

Corporate Information	Top Message	The HINO Credo & Course of Action	Realizing a Sustainable World	Environmental Management	Hino's Strategies and Initiatives and the Sustainable Development Goals (SDGs)	CSR Management	Topic	ESG Initiatives			
								Environment	Social	Governance	ESG data and others

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2020
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Building Low-carbon Society



Item	Specific Action Items/Targets, etc.	Fiscal 2016–2020 Achievements and Challenges for the future
Product development	Improve CO₂ emissions and fuel consumption performance of vehicles <ul style="list-style-type: none"> Develop technologies to meet world's top-class fuel efficiency standards [Japan] <ul style="list-style-type: none"> Develop technologies to improve fuel efficiency to meet next round of regulations Improve the performance of hybrid vehicles [United States] <ul style="list-style-type: none"> Develop technologies for enabling compliance with greenhouse gas emission regulations in 2020 [Europe] <ul style="list-style-type: none"> Develop technologies to improve fuel efficiency to meet the next round of regulations 	<ul style="list-style-type: none"> Improved fuel efficiency and reduced CO₂ emissions over earlier Hino Profia models by equipping the Hino Profia with the world's first hybrid system with AI Improved mass transport efficiency by jointly developing with Isuzu Motors the first hybrid articulated bus in Japan, a highly fuel efficient HEV. Launched the Connected service, HINO CONNECT to support eco-friendly driving by customers using the Eco Tree Report, a support tool for fuel saving
	Promote the development of vehicles that run on clean energy <ul style="list-style-type: none"> Conduct R&D on electric vehicles [FCEV] Develop and conduct limited sales of FCEV [BEV] Conduct R&D on practical implementation for trucks and buses Conduct research on technologies for enabling the use of alternative fuels <ul style="list-style-type: none"> Develop technologies that enable a switchover to biofuels and other alternative fuels 	<ul style="list-style-type: none"> Released onto the market SORA, an FCEV fixed-route bus developed with Toyota Motors, and began operations in Tokyo Future Challenge: <ul style="list-style-type: none"> Accelerate electric vehicle development through alliances with other parties in the same and different industries that have similar ambitions to quickly introduce and spread BEV and FCEV in the market
Production and logistics	Initiatives for reducing CO₂ emissions in production activities <ul style="list-style-type: none"> Carry out initiatives for reducing CO₂ emissions on both a total and per-vehicle basis by introducing low-CO₂ production technologies, and reducing CO₂ through daily improvements Consider exploiting new energy-saving technology and renewable energy Targets: <ul style="list-style-type: none"> [Global] <ul style="list-style-type: none"> 26% reduction in emissions per unit compared to FY2008 [Consolidated Companies in Japan] <ul style="list-style-type: none"> 24% reduction in emissions per unit compared to FY2008 [Hino Motors, Ltd.] <ul style="list-style-type: none"> 30% reduction in emissions per unit compared to FY2008 Reduction in emissions: Fiscal 2020 output target x active mass Control emissions of other greenhouse gases besides CO₂ 	<ul style="list-style-type: none"> Reduced CO₂ emissions by introducing energy-saving innovative technologies Improved efficiency of equipment motors, enabled inverter control for circulating water pumps, introduced ultrasonic cleaning machines, applied thermal insulation paint to heating furnaces Installed solar power equipment (Nitta Plant, Koga Plant) Results*: <ul style="list-style-type: none"> [Global] <ul style="list-style-type: none"> Reduced emissions per unit by 27% compared to FY2008 [Consolidated Companies in Japan] <ul style="list-style-type: none"> Reduced emissions per unit by 28% compared to FY2008 [Hino Motors, Ltd.] <ul style="list-style-type: none"> Reduced emissions per unit by 37% compared to FY2008 Emissions of fiscal 2020 were 158 thousand tons Future Challenge: <ul style="list-style-type: none"> Further establish technologies for achieving medium-and-long-term targets to reduce CO₂ and promote purchase of outside renewable energy
	Make transportation more efficient and reduce CO₂ emissions in logistics <ul style="list-style-type: none"> Promote initiatives to reduce CO₂ emissions in logistics by improving efficiency of transportation Shorten distribution routes between factories and improve shipping efficiency by using tractor-trailers and increasing transport loading rates Use more fuel-efficient vehicles Improve efficiency of vehicle parts shipments Targets: <ul style="list-style-type: none"> [Consolidated Companies in Japan] <ul style="list-style-type: none"> 26% reduction in emissions per unit of transport volume compared to FY 2008 [Overseas Operations] <ul style="list-style-type: none"> Set targets and promote reduction measures according to the highest standards in each country 	Improved distribution efficiency between plants: <ul style="list-style-type: none"> Achieved efficient transport of shipped vehicles (completed vehicle) Reduced transport between bases using container loading at production sites Promoted continued use of marine containers Results: <ul style="list-style-type: none"> [Consolidated Companies in Japan] <ul style="list-style-type: none"> Reduced emissions per unit of transport volume by 28% compared to FY2008 Assessed impact of plant relocation and continued emissions reduction activities [Overseas Operations] <ul style="list-style-type: none"> Continued promoting emissions reduction activities in each country Improved transport efficiency in logistics industry: <ul style="list-style-type: none"> Started commercialization of optimal mixed load patterns and cargo matching that exceeds barriers in shippers and transport vehicle manufacturers at NEXT Logistics Japan in December 2019 to reduce CO₂ emissions through improved transport efficiency (awarded the Special Prize for the 22nd Logistics Environment Award)
Sales and after-sales service	Initiatives for reducing CO₂ emissions in sales activities <ul style="list-style-type: none"> Create and execute plan to reduce energy consumption per unit by at least 1% per year at Japanese sales offices Assist customers in reducing CO₂ emissions 	<ul style="list-style-type: none"> Reduced energy consumption rate per unit by 9.6% compared to FY2015 by installing energy-saving lighting, etc.

*Estimates are calculated from reported or derived values and available data. Actual emissions may vary.

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Creation of Closed Loop Economy



Item		Specific Action Items/Targets, etc.	Fiscal 2016–2020 Achievements and Challenges for the future
Product development	Develop technologies that enable elimination of the use of scarce resources	<ul style="list-style-type: none"> Reduce the amount of precious metals used in exhaust-cutting catalytic converters 	<ul style="list-style-type: none"> Developed a diesel exhaust purification system using NOx selective reduction reaction with light oil → Won the FY2020 Catalysis Society of Japan Award for Technological Progress <p>Reason for winning: Improved the air environment by reducing diesel exhaust gas and contributed to technological development in the field through long-term research and development</p>
	Develop new vehicles with a higher ratio of recyclable components	<ul style="list-style-type: none"> Initiatives to create assembled structures that are easy to disassemble 	<ul style="list-style-type: none"> Incorporated considerations for recycling and disassembly in the design of vehicle structural components Contributed to effective use of resources by reducing vehicle body weight.
Production and logistics	Reduce waste from production and logistics, and use resources effectively	<ul style="list-style-type: none"> Adopt waste reduction technologies and promote waste reduction in daily improvement activities Facilitate more effective usage of resources by improving yield rates and managing the sources of waste Promote the usage of resources within the Hino Motors Group <p>Targets: [Consolidated Companies in Japan] <ul style="list-style-type: none"> 43% reduction of amount of waste generated per unit compared to FY 2008 Zero for final disposal amount* [Overseas Operations] <ul style="list-style-type: none"> Implement management that leads to reduced emissions (manage amounts) *Definition of Zero: Landfill amount including ash after incineration is not more than 0.5% compared with total waste including recyclable waste</p>	<ul style="list-style-type: none"> Implemented thorough waste separation and recovered valuable materials from plastic waste Introduced automatic device for collecting paint gas (Hamura Plant) Reduced defective product rate and number of retests (Nitta Plant) Sold reclaimed sand to Group companies in Japan (Nitta Plant) <p>Results: [Consolidated Companies in Japan] <ul style="list-style-type: none"> Reduced amount of waste generated per unit by 41% compared to FY2008 Achieved a final disposal rate of 0.11% In the past, market changes resulted in valuable resources becoming waste and a reduction of per unit value. Targets were not reached for recovered waste by FY2020, but going forward Hino Motors will quickly reassess plans and continue carrying out waste-reduction activities through action such as promoting a greater recycling rate. [Overseas Operations] <ul style="list-style-type: none"> Waste Materials: Set targets and promoted reduction activities in each country </p>
	Initiatives for reducing water usage in production activities	<ul style="list-style-type: none"> Promote activities for reducing water consumption in consideration of water supply conditions in each country and region where the Group operates Conserve water through actively introduce water-saving technologies and daily improvements <p>Targets: [Consolidated Companies in Japan] <ul style="list-style-type: none"> 40% reduction of water usage per unit compared to FY 2008 [Overseas Operations] <ul style="list-style-type: none"> Management of water usage reduction </p>	<ul style="list-style-type: none"> Improved underground piping and took measures against water leaks Introduced a dry booth (Koga Plant) Reused wastewater from cleaning on the paint line (Koga Plant) <p>Results: [Consolidated Companies in Japan] <ul style="list-style-type: none"> Reduced water usage per unit by 38% compared to FY2008 In fiscal 2020, the consumption rate per unit worsened due to a drop in production volume and targets were not achieved. Looking ahead, Hino Motors will work toward efficient process planning not easily affected by fluctuations in production to promote water recycling and other water conservation actions. [Overseas Operations] <ul style="list-style-type: none"> Set targets and promoted reduction activities in each country </p>
	Initiatives for reducing usage of packaging materials and use resources effectively	<ul style="list-style-type: none"> Reduce usage of packing and shipping materials by making them returnable and more lightweight Enable use of returnable racks in more countries Improve methods of packing vehicle parts <p>Targets: [Consolidated Companies in Japan] <ul style="list-style-type: none"> 57% reduction of shipment volume per unit compared to FY 2008 [Overseas Operations] <ul style="list-style-type: none"> Ascertain use of packaging materials and expand reduction activities </p>	<ul style="list-style-type: none"> Shifted from wooden materials to cardboard Changed cardboard to returnable boxes Increased packing ratio to reduce cardboard usage <p>Results: [Consolidated Companies in Japan] <ul style="list-style-type: none"> Reduced amount of packaging materials used per unit of shipment volume by 72% compared to FY2008 → Promote greater reduction activities going forward [Overseas Operations] <ul style="list-style-type: none"> Continued promotion of reduction activities in each country </p>

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Environmental Conservation & Creation of Society Coexisting in Harmony with Nature



Item		Specific Action Items/Targets, etc.	Fiscal 2016–2020 Achievements and Challenges for the future
Product development	Reduce gas emissions to help improve urban air quality in each country and region	<ul style="list-style-type: none"> Introduce vehicles with lower gas emissions to help improve urban air quality in each country and region [Japan] <ul style="list-style-type: none"> Bring vehicles to market that comply with Japan's 2016 exhaust emission regulations Research and develop new technologies to comply with new exhaust regulations starting in 2016 [United States] <ul style="list-style-type: none"> Bring vehicles to market that comply with US13, and develop vehicles that comply with U.S. exhaust emission standards effective from 2016 [Europe and developed countries] <ul style="list-style-type: none"> Develop and bring vehicles to market that comply with EURO 6 exhaust emission standards [General] <ul style="list-style-type: none"> Introduce low-emission vehicles (close to EURO 4 or 5) 	<ul style="list-style-type: none"> Made partial improvements to Hino Dutro (light-duty truck), Hino Liesse II (mini bus), and Hino Profia (heavy-duty truck) tractor series.
	Further reduce the use of environmentally harmful materials	<ul style="list-style-type: none"> Collect and manage information on increasing regulations in each country where the Group operates, and take the lead in switching to alternative materials 	<ul style="list-style-type: none"> Collected information on chemical substances contained in parts to quickly address the growing number of regulated substances Enhanced and promoted global chemical substance management
Production and logistics	Reduce substances that impact the environment in production activities (VOC)	<ul style="list-style-type: none"> Promote reduction of VOCs through daily improvements Reduce the use of painting materials and thinners in vehicle painting work <p>Targets in Body Painting Reduction:</p> <p>[Hino Motors, Ltd.]</p> <ul style="list-style-type: none"> Reduction of VOC emissions by 22 grams per square meter of painted surface area <p>[Overseas Operations]</p> <ul style="list-style-type: none"> Broaden initiatives for VOC emissions reductions <p>Other Painting Work Targets:</p> <p>[Hino Motors, Ltd.]</p> <ul style="list-style-type: none"> Set annual reduction targets on a per-vehicle basis every year <p>[Overseas Operations]</p> <ul style="list-style-type: none"> Implement management that leads to reduced emissions (manage amounts) 	<ul style="list-style-type: none"> Improved paint fixing efficiency when spraying paint Collected cleaning thinner when recoloring and cleaning Optimized painting range during automated painting <p>Results:</p> <p>[Hino Motors, Ltd.]</p> <ul style="list-style-type: none"> Achieved 15 grams of VOCs per square meter of painted surface area → Promote initiatives relating to renovation plan for painting equipment and facilities and continued efforts to reduce volatile organic compounds (VOC) through daily improvements <p>[Overseas Operations]</p> <ul style="list-style-type: none"> Conducted research analysis to identify the cause of VOC volume change using constant volume and the trend management method
Social contribution	Implement biodiversity preservation activities locally at factories in every region where the Group operates	<ul style="list-style-type: none"> Promote initiatives based on biodiversity guidelines Carry out regular activities in consideration of the unique ecosystems surrounding the factories in each country and region (including forest conservation and protection of local habitats) Undertake environmental conservation initiatives together with local residents and children 	<ul style="list-style-type: none"> Implemented initiatives that take the surrounding ecosystem into account in each country and region <p>[Japan]</p> <ul style="list-style-type: none"> Maintained the cliff line in cooperation with local groups and municipalities (Hamura Plant) Cleared weeds using goats (Koga Plant) Conducted forest management and nature tour for the 70th anniversary of Hino Motors <p>[Overseas Operations]</p> <ul style="list-style-type: none"> Planted trees on plant grounds, etc. (Thailand, Indonesia, Pakistan, Philippines, etc.) Held classes at nearby schools (Pakistan)

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**2020
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Environmental Management

Item	Specific Action Items/Targets, etc.	Fiscal 2016–2020 Achievements and Challenges for the future
Management Strengthen and promote group environmental management	<p>[Japan and overseas companies]</p> <ul style="list-style-type: none"> Activities to ensure No. 1 of environmental performance in each country and region Comply with environmental laws in each country and region, and enhance activities to prevent environmental risks 	<ul style="list-style-type: none"> Issued periodic reports on environmental performance and improvement initiatives at group companies in and outside Japan Conducted environmental management that considers the entire life cycle of Hino products and required activities to reduce environmental risks Managed activity examples, data, etc. for overseas Group companies and used a self-assessment tool for activity levels Continued to hold seminars and workshops with the aim of further boosting capabilities going forward
Promote environmental activities in collaboration with business partners (Our suppliers)	<p>[Suppliers]</p> <ul style="list-style-type: none"> Compliance with laws by suppliers, and enhance management of substances that impact the environment contained in parts, raw materials, secondary materials, production equipment, etc. 	<ul style="list-style-type: none"> Managed environmentally hazardous substances throughout the life cycle and tackled improving environmental performance, especially implementing measures for achieving carbon neutrality in light of climate change Administered environmental questionnaires in each company to manage environmentally hazardous substances and share the current state of endeavors Took into account global trends in environmental laws and began strengthening and operating internal management systems for environmentally hazardous substances Revised the Green Purchasing Guidelines Periodically confirmed supplier compliance with requests for environmental considerations and cooperation, environmental performance, etc.
Promote environmental activities in collaboration with business partners (Dealers and distributors)	<p>[Sales in Japan]</p> <ul style="list-style-type: none"> Promote environmental activities by sales companies via each Environmental Management System. <p>[Sales outside Japan]</p> <ul style="list-style-type: none"> Grasping the burden on the environment and act continually to raise awareness of the environment 	<p>[Consolidated subsidiaries in Japan]</p> <ul style="list-style-type: none"> Conducted environmental improvement activities at 223 dealers nationwide, including 2 new dealers Supported improvements and upgrades to conclude EMD certification at 223 dealers nationwide <p>[Overseas Sales Operations]</p> <ul style="list-style-type: none"> Shared environment-related data monthly with overseas sales offices Held events to promote environmental awareness during JAPAN Environment Month in June
Improve global human resources development and training programs	<ul style="list-style-type: none"> Systematically implement environmental education Further enhance awareness training programs for every employee 	<ul style="list-style-type: none"> Conducted ISO internal environmental audit education President delivered a message for environmental month (June) The Company will continue actively taking initiatives to improve the environment, including planning events featuring employee participation.
Actively disclose environmental information and enhance communication	<ul style="list-style-type: none"> Enhance provision of information on product environmental technologies in each country and region (e.g. exhibiting at expos) Continually publish sustainability reports and other documents in each country and region, and publish at more sites to enhance environmental communication in each country and region 	<ul style="list-style-type: none"> Actively communicated topics on environmental initiatives and new technologies in news releases Hino USA announced Project Z—The road to zero emissions in the USA Launched demonstration tests for heavy-duty fuel cell trucks from around spring 2022 Participated in the Japan Hydrogen Association Toyota and Hino began efforts aiming to introduce light-duty fuel cell trucks Hino Profia Hybrid won the “Minister Prize of Economic, Trade and Industry” (transportation field) Published a sustainability report every year on the official website to disclose information and outcomes of environmental promotional activities