologies to emerging countries as those in developed countries.

As for power products, Honda has cleared compliance with United States Environmental Protection Agency Phase 3 regulations, the most stringent in the world, through engine enhancement technology without using a catalyst.

Honda will continue to reduce the harmful substances contained in the exhaust emissions from internal combustion engines and set milestones for the sales ratio of electrified products that do not emit exhaust gas while in use, to preserve clean air.

In the production of automobiles, the solvents found in paint and thinner used mainly in paint processes can generate Volatile Organic Compounds (VOC), the cause of photochemical oxidants. Honda has sought to reduce VOC emissions such as through the improvement of painting efficiency, the installation of equipment to remove VOC, and the introduction of Honda Smart Ecological Paint\*3, a highly functional painting technology that shortens the automobile painting process, at the Saitama Factory's assembly plant.

Honda will continue to undertake these and other reduction efforts in the future. Honda believes that providing products with high environmental performance at reasonable prices and leading the industry in terms of cleaner exhaust emissions and air pollution response will serve to preserve clean air and bring about a greater opportunity for business expansion.

\*1 Super Ultra Low Emission Vehicle  
 \*2 Low Emission Vehicle  
 \*3 A technology that eliminates a middle coating process from the commonly used 4-coat/3-bake auto body painting process, thereby realizing a 3-coat/2-bake water-based painting process.



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# Other Important Issues

## Conserving Water Resources

Cognizant of the potential for business activities to impact upstream and downstream water resources, Honda is also focusing on the conservation of water resources.

Since Honda seeks out communities where harmonious coexistence with nearby water sources is viable as potential plant locations, and builds plants in compliance with host countries' environmental assessment laws and regulations, no water sources are significantly impacted by the Company's water use. In addition, no water sources are affected by wastewater from Honda facilities since it treats wastewater and discharges treated water in accordance with applicable laws and regulations. Under these circumstances, Honda appropriately manages the amount of water used and works to manage and provide information on wastewater, which includes thorough quality control and the disclosure of water quality test findings.

In addition, to minimize water intake, various business sites are implementing initiatives based on regional circumstances, such as the utilization of recycled water and water conservation.

Honda verifies the water risk for all production sites using assessment tools such as Aqueduct and Water Risk Filter. Accordingly, Honda has prioritized the introduction of a water recycling system at the Celaya Auto Plant of Honda de Mexico S.A. de C.V. in Mexico, the Tapukara Plant of Honda Cars India Ltd. in India, and the No. 2 Plant of Guangqi Honda Automobile Co., Ltd. in China, where the water risk is particularly high.

Total consumption of recycled water at production sites amounts to about 3.86million m<sup>3</sup> a year, accounting for about 16% of Honda's total annual water use.

Honda will continue to introduce its water recycling system around the world.

Honda strives to reduce the environmental impact during product usage. The Company's lineup of engines for outboard motors consists solely of four-stroke engines, with the aim of reducing water contamination by outboard motors around the world.

Honda has continuously undertaken conservation activities for forest watersheds since 1999 as part of its social contribution program. Production sites protect and manage the forest watersheds that they benefit from and strive to keep them optimized for each region. Aware of the fact that water is an indispensable resource supporting its business, Honda will continue implementing this activity. (Please refer to the link below.)

**"Forest Conservation Activities" (Japanese only)**  
<https://www.honda.co.jp/philanthropy/forest/>



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## Other Important Issues

### Management and Reduction of Chemical Substances

Honda works to ensure the appropriate management and reduction of the chemical substances contained in automotive components from the product design and development stages in order to reduce those materials that impact the environment.

Laws and regulations have been introduced in each country to ensure the appropriate management of chemical substances and the reduction of harmful substances contained in automotive components. These legislations are based on the goal set by the United Nations in 2002 of minimizing the impact of chemical substances on people and the environment by 2020.

The International Material Data System (IMDS), a mechanism for collecting information throughout the supply chain on the materials and chemical substances contained in components making up a vehicle, was developed in response to this trend largely by the German Association of the Automotive Industry. Honda is also tabulating and managing chemical substances via its independently developed global management system, called the Management System of Chemical Substances (MoCS), which collects information based on IMDS.

Honda promotes the management of chemical substances via MoCS to comply with the Regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and other regulations on the use of substances of concern in each country. In addition, Honda is moving ahead with the reduction of four types of heavy metals (lead, mercury, hexavalent chromium and cadmium), in accordance with the European Directive on End-of-Life Vehicles (ELV Directive).

### Biodiversity Conservation

Biodiversity is fundamental to the well-being of humanity, a healthy planet, and the economic prosperity of all people. Not only do we depend on biodiversity, but also biodiversity underpins all systems of life on Earth. The IPBES\* Global Assessment Report on Biodiversity and Ecosystem Services, published in 2020, suggests that many of the approximately one million species face extinction within the next few decades. In June 2021, the G7 Cornwall Summit adopted the G7 2030 Nature Compact and declared the need for a nature-positive approach to reverse nature loss by 2030.

In operating its business, Honda benefits from natural resources. In addition to the procurement of raw materials, Honda depends on and affects a great deal of natural capital throughout its value chain, from research and development to manufacturing, use, and disposal.

Honda's basic approach is defined as follows: "We recognize, under Honda's Environment Statement, that biodiversity conservation initiatives are an essential part of our commitment to the preservation of the global environment. We will continue to work toward harmony between this commitment and our activities."

Honda also recognizes the need for biodiversity-conscious actions in its relationship with nature. Based on this recognition, the Company carried out tree-planting and water-recycling initiatives at its plants in the 1960s and launched the Community Forest program in 1976. In 2011, the Company established the Honda Biodiversity Guidelines. In line with the Guidelines, Honda is working to avoid or minimize impacts on nature, including air, water, and biodiversity, as well as to conserve and restore them. In addition, the Company conducts biodiversity impact assessments.

**Honda Biodiversity Guidelines**

■ <https://www.honda.co.jp/environment/report/pdf/report/report-2022-biodiversity-en.pdf>

\* Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

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### Priority Analysis for Biodiversity Conservation

#### Biodiversity Assessment around the Company's Production Sites

Honda assesses the potential for its business activities to impact biodiversity using the Integrated Biodiversity Assessment Tool (IBAT), a biodiversity assessment tool.

The Company surveys its own 86 production sites around the world within a 50 km radius of each site to determine their proximity to areas inhabited by endangered species on the IUCN Red List.

In order to conduct specific biodiversity efforts, Honda uses indicators in IBAT such as the KBA\*1, WDPA\*2, IUCN\*3 Red List of Threatened Species, and STAR\*4 to conduct integrated assessments of the biodiversity risk of the production sites.

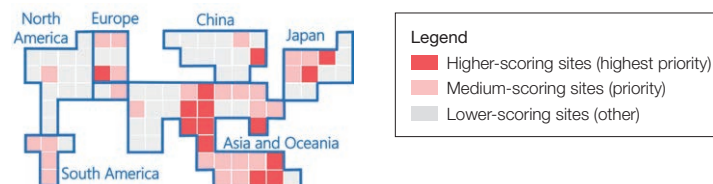
Honda will continue to identify priority sites and consider specific efforts to conserve biodiversity.

Honda assesses and identifies endangered species and priority sites in cooperation with BirdLife International Tokyo, a general incorporated association specializing in biodiversity assessment.

#### Endangered species assessment around the Company's production sites

Region	Endangered species category		
	CR (Critically Endangered)	EN (Endangered)	VU (Vulnerable)
Japan	60	292	607
North America	75	187	294
Europe	62	136	305
Asia-Pacific excluding Japan and China	647	1,547	4,538
China	189	404	755
South America	29	97	212
Africa & Latin America	36	64	90
Total	1,098	2,727	6,801

#### Assessment of biodiversity priorities at the Company's production sites

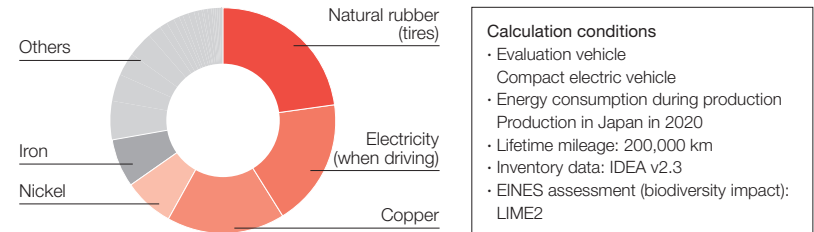


\*1 Key Biodiversity Areas  
 \*2 World Database on Protected Areas  
 \*3 International Union for Conservation of Nature  
 \*4 Species Threat Abatement and Restoration Metric

### Biodiversity Assessment of Products

Products are made from a variety of materials, some of which may have an impact on biodiversity. Honda is therefore engaged in the primary assessment of the impact of materials used in its products on biodiversity. Based on the assessment results, the Company will conduct a more detailed analysis of materials that have a large potential impact, and consider ways to reduce the impact of its products on biodiversity.

#### Results of the primary assessment of biodiversity impacts





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### Specific Initiatives for Biodiversity Conservation

#### Activities to Protect and Restore Biodiversity

Mobility Resort Motegi in Tochigi Prefecture, Japan, which is 100% owned by Honda, covers an area of approximately 640 hectares, and is engaged in nature conservation activities in approximately 70% of its forests. There are approximately 5,800 confirmed species, including many rare species, among the inhabitants.

The area was unmanaged wooded areas and rice paddies, but Honda has improved the environment by cutting trees to let light into the forest, restoring terraced rice paddies and other riparian areas, and protecting and relocating endangered Haccho dragonfly (*Nannophya pygmaea*). Based on the idea that "improving the environment is not only about managing it, but also about creating it\*," Honda is also working to create a diverse environment for living creatures at Mobility Resort Motegi. To create a sustainable forest, Honda conducts forest surveys (tree surveys, etc.) and monitoring surveys (registered as one of the Monitoring Sites 1000 by the Ministry of the Environment), and holds forest development workshops to nurture the people involved in forest development.



Haccho dragonfly confirmed at Mobility Resort Motegi

\* Improving the forest environment is not only about reducing the density of the forest by logging to let in light and wind, but also about creating habitats for living creatures.

### Collaboration with External Initiatives

In April 2022, Honda joined the 30by30 Roadmap, led by the Ministry of the Environment in Japan, and is promoting its efforts to obtain certification as an Other Effective area-based Conservation Measures (OECM) site, which is an area where biodiversity is being conserved.

In addition, Honda has been participating in the Taskforce on Nature-related Financial Disclosures (TNFD) Forum since December 2022. The Company is committed to the proactive disclosure of information and will continue to further accelerate its efforts related to environmental conservation.



### Japan: Biotope at an Automobile Assembly Plant

A biotope located at the Saitama Factory's assembly plant, which started operation in 2013. The biotope is home to endangered species such as *Hynobius tokyoensis* and *Lefua echigonia*, and along with monitoring and conservation activities, Honda is exterminating non-native species such as the red swamp crayfish and American bullfrog.



Biotope at the Saitama Factory

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### U.S.A.: Habitat Conservation for Wild Honeybees

Honda Development & Manufacturing of the Americas' Ohio automotive production plant and research and development facility have unused land that is home to wild honeybees. Bees play an important role in supporting a healthy ecosystem and help pollinate approximately 80% of flowering plants. To protect the bees, the Company maintains approximately 5 hectares as the habitat and has built an apiary to support bee research.



Beekeeping activity

### Belgium: Conserving Biodiversity at a Logistics Base

At Honda Motor Europe Logistics NV's logistics base in Aalst, the Company has expanded its greenbelt by planting black poplars, which are threatened due to habitat degradation and a lack of genetic diversity. The Company is also contributing to the maintenance of biodiversity by creating habitats such as ponds, insect hotels, and feeding stations for living creatures.



Insect hotel

\* Sanjivani van: a Hindi term referring to a mythical forest associated with the herb "Sanjivani", which has healing properties and significant meaning in Hindu mythology.

### Brazil: Nature Conservation at a Test Course

Moto Honda da Amazonia Ltda's motorcycle test course in Rio Preto da Eva is in the Amazon rainforest. In harmony with the environment, approximately 80% (802 hectares) of the site is maintained as a legally protected area. Agricultural projects here include the planting of fruits and vegetables as well as the restoration of endangered species such as mahogany, rosewood, and Brazil nuts.



Test course

### India: Plant Greening in Consideration of Biodiversity

The Company created a 0.4 hectare mini-forest on the premises of Honda Motorcycle & Scooter India Pvt. Ltd.'s motorcycle plant in the state of Gujarat with the aim of creating a rich natural environment to protect the ecosystem. This forest, named "Sanjivani van\*," is planted with more than 16,000 trees in 24 different categories. In addition, food residues are converted into compost and used for gardening in the forest.



Mini-forest

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### List of Targets

Target Items	Targets for 2030	Targets for 2050
Reduction rate of total CO <sub>2</sub> emissions from corporate activities (compared to FY2020)	46%	
Sales ratio of electrified products	Motorcycles	15%
	Automobiles	30%
	Power products	36%
Reduction rate of CO <sub>2</sub> emissions intensity of product use (compared to FY2020)	Motorcycles	34.0%
	Automobiles	27.2%
	Power products	28.2%
Reduction rate of total water intake in corporate activities (compared to BAU)	14.5%	Zero industrial water intake and industrial waste
Reduction rate of total waste generation in corporate activities (compared to BAU)	14.5%	
Product resource circulation	(Set internal milestones)	100% use of sustainable materials