HONDA
The Power of Dreams

BLUE SKIES FOR OUR CHILDREN

Honda

ENVIRONMENTAL ANNUAL REPORT

2013

Environmental Headlines in 2012

TOP25
Speak on Environmental Outlook

Honda strives to run a global operation in which all levels of management, from the executive level to the factory floor, work together. In this year's Environmental Annual Report, Honda's top 25 environmental exectives offer a systematic perspective on the future outlook of Honda's environmental performance. This content can be found in the Top Message (page 4), a round-table discussion by Honda's six regional environmental committee chairmen (page 6), and discussions between executives and operating managers in each domain (first page of domain sections).

New 'Products' Section Added to Report

Considering that improving the environmental performance of Honda products is necessary and also an effective way to reduce its total environmental impact, Honda introduced a new Products section in this year's report. The section starts off with a discussion (page 26) between the four top exectives involved in product development, with a focus on Honda's plans for advancing impact reductions for automobiles, motorcycles, and power products.

275.91 Million
Total Honda Emissions: 275.91 Million t-CO_2e

Honda calculates greenhouse gas emissions that come from not only its own business activities but also from those of its value chain, which includes all processes from extraction and transportation of raw materials to customer use and end-of-life processing of Honda products. Detailed fiscal 2013 figures are shown on page 44.

Satoyama Management Policy Revised

Honda revised its Community Forest management policy, adding traditional satoyama practices, including forest thinning and the removal of non-native species, to make these forests more functional and beneficial to local communities. (Page 20)

-30%
Yorii Plant Emits 30% Less CO_2

Construction on the Saitama Factory's Yorii Plant, a new automobile plant with an annual production capacity of 250,000 vehicles, reached completion in March 2013. The plant boasts state-of-the-art production technologies and world-leading energy efficiency performance, using 30% less energy per unit than conventional plants. (Page 10)

Online Solar Monitor Launched

As it continues to expand photovoltaic generation capacity at automobile dealers across Japan, Honda launched an online monitor (Japanese only) showing real-time and historical generation data. Total generation capacity reached 1.3 MW as of March 31, 2013. (Page 77)

1, 2, 3
Motor Hybrid Systems Announced

Honda developed three new hybrid systems, customized respectively for optimum performance in small, medium, and large-sized vehicles. The 2-motor Earth Dreams Technology[1] powertrain powers the Accord PHEV in North America, and will be followed by 1-motor and 3-motor products to be released in 2013 and thereafter. (Page 31)

700cc
Application of Next-Gen 700-cc Engine Expanded

A next-generation engine for mid-size motorcycles that was released to much fanfare in 2011 with a 40% fuel economy improvement over conventional engines was introduced in a larger line of models in fiscal 2013 to boost environmental performance of mid-size motorcycles worldwide. (Page 36)

CO_2 (Automobiles) -15.2%
CO_2 (Motorcycles) -27.4%
CO_2 (Power products) -14.7%

Honda cut CO_2 emissions further in fiscal 2013, reducing emissions by the above amounts from 2000 levels as it sought to meet its 2020 Product CO_2 Emission Reduction Targets (30% reduction). (Page 22)

Rare Earths Recycling Launched

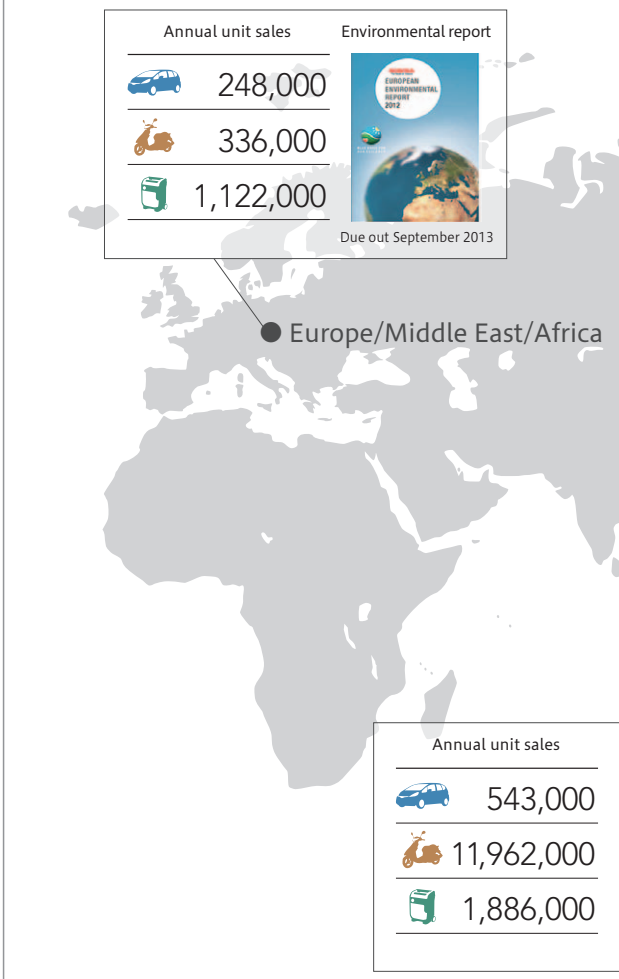
Honda became the first company in the world[2] to establish a system for recycling rare earths on a production scale. The precious elements are extracted from used nickel–metal hydride batteries from hybrid vehicles and processed for reuse in new batteries. (Page 80)

1. "Earth Dreams Technology" is a next-generation powertrain series that greatly enhances both driving performance and fuel economy, building on advancements in environmental performance for internal combustion engines, transmission efficiency, and electromotive technologies to pursue a joy of driving unique to Honda.
2. Honda internal research

Reducing and Reporting Environmental Imp

Driven by our philosophy of building products close to the customer, Honda has manufacturing operations in 6 regions worldwide. In fiscal 2013, we delivered 26 million products to customers around the world. Always conscious of the environmental impact of our operations, we are working hard to take environmental responsibility to ever-higher levels around the world. In 2010, we established a new set of CO_2 emission reduction targets for our products, aiming by 2020 to provide "good products to customers with speed, affordability, and low CO_2 emissions." As we seek to realize the Honda Environmental and Safety Vision—to realize the joy and freedom of mobility and a sustainable society where people can enjoy life—based on these targets, we are accelerating global efforts to address climate change, energy issues, and other environmental challenges. And amidst increasing global pressure on companies to disclose their environmental impacts, we are actively working to disclose the environmental performance and initiatives of each region, the highlights of which are compiled yearly in regional environmental reports.

Annual unit sales by region (FY



■ Information on Honda in Japan

Company overview

Company name: Honda Motor Co., Ltd.

Head office: 2-1-1 Minami Aoyama, Minato-ku, Tokyo 107–8556, Japa

Established: September 24, 1948

President & CEO: Takanobu Ito

Capital: ¥86.067 billion (as of March 31, 2013)

Sales: Consolidated: ¥9.878 trillion (Results of FY2013)
Unconsolidated: ¥3.244 trillion

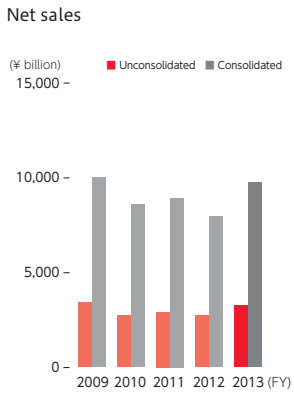
Consolidated subsidiaries: 369 (as of March 31, 2013)

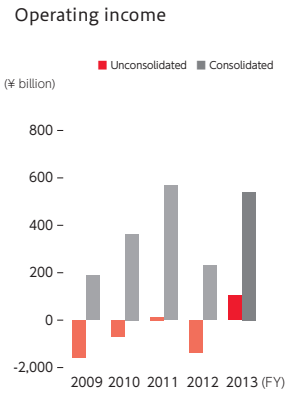
Major products: <Automobiles> Standard-sized vehicles, compact vehicles, and mini-vehicles

<Motorcycles> Scooters, mini-bikes, motorcycles, and ATVs

<Power products> Power product engines, lawnmowers, marine outboard engines, CIG thin film solar cells, and household gas engine cogeneration units

Financial information



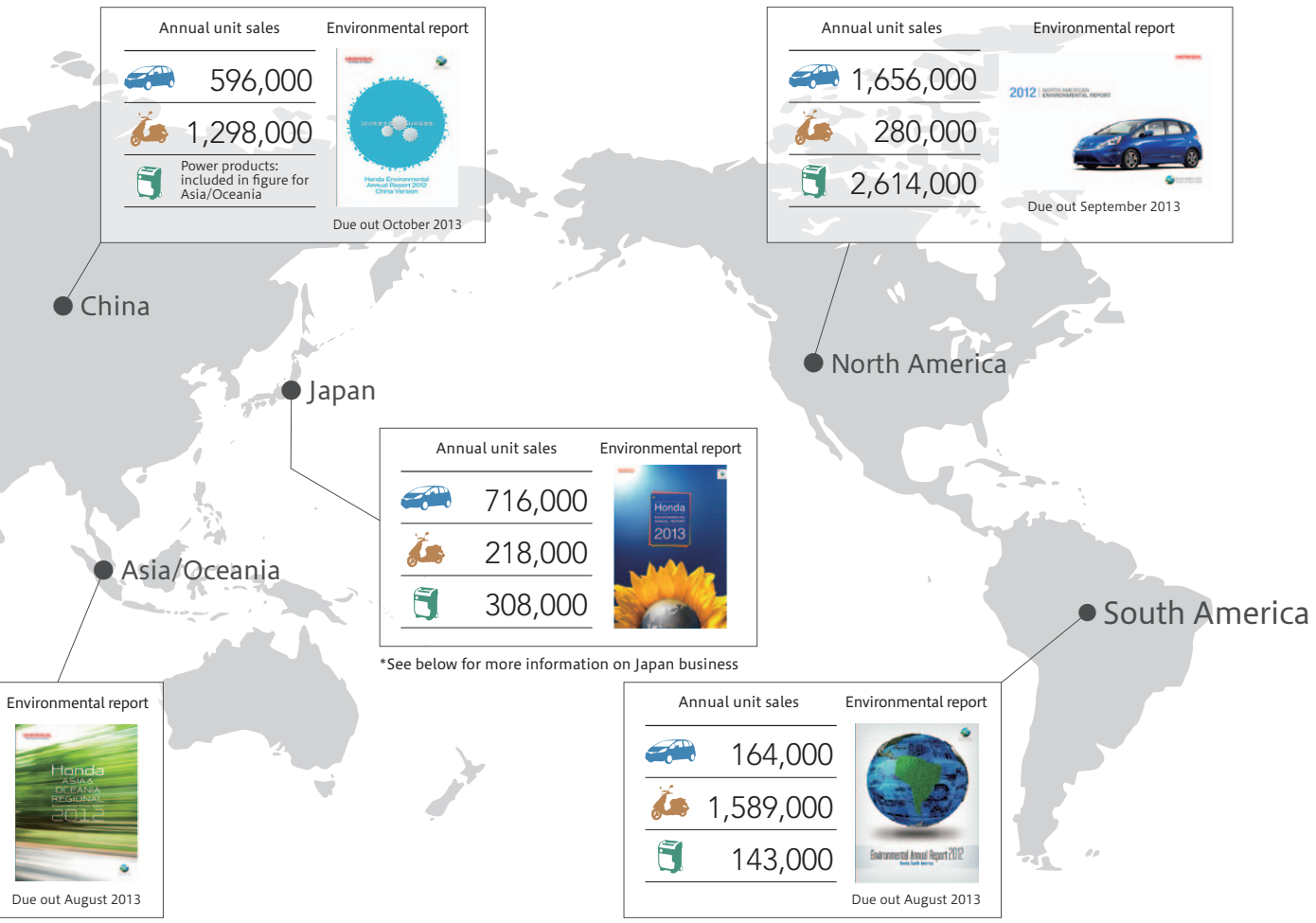


acts in 6 Regions Worldwide

2013), and regional environmental reports

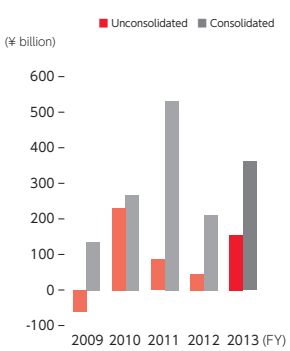
Automobiles Motorcycles Power products and other

Latest data as of March 31, 2013

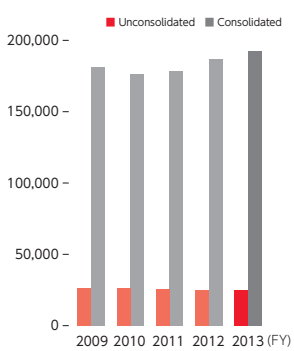


*Report covers from fiscal 2012 are shown for all regions except Japan

Net income

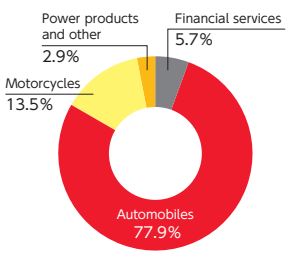


Number of associates



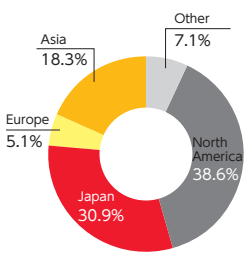
Net sales by operational area

(consolidated: FY2013)



Net sales by region

(consolidated: FY2013)



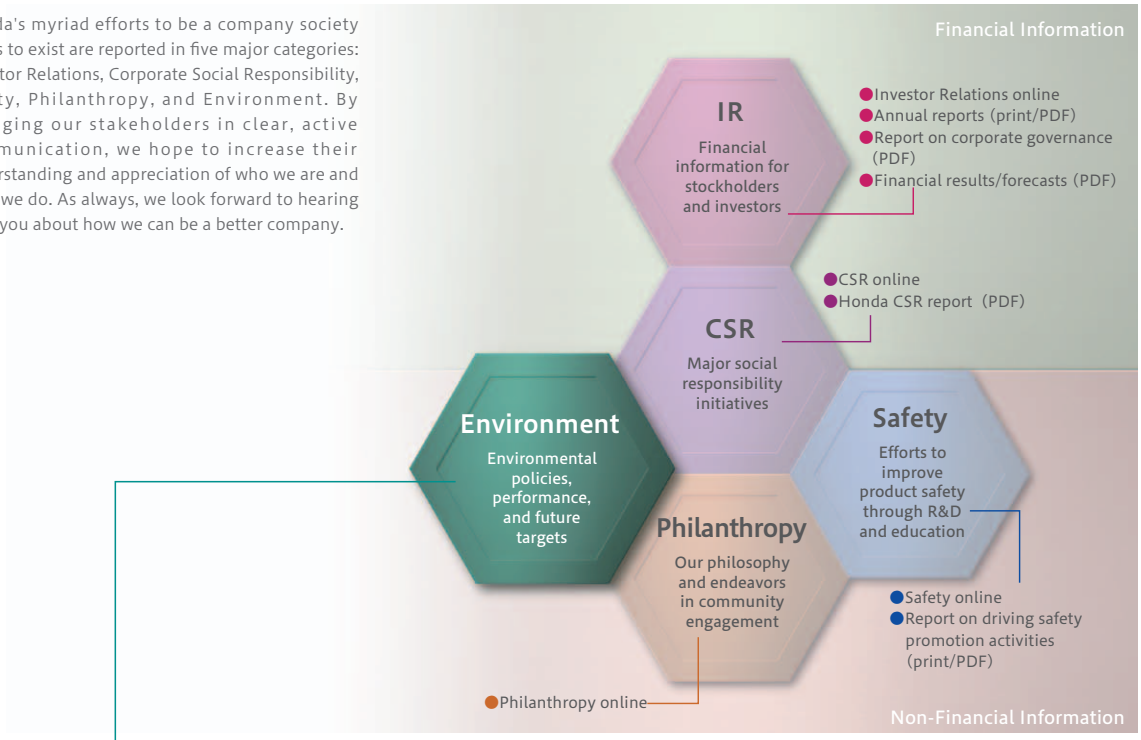
*See Honda Annual Report (print/PDF) for detailed financial information.

• 5 Categories of Honda Corporate Reporting

Honda Corporate Reporting Map

http://www.honda.co.jp/csr/library/

Honda's myriad efforts to be a company society wants to exist are reported in five major categories: Investor Relations, Corporate Social Responsibility, Safety, Philanthropy, and Environment. By engaging our stakeholders in clear, active communication, we hope to increase their understanding and appreciation of who we are and what we do. As always, we look forward to hearing from you about how we can be a better company.



Environmental Annual Report and Other Environmental Disclosure Channels

Honda recognized early on that finding and implementing solutions to environmental problems was one of the highest priorities for its business. We published our first Honda Environmental Annual Report in 1998, informing the public on our environmental initiatives every year ever since. This year's report is the 16th edition.

Honda Environmental Annual Report 2013 conveys our stance on environmental issues, our goals for a better future, and detailed results of efforts to make our products and business activities more environmentally friendly. Product-related content is focused on individual products and technologies that were announced or released during the reporting year. Business activities are reported from a life-cycle perspective, with emphasis given to yearly results and progress made toward meeting environmental targets in each domain of our operations.

Environmental Documentary—Honda Face presents our environmental initiatives in a style and format that is easy for the general public to understand.

*For updates, please visit the Environment section of the Honda Worldwide website:
http://world.honda.com/environment/index.html

Honda Environmental Annual Report (print/PDF/Web)

The Honda Environmental Annual Report is intended mainly for our stockholders and other investors. By disclosing environmental information in a transparent manner, we aim to fulfill our corporate social responsibility and build trust and a positive reputation among more stakeholders.

Environmental Documentary —Honda Face

Environmental Documentary—Honda Face is an online magazine for a more general audience, introducing Honda's environmental initiatives with a spotlight on the passionate associates who work behind the scenes.

Honda Face http://world.honda.com/environment/face/

• Third-Party Verification

To disclose environmental impact data in a more transparent and reliable manner to our diverse stakeholders, Honda obtained third-party verification of the following information from Bureau Veritas Japan Co., Ltd.

<Organizational scope of verification>Environmental impact data from Honda Motor Co., Ltd. and 481 consolidated and affiliated companies in Japan and overseas.

Environmental impact data verified: Energy consumption, greenhouse gas emissions, water use, wastewater volume, waste generated, waste recycled, waste landfilled, waste sold for reuse*, atmospheric pollutant emissions, (NOx, SOx), VOC emissions*, PRTR emissions*, CO_2 emissions from product use (scope 3, category 11)
*Data from Japan only

ENVIRONMENTAL ANNUAL REPORT 2013

Key indicators of Honda's environmental performance

CARBON DISCLOSURE PROJECT **2nd in Japan**

In the Carbon Disclosure Project's (CDP) 2012 survey, Honda earned a higher disclosure score than in 2011 and was the second-highest scoring Japanese company in the Global 500*. We also placed in the Carbon Disclosure-Leadership Index (CDLI) for the second year running.

*Global 500: The 500 largest companies (by market capitalization) that make up the FTSE Global Equity Index Series.

16th Nikkei Environmental Management Survey **9th place**

Honda ranked 9th out of 1,730 manufacturers examined in the 16th Environmental Management Survey by news publishing company Nikkei Inc.

Newsweek Green Rankings 2012 **TOP 250**

Honda was chosen among the top 250 global companies in the 2012 Green Rankings by Newsweek.

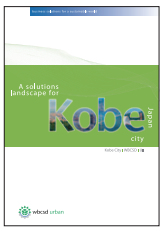
Buna-no-Mori Environmental Survey 2012 **Rank A**

Honda earned the highest rank, rank A, in the 2012 Buna-no-Mori environmental survey by NKSJ Risk Management, Inc., and was also selected as a component of the Buna-no-Mori eco-friendly investment fund.

Environment-related external relations activities

Honda is a member of the World Business Council for Sustainable Development (WBCSD), and a member of the WBCSD's Urban Infrastructure Initiative (UII) Core Group. In May 2013, the UII presented a report outlining several proposals to help Kobe city achieve its sustainable development objectives. We took part in the dialogue with Kobe and in drawing up plans for sustainable mobility infrastructure. We also are participating in Vision 2050 activities and Sustainable Mobility Project 2.0.

wbcsd member



WBCSD-UII
A solutions landscape for Kobe

Honda also conducts various external relations activities in collaboration with policy makers in each region. We advise regional and national governing bodies on how to make mobility systems environmentally sustainable from a technological standpoint, partner with governments for conducting technology development projects, and serve on committees held by national government agencies.

Public-Private Partnerships:
E-KIZUNA Project (Saitama Prefecture, Japan),
California Fuel Cell Partnership (California, U.S.), and others

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The Road to a Healthier Environment

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Japan
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● Reporting period : Fiscal year (FY) 2013 (April 1, 2012 - March 31, 2013). Note: The report also refers to activities in FY2014, as well as to previous ongoing initiatives. Publication of last year's report: June, 2012.
● Organizational scope : This report covers the entire Honda Group, including Honda Motor Co., Ltd. and its 455 consolidated subsidiaries and affiliates (369 consolidated subsidiaries, 86 equity-method affiliates). All reported data covers to the entire Honda Group unless otherwise noted. Detailed information about the main companies covered by this report can be found in the financial statements issued in June 2013. (The number of companies covered in this report changed throughout the course of fiscal 2013 due to company mergers and other developments.)
This report features detailed information on environmental initiatives in Japan by major consolidated group companies (listed below), with a special focus on initiatives by Honda Motor Co., Ltd. ■ Honda R&D Co., Ltd. ■ Honda Engineering Co., Ltd. ■ Honda Access Corporation

Environmental Headlines in 2012

Reducing and Reporting Environmental Impacts in 6 Regions Worldwide

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The Seven Domains of Honda Business Activities

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GRI Guideline Index

Guideline used: G3 Guidelines, Global Reporting Initiative / G4 Guidelines, Global Reporting Initiative / Environmental Reporting Guidelines (2012), Ministry of the Environment, Japan / Environmental Reporting Guidelines (2007), Ministry of the Environment, Japan / Environmental Reporting Guidelines (2005), Ministry of the Environment, Japan
Note: Guidelines and methods used to calculate specific categories of data are noted individually in the report.

Striving to Realize the Joy and Freedom of Mobility and a Sustainable Society where People Can Enjoy Life

In 2010, Honda announced its direction for the decade leading up to 2020: to provide "good products to customers with speed, affordability, and low CO_2 emissions." The Honda Environmental and Safety Vision—to realize "the joy and freedom of mobility and a sustainable society where people can enjoy life"—was established based on this direction. Providing the joy and freedom of mobility has been Honda's aim in the development of personal mobility products since the company's founding. The joy of mobility is not just the pleasure of driving your own car or motorcycle. It's also the excitement of making discoveries and realizing dreams through the freedom mobility provides. Realizing a sustainable society where people can enjoy life, on the other hand, will require us to focus corporate resources on addressing climate change and energy issues as top priorities. To realize the two components of our Environmental and Safety Vision, we will lead the industry in offering outstanding environmental and safety performance with products and technologies that proudly bear Honda's identity.

Locations: Forest in Hello Woods, located next to the Twin Ring Motegi speedway

Global operational reform

To thrive in an ever-changing global economy and market, Honda must transition to a new global organizational structure that, in every region (the six regions into which Honda has organized its worldwide operations), consistently rolls out competitive products that target local needs before other companies.
Specifically, we need to finish the work of assembling an organization that is globally optimized for producing the best products for all of our customers. This includes building development capacities for responding quickly to market needs, enacting product design and procurement structure reform, and further improving production efficiency, all while adapting these organizations and facilities to national and local industrial infrastructure in rapidly growing economies in developing nations as well as in mature economies.
The same goes for environmental management. Honda puts climate change and energy at the top of the list of global environmental issues that it needs to address. To respond to the environmental laws, standards, and challenges unique to each country and region, we believe reducing environmental impacts based on firm regional autonomy is the most appropriate business organization for Honda.

Awareness of the challenges: 2013 a year of action

Last year, we announced estimates of all greenhouse gas (GHG) emissions that resulted from Honda business activities in fiscal 2012. These figures, calculated in accordance with the Greenhouse Gas Protocol, the most widely used GHG accounting and reporting standard worldwide, included data on Scope 3 (which includes emissions from use of sold products), making Honda the first automaker in the world to release emissions data covering its entire value chain.
In fiscal 2012, Honda emitted the equivalent of 225 million tons of CO_2. Of that, 196 million tons—or 87%—came from the use of Honda products sold in that year (which includes GHGs emitted across their lifespans now and into the future). Clearly, improving the fuel efficiency of products must be our core strategy for reducing CO_2 emissions, but we think that taking all available actions to reduce emissions—regardless of the size of their impact—is the responsible approach to take as a corporate citizen.
Until last year, Honda's focus in this area was on doing research to understand the size of our environmental footprint. The next stage will include monitoring and managing GHG emissions across our value chain and devising and implementing specific strategies to reduce them, such as expanding hybrid options to our entire lineup and commencing operation of the environmentally advanced Yorii Plant. Expanding this approach beyond CO_2 emissions to include all types of environmental pollutants, improving monitoring accuracy, and realizing further reductions, will be our environmental management policy for the years ahead.

June 2013

BLUE SKIES FOR
OUR CHILDREN

President & CEO
Chairman, Honda World Environmental
and Safety Committee

Being “A Company Society Wants to Exist” in All Corners of the World

Honda's six regional environmental committee chairmen look back on fiscal 2013 and forward to the years ahead

Honda manages its global production and sales networks through an organization divided into six regions: North America, South America, Europe, Asia & Oceania, China, and Japan. Six regional environmental committees, one for each region, set their own policies and plans for environmental initiatives based on the global direction and supervise and evaluate the divisions that carry out these plans. For the publication of this year’s report, the six committee chairmen were gathered and asked to provide a review of activities in fiscal 2013 as well as their future outlook for global operations.

Tetsuo Iwamura
Honda North America Regional Environmental Committee Chairman

Masahiro Takedagawa
Honda South America Regional Environmental Committee Chairman

Manabu Nishimae
Honda European Regional Environmental Committee Chairman

Hiroshi Kobayashi
Honda Asia & Oceania Regional Environmental Committee Chairman

Seiji Kuraishi
Honda China Regional Environmental Committee Chairman

Sho Minekawa
Honda Japan Environmental Committee Chairman

Interviewer: Michio Shinohara, General Manager,
Environment & Safety Planning Office

Honda South America
Regional Environmental Committee Chairman
Masahiro Takedagawa

"Next year we will begin operating a wind farm that will satisfy all the electricity needs of our automobile plant in Brazil."

What is each region like?

First, please tell us what defines your region in terms of market characteristics and environmental challenges.

●Iwamura: North America is in many ways an environmentally advanced region with very eco-conscious public and private sectors. This is true not only of the U.S., which has the most stringent environmental regulations in the world, but also Canada and Mexico, which tend to follow U.S. regulations. So as a whole, North America is a region that's rather tough on environment requirements. At the center is the U.S.; its government makes decisions based on hearings with various private sector interests. Honda engages in a wide range of communication activities to take advantage of these opportunities and convey to the government our stance and how companies should act on key issues, and get those ideas reflected in long-term environmental policies.

●Takedagawa: South America's largest market, Brazil, has for the last 40 years been promoting the use of sugar cane-derived bioethanol fuel as a national policy. During that time, flex-fuel cars and motorcycles have moved into the mainstream. Other innovative efforts include the development of the world's largest environmental protection system, a system to monitor the Amazon rainforest using satellite technology, and the passing of an environmental crimes law, which is unusual on a global level. National environmental programs outside Brazil vary widely, so today I would like to talk mostly about Brazil, which is the most important market for Honda in South America.

Honda North America
Regional Environmental
Committee Chairman
Tetsuo Iwamura

●Nishimae: Europe has watched its automobile market contract in a deteriorating economic environment, from 16 million units in 2006 to less than 12 million units last year. Consumers are wanting smaller and more fuel-efficient vehicles. Another notable trend in recent years has been the dominance of diesel, which now accounts for more than 55% of the market. Diesel engines with a capacity of 1.6 liters or less are particularly popular among fuel-efficient models. With the EU targeting a mandatory CO_2 emission limit for passenger cars of 95 g/km—one of the lowest in the world—by 2020, environmental regulations across Europe are also becoming increasingly strict.

●Kobayashi: Asia and Oceania is a very broad region that extends from Pakistan in the west to South Korea in the east, and as far south as Australia and New Zealand. As a result, a wide divergence in environmental awareness between countries is one characteristic of this region. Within that context, the automobile market in India and other emerging countries is growing quickly, which has been met with moves in these countries to introduce more progressive environmental regulations. This region also has the highest sales of Honda motorcycles, so what we do to the environmental performance of motorcycle products here will have a large impact on Honda elsewhere.

●Kuraishi: China is now the largest mobility market in the world, selling roughly 20 million cars and 25 million motorcycles a year. This has led the national government to set very high environmental targets and ordinary people to take more interest in environmental issues. The actual response to these issues is still inadequate when you look at, say, the problem of fine-particle pollution, but the environment is, as you would expect, a major pillar of Honda's business in China. Looking to the future, we are actively expanding the application of hybrid technologies for automobiles and electronic fuel injection (see note) for motorcycles, and aim to be the most environmentally responsible automaker as we continue growing in this market.

●Minekawa: Japan's triple disaster of two years ago: the earthquake, tsunami, and nuclear meltdown, have had a huge impact on the minds of Japanese people. Since then, customer expectations with regard to sustainability and renewable energy have risen substantially, meaning that companies who are failing to respond decisively to these expectations will be left behind. Furthermore, local public transport systems are going bankrupt more often due to the decline of Japan's rural population, which is increasing the need for personal vehicles as a means of transportation. Honda hopes to offer viable solutions to issues like these.

Note: Programmed Fuel Injection (PGM-FI)

"In North America, we've begun the highly consequential mission of trying to meet the new fuel efficiency standards set for 2025."

Honda Asia & Oceania Regional Environmental Committee Chairman
Hiroshi Kobayashi

"Supplier selection and development is the key to expanding local production and procurement in Asia."

Fiscal 2013 in review

Thank you for your informative description of each region. Next, what were the most important events that happened in your region in fiscal 2013, on both the business and environmental fronts?

●Iwamura: North America launched in April 2012 a Green Dealer program for Acura dealers and Honda automobile dealers in the U.S. The program is meant to encourage a stronger commitment to environmental conservation by awarding silver, gold, or platinum status to dealers based on their environmental efforts and achievements. By the end of fiscal 2013, 40 dealers were awarded, and we plan to increase this to 100 dealers by the end of fiscal 2014. We also established a partnership with a company to lease solar equipment to our customers dealers to encourage them to install solar. In production, our transmission plant in Ohio announced in January 2013 plans to develop and begin operation of a wind farm by the end of 2013. The wind farm is expected to cover about 10% of the plant's electricity needs.

●Takedagawa: In South America, we held two regional environmental committee meetings where we discussed environmental performance at production sites in each country and exchanged ideas for improvement. An increasing number of sites are using smart meters and switching from liquid paint to powder coat. Fuel-efficient products were released, including the Civic and CR-V, both equipped with Eco Assist, and the PCX150 scooter with an idling stop system. In transportation, we worked to reduce both cost and CO_2 emissions by increasing the number of motorcycle units per land shipment and by shifting to marine transport.

Honda European Regional Environmental Committee Chairman
Manabu Nishimae

●Nishimae: In Europe, we were excited to introduce a small, 1.6-liter diesel engine—which was a highly anticipated component business-wise—in the Civic, which also marked the debut of Earth Dreams Technology in the region. In spring of last year we started demonstrating a new electric scooter in Barcelona, Spain, and we also released a robotic lawn mower under the name Miimo. We're making continued efforts to reduce CO_2 emissions, for example by installing solar panels at plants and parts warehouses, and by searching for more efficient routes and modes of transport within the complex European distribution system.

"In Europe, we will bolster our position by revamping all automobile engines over the next three years."

●Kobayashi: Asia & Oceania posted spectacular business results in fiscal 2013. Automobile sales volume exceeded prior year results by a wide margin in all countries and set a new all-time record for the region. Thailand, India, Indonesia, and a few other countries posted their own record sales. A new power product sales record was also set for the region. Environmentally, we've been pushing hard to reduce CO_2 emissions from product use, for example by expanding our lineup of electronic fuel injection-equipped motorcycles in Indonesia and raising fuel efficiency levels for new motorcycle models in Thailand and India. For automobiles, we began local production of hybrid vehicles in Thailand and Malaysia.

●Kuraishi: China saw its second consecutive year of declining automobile sales. This was largely due to impacts from the disaster in Japan and flooding in Thailand two years ago, and the Senkaku Isl ands issue last year. To promote the popularization of hybrid vehicles, we introduced the Insight, CR-Z, and ILX hybrid, and set the stage for full-scale adoption of eco-cars by hosting test-drive events and demonstrating the Fit EV in Guangzhou. Contrastingly, we succeeded in expanding our share of the motorcycle and power equipment markets. In production, Dongfeng Honda launched a second plant and Guangqi Honda a third production line, both of which were designed for better environmental performance and associate comfort, by recycling waste heat and using more natural light in offices, among other improvements.

●Minekawa: Japan achieved a significant increase in automobile sales in 2012, the driving force behind which was the release of the first mini-vehicle in Japan to feature an Earth Dreams Technology powertrain. We also worked on expanding our hybrid lineup, and the customer response to these efforts showed us that environmental awareness and the demand for better fuel efficiency is getting stronger and stronger. We also increased solar generation capacity at Honda dealers and added a web page showing in real time how much solar electricity is being generated at Honda operating sites and dealerships, which is a major step forward in communicating effectively with our

Honda Japan Environmental Committee Chairman
Sho Minekawa

"R&D, production, and sales divisions need to work together and figure out how to get satisfying products to more people."

external stakeholders in Japan. These achievements will form the basis for company efforts in fiscal 2014.

Strategies and ambitions for the future

It appears that progress is being made in both business and the environment in each region, with the right balance being struck between the two. In closing, please tell us your region's action plan for business and the environment in the years ahead.

●Iwamura: In North America, we've begun the highly consequential mission of trying to meet the new fuel efficiency standards set for 2025. If we don't clear these demanding targets, we won't be able to continue doing business. Not only do we need to strengthen the competitiveness of our hybrid lineup but we also need to dramatically increase the fuel efficiency of our gas-engine models. Companies that accomplish this efficiently, quickly, and cheaply will be the ones to flourish in this market. For Honda to flourish, we will bring to bear all the power we have as a company, based on close coordination between front-line associates in development, manufacturing, and sales.

●Takedagawa: In South America, we adopted the South America Honda Environment Statement at a regional environmental committee meeting last February. The declaration articulates our decision to put to use all human creativity and wisdom and do our very best to achieve environmental impact reductions and sustainable business activities. As a way of acting on our promise, we plan to develop enough wind capacity to satisfy all the electricity needs of our automobile plant in Brazil, which produces 160,000 units per year. The wind farm is scheduled to go into operation in September 2014 (see page 48). For products, we will market new eco-conscious motorcycle and automobile engines under the name Flex One and engage in branding activities to show how Honda is an environmental leader.

Honda China Regional Environmental Committee Chairman
Seiji Kuraishi

●Nishimae: In Europe, we plan to meet customers' needs for low emissions, high fuel-economy by revamping all automobile engines over the next three years. We hope to maintain our strong motorcycle reputation in Europe, the biggest market for sport-touring crossover bikes, by leveraging the fuel-efficient NC700 series. Honda's approach in Europe for the coming years will be about bolstering our position as a company society wants to exist while thinking about the environment and offering advanced environmental technologies in all products—automobiles, motorcycles, and power equipment.

●Kobayashi: Asia and Oceania is expected to continue showing impressive growth, but environmental regulations in a number of countries will become increasingly strict. To get the upper hand in this environment we need to expand local procurement and production and find and develop new local suppliers. The key to future business is developing suppliers that can share Honda's position on the environment and will work with us to reduce impacts. Although awareness and activity vary between countries, we hope to speed up progress by actively promoting the sharing of best practices and bringing everyone up to the same level.

●Kuraishi: In China, Honda takes it as its mission to actively increase penetration of eco-conscious engines, the most prominent being the hybrid engine. To that end, we are making preparations to begin local hybrid production within the next three years. As we aim to become the environmental leader and offer the most fuel-efficient products in each category, we will also strive to deliver outstanding value that satisfies our Chinese customers in areas beyond environmental performance as well. By doing so, we hope to be a brand that is well-loved and that encourages positive excitement for the future.

●Minekawa: In Japan, public expectations surrounding renewable energy and the environment have risen tremendously. Honda's technological answer to those expectations actually already exists. All that's left is to determine how affordably we can provide the technologies to our customers. R&D, production, and sales divisions need to work together to figure out how to deliver good products to customers with speed, affordability, and low CO_2 emissions. Solving this problem is an important key to achieving higher growth for our business.

Thank you all for your time today.

"In China, we're making preparations to begin local hybrid production within three years."

The New Yorii Plant, an Experiment in Satoyama Restoration

Last March, Honda finished construction on a new 250,000-vehicle plant in Saitama, Japan. Set to begin operating in July, the Yorii Plant is not only a state-of-the-art manufacturing compound boasting world-leading energy efficiency and the most advanced equipment available, but, with more than 30% of its land area devoted to vegetation and riparian habitat, it is also ecologically responsible, specially designed for building harmonious relationships with the surrounding human and biological communities.

Yorii designated as leader of global Honda manufacturing

In July 2010, Honda announced that the Yorii Plant will be indispensable in efforts to establish the highly sophisticated next-generation manufacturing technologies necessary for the production of environmentally responsible products and development of low-carbon manufacturing. Equipped and designed to function as one of the leader plants in Japan of Honda's manufacturing sites in 27 countries, the Yorii Plant is absolutely packed with cutting-edge environmental technologies.

● **Product specialization yields 30% reduction in energy use**
Customizing the plant for production of compact vehicles—such as the new Fit to be released this year—and loading it with dedicated machinery and technologies has resulted in an extremely efficient production system. In fact, combined with the latest energy conservation and management technologies, this system uses 30% less energy per unit[1].

● **2.6 MW of solar power—the most of any auto factory in Japan**
Installation of Honda Soltec-brand CIGS thin-film solar panels on rooftops and other surfaces is underway, with plans to increase total generation capacity to 2.6 MW by August 2013—the most of any auto factory in Japan. This is enough to power 459 typical Japanese homes[2], and should cut CO_2 emissions by roughly 1,200 tons per year.

● **Produces 28% of the energy it uses through cogeneration**
Faced with nationwide restrictions on electricity use following the 2011 disaster, the Yorii Plant was equipped with a natural gas-powered cogeneration system that will meet 28% of its electrical and thermal energy needs, reducing the plant's peak power demand by 45%. Using energy from the system, which is about twice as efficient as energy from the grid, will cut emissions by roughly 3,000 t-CO_2 per year.

● **New paint technologies reduce CO_2 emissions by 40%**
Body coating processes at the Yorii Plant will use a newly developed paint technology called Honda Smart Ecological Paint as well as a newly developed wall-mounted robotic painting system. These innovations result in a 40% shorter coating line and 40% fewer CO_2 emissions compared to conventional lines.

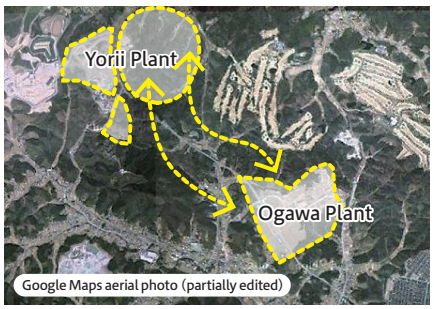
Toward better relationships with life of all kinds

The Yorii Plant is not just about cutting-edge hardware. It is also a testing ground for pioneering efforts in community engagement and environmental conservation. Efforts here will serve as a model for other Honda plants around the world.

● **Built to support healthy, active ecosystems**
Before the plant's construction, Honda hired experts to survey the site and conduct an environmental assessment. Their survey showed that the site and the area around it was once an expansive satoyama environment, one that in modern times had fallen into disuse. Meanwhile, the environmental impact assessment showed that the construction of a plant here would have, as expected, a

1. Compared to the Saitama Factory's Sayama Plant
2. Honda calculation (annual electricity use of typical Japanese home: 5,650 kWh; CO2 emission factor: 0.464 t-CO2/MWh, fiscal 2011 figure published by Tokyo Electric Power Co., Ltd.)

Green corridor

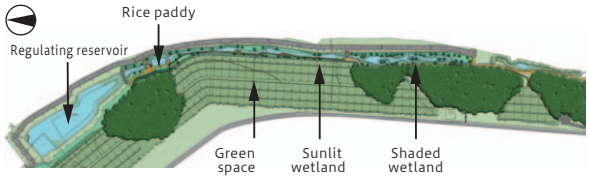


The area between the Yorii Plant and nearby Ogawa Plant forms a broad ecosystem that was preserved to keep wildlife populations from being separated. Restoration and conservation efforts are happening throughout this area.

Some of the rare animal and plant species living near Yorii Plant

Top: Rare animals - Tokyo salamander (Hynobius tokyoensis), Stone loach (Lefua echigonia), Japanese firefly (Luciola cruciata), Great purple emperor (Sasakia charonda)
Bottom: Rare plants - Hakuun-ran (Vexillabium nakaianum), Tokyo wood fern (Dryopteris tokyoensis), Hardy orchid (Bletilla striata), Japanese bugbane (Cimicifuga japonica)
Biotopes and other areas for conserving and creating new habitat for rare species were included in the plant construction plans. Biodiversity surveys and management will be conducted regularly even after the project is over.

East biotope



The east biotope was publicized at a press conference in April 2013.

Reintroducing rare species

Rare species were captured, bred, and reintroduced to the biotope under expert guidance. Surveys later showed the species were establishing themselves and thriving.

Tokyo salamander (left), Stone loach (right)

sizable impact on the surrounding environment.
Facing these findings head-on, Honda decided that the most responsible thing to do as a company that strives to operate in harmony with its surroundings would be not only to minimize the impact of the plant's construction on the environment but to stimulate the natural environment through the creation and continued maintenance of new habitat, and restore the satoyama to its original condition.

● 16,000 m² of life-sustaining biotope

Satoyama are rural areas in Japan where humans have actively managed and taken care of the natural environment while sustainably benefiting from the services they provide. The neglect of a satoyama environment causes it to deteriorate, adversely impacting the wildlife it supports.
Honda undertook to conserve and even create new habitats for animals and plants living in the site and the surrounding area, particularly species endemic to Yorii. We dedicated 326,000 m², or 34%, of the site's 950,000 m² to vegetated land and riparian habitat for wildlife.
The east and west biotopes, which comprise mixed woodlands, streams, rice paddies, and wetlands, total 160,000 m² and are given central importance in Honda's effort to cultivate a diverse ecosystem at the Yorii Plant. Special care was also taken to ensure that plants and animals can move freely from these biotopes to other vegetated land and wetland on site, and farther to unmanaged areas beyond the plant. This continuous biological community forms a green corridor[1] that extends as far as the Ogawa Plant about two kilometers away.

Surveys show positive trend in biodiversity conservation

● Conserving rare animal species

During construction, Honda took utmost care to preserve habitat for rare species. From the habitats of the Tokyo salamander, stone loach, and Japanese firefly—three species that have difficulty relocating and were thought to be particularly vulnerable to the construction—that could not be saved, individuals were captured and bred indoors and then later reintroduced to the biotopes.

● Conserving rare plant species

Rare plant species, such as the Tokyo wood fern, Hardy orchid, and Japanese bugbane, were conserved via transplantation. The Hakuun-ran, a type of orchid that was on Saitama Prefecture's endangered species list at the time, was given special attention. The population was preserved by propagating it through artificial pollination and growing them in sterile culture media.

● Increase in rare species confirmed

As a result of these efforts, surveys confirmed that the number of rare animal and plant species on site has been increasing since before construction of the plant.

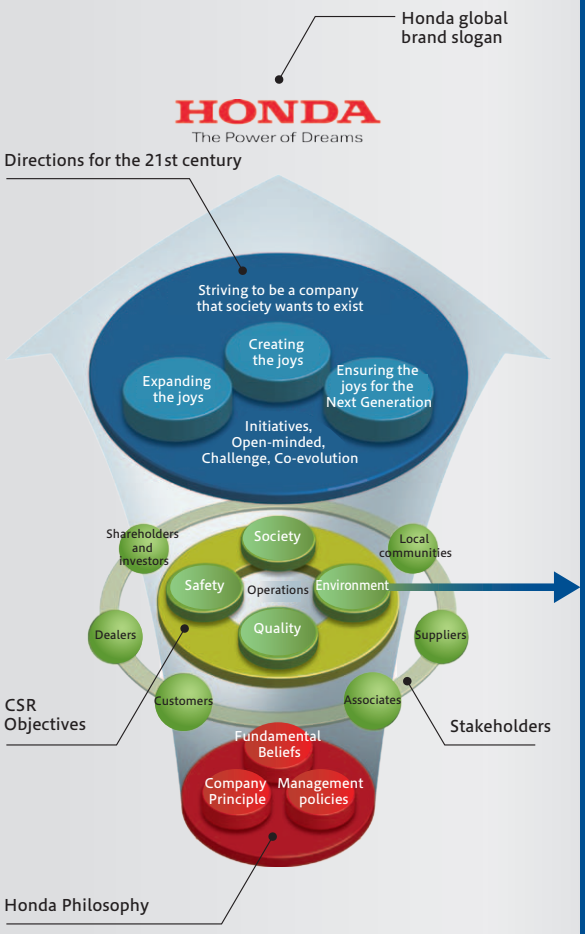
- Rare animals 69 species (2007) → 73 species (2010-2012)
- Rare plants 29 species (2007) → 35 species (2010)
- Number of rare species confirmed per area of vegetated land
  6 species/ha (2007) → 15 species/ha (2010)

In a program developed by the Japan Business Initiative for Biodiversity and Tohoku University for measuring the success of eco-conscious land use projects and conservation initiatives[2], the Yorii Plant scored an impressive 84 out of 100.
By continuing to support and expand conservation initiatives like these, Honda will strive to build relationships of symbiosis and mutual growth between the Yorii Plant and the surrounding communities.

1. An unbroken stretch of wildlife habitat preserved within a developed area.
2. A 100-point self-assessment developed for evaluating the contribution of a land use project to biodiversity conservation, as measured for example by the area, quality, and organizations and systems dedicated to management of vegetated land.

Direction

The Road to a Healthier Environment



Honda Approach to CSR

Propelled by the Honda Philosophy, we set our course on being a company that society wants to exist by sharing joys with people throughout the world.

Honda's approach to environmental initiatives

(1) Based on our basic goal of reducing environmental impacts at every stage in the life cycle of our products, we (2) strive to realize the joy and freedom of mobility and a sustainable society where people can enjoy life. We (3) recognize climate change and energy issues as the greatest challenge to our business, resource problems as a major challenge, and biodiversity as a serious concern. We established (4) a future vision to achieve zero CO_2 emissions, zero energy risk (through our energy management technologies), and zero waste to tackle these challenges, and announced and are now implementing concrete measures to do this (5) for our products and (6) in our business activities.

1. Honda Environmental Statement

2. Honda Environmental and Safety Vision

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

BLUE SKIES FOR OUR CHILDREN

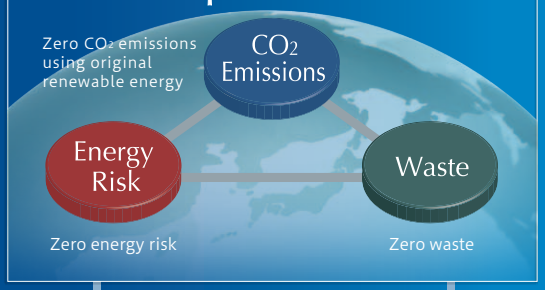
Honda global environmental symbol

3. Assessment of environmental issues

Greatest challenge	Major challenge	Concern
Climate change and energy issues	Resource problems	Biodiversity

4. Honda's vision for future operations

Triple ZERO



5. Product-based initiatives

HEPS
Honda Environmental Performance Standard
Hi Efficient Products
Innovative Products
Revolutionary Products

6. Operations-based initiatives

Honda Environment Statement

Honda has endeavored to solve environmental problems since the 1960s. We introduced the Compound Vortex Controlled Combustion (CVCC) engine, becoming the world's first automaker to comply with the 1970 U.S. Clean Air Act—a challenge thought by many at the time to be insurmountable. In 1992, we released the Honda Environment Statement to articulate the basic stance we had developed until that time to reduce environmental impacts at every stage in the life cycles of our products. Today, this Honda Environment Statement is the foundation upon which we carry out all of our environmental efforts.

Honda 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 activity. Only in this way will we be able to count on a successful future not only for our company, but for the entire world.
We should pursue our daily business interests 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 services and disposal.
2. We will make every effort to minimize and find appropriate methods to dispose of waste and contaminants that are produced through the use of our products, and in every stage of the life cycle of these products.
3. As both a member of the company and of 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 environment and society, and endeavor to improve the social standing of the company.

Established and announced in June 1992

Honda Environmental and Safety Vision

We announced that our direction in the years leading up to 2020 would be to provide "good products to customers with speed, affordability, and low CO_2 emissions". We dream a society where everyone can safely and confidently go anywhere and the Honda Environmental and Safety Vision was set. The vision expresses our passionate desire to contribute to the sustainable growth of society and harmony between people so we can continue to deliver excitement through products and services that support personal mobility and a better life in general.

Honda Environmental and Safety Vision

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

In working to achieve this vision, the following objectives shape our environmental initiatives around the world:

- **At each stage of a product's life cycle (products, corporate activities), Honda aims to**
  - ·Minimize the use of fossil fuel and resources newly recovered from the Earth
  - ·Minimize environmental impacts, including greenhouse gas emissions
- **Honda aims to reduce to zero greenhouse gas emissions from Honda products used for mobility and in people's everyday lives**

BLUE SKIES FOR OUR CHILDREN

We established "Blue Skies for Our Children" as a global environmental slogan expressing our commitment to do more to realize our environmental and safety vision. The graphic on the left symbolizes the global environmental slogan.

Pursuing the Honda Environmental and Safety Vision

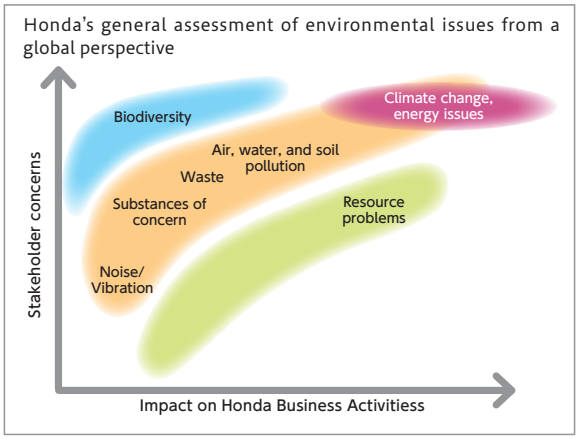
In working toward the Honda Environmental and Safety Vision for the future, we objectively assess current environmental problems, analyze the kinds of risks and opportunities they represent, and respond in various ways. Honda is promoting environmental initiatives in both business activities and product development, with the aim of eventually becoming a company with zero environmental impact.

• Honda's current recognition and response to environmental issues

■ Current assessment of environmental issues

● Climate change and energy issues are our greatest challenges

To continue doing business across the globe as a member of society and to make progress toward the Honda Environmental and Safety Vision, we must correctly assess the environmental issues that exist in the world today and the way in which Honda business activities relate to and influence them. Accordingly, Honda has organized various environmental issues and identified those that pose the greatest risk to our business and stakeholders. As a global corporation supplying mobility products, we see climate change and energy issues as the greatest challenges facing the company, followed by resource problems.



●Environmental management system

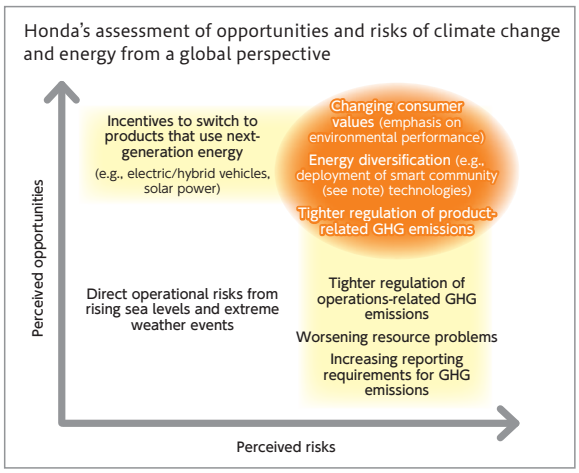
To organize and analyze in a timely manner the impacts of various environmental issues on our business, particularly climate change and energy, and to develop and execute specific measures for addressing them, we have constructed a comprehensive global management system (page 42). Based on this system, we have established our own CO_2 emission reduction targets, considered to be the principal driver of climate change (page 22), and are carrying out various initiatives to realize the Honda Environmental and Safety Vision, such as stepping up efforts in each region across the globe to achieve these targets.

■ Assessment of business activity risks and opportunities

● Risks and opportunities relating to climate change and energy issues

Honda's response to the key challenges of climate change and energy issues does not just involve initiatives for environmental conservation. While these environmental issues pose risks to our business continuity, they also present opportunities to create and expand new businesses. Honda considers it essential to engage in business activities and decide and execute specific measures, having sufficiently assessed these risks and opportunities.

Accordingly, we have compiled all of the major opportunities and risks we currently expect from climate change and energy issues, and have been taking measures in response.



●Measures based on risk and opportunity assessment

To minimize the regulatory risk our products face as emitters of GHGs, we set forth CO_2 emission reduction targets for our automobiles, motorcycles, and power products for 2020. Major initiatives to reduce CO_2 emissions include the introduction of the new Earth Dreams Technology hybrid powertrains for automobiles, and the marketing of electric vehicles (page 30).

In response to changes in consumer awareness and growing energy diversification needs, we are continuing demonstration testing of electric mobility products in Japan, the U.S., and China for the establishment of a future smart mobility society. We also are accelerating development projects, having completed the construction of a demonstration Honda Smart Home System house (page 28) and a solar-powered hydrogen station (page 34) in 2012.

We are working to reduce GHG emissions in each region and domain of our business in order to minimize regulatory risk relating to emissions from each business site. We compile the results of our efforts and make them known to

Note: Smart communities: Communities that, through broad partnerships between governments and private entities in the fields of next-generation energy infrastructure, telecommunications, traffic systems, and various products and services, are engineered to be more efficient, self-sustaining, and dynamic.

the public once a year through this Environmental Annual Report.

We see the increasing scarcity of resources stemming from the response to climate change and energy issues as another major challenge. In recognition of the risk of resources becoming depleted, more difficult to obtain, and more expensive to dispose of, we are developing alternative technologies, technologies to reduce, reuse, and recycle these resources, and we are also diversifying our supply chain. In fiscal 2013, we actively engaged in measures such as establishing a scheme for the closed-loop recycling of rare earths (see note[2]) extracted from nickel metal hydride batteries for hybrid vehicles (page 80).

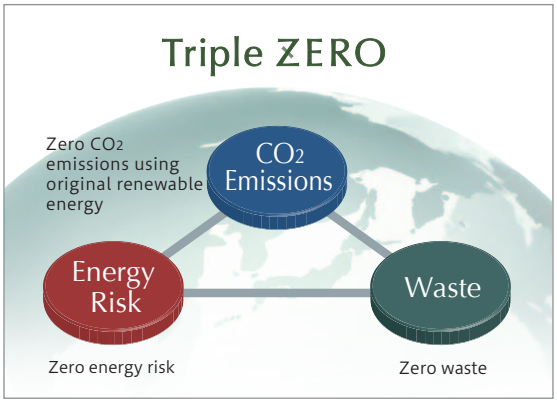
●Risk management led by the World Environment and Safety Committee

We clarify our understanding of such risks and opportunities relating to climate change and energy issues by analyzing them from three different perspectives: by product categories (motorcycles, automobiles, and power products), with a focus on our business and product development operations; by region, which is based on our unique regional management structure; and by function, such as production and sales. The Honda World Environmental and Safety Committee assesses these risks and opportunities from a global perspective, the findings of which are then used by our Regional Operations (regional environmental committees), Business Operations and Functional Operations in the formulation of various management policies and strategies, such as in formulating and updating our medium-term plans for environmental initiatives.

We conduct this risk management process every six months and as needed.

• Triple Zero: Toward a zero-impact society

■ Giving shape to the Honda Environmental and Safety Vision



●Triple Zero: The ultimate zero-impact society

In order to realize the Honda Environmental and Safety Vision—our vision for the future—we are engaging with climate change, energy and resource issues through our technology and business activities, with the aim of creating a zero-impact society. As a specific model for this, Honda has announced the Triple Zero concept.

●Zero CO_2 emissions through renewable energy

In response to climate change, our long-term goal is to deploy solar power and other renewable energy systems to bring well-to-wheel (see note[3]) CO_2 emissions down to zero. To get there, we will develop the technologies needed to reduce and eliminate emissions, while at the same time steadily reducing product life-cycle emissions and emissions from business activities through a range of initiatives including product fuel-efficiency improvements and increasing efficiency in product transportation.

●Zero energy risk

In response to energy issues, our long-term goal is to achieve zero energy risk by becoming energy self-sufficient through the use of solar-powered hydrogen stations, and by raising the efficiency of environmental management through innovations in energy management technologies. To get there, we will reduce energy risk by cutting energy use through product fuel efficiency improvements, and by diversifying energy sources through the deployment of hybrid and other electromotive technologies.

Progress in this area will also lead to reduced risk for Honda's business activities.

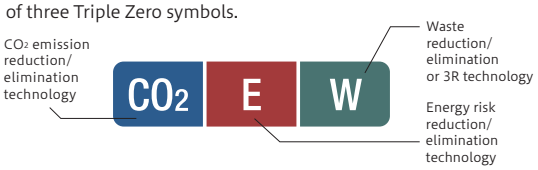
●Zero waste

In response to resource problems, our aim is to completely close the loop for all resources and bring product life-cycle waste down to zero. We will do this by developing technologies to shift away from using precious resources, by developing and perfecting reduction, reuse, and recycling (3R) technologies, and by reducing water resource use.

By reducing and eliminating the use of hazardous chemicals as well as waste, we will strive to eliminate all materials from our products and business activities that have an adverse effect on human health and the environment.

●Triple Zero symbols

In this year's report, technologies, products, and initiatives that contribute to the realization of Triple Zero are marked with one of three Triple Zero symbols.



Note 2: Read more about the recycling of rare earths in Case17 of "Environmental Documentary Honda Face." (http://world.honda.com/environment/face/2012/)
Note 3: Well-to-wheel: Typically, all steps from extracting petroleum resources to their use as fuel in a vehicle. It can also refer to the life cycles of non-petroleum energy resources, from generation to their final use in propelling a vehicle.

• Honda Environmental Performance Standards (HEPS) and carbon reduction scenarios

■ Scenarios for achieving zero CO_2 emissions

● Reducing CO_2 emissions in three stages

To achieve zero CO_2 emissions, one of the three objectives of Triple Zero, our aim is to eliminate the life-cycle emissions (emissions from all stages in the life of a product, from its manufacture using raw materials, to customer use, to disposal) of all Honda products, including through such strategies as renewable energy carbon offsets.

However, given that many mobility products today still run on fossil fuel burned in an internal combustion engine, zero CO_2 emissions is not something we can achieve overnight.

That is why we have developed three scenarios to guide us through steady reductions, and ending with the complete elimination of CO_2 emissions. These scenarios, which are to be pursued in parallel, are: 1) Reduce emissions through efficiency improvements of internal combustion engines, 2) Reduce emissions by introducing energy-diversification and environmentally innovative technologies, and 3) Eliminate emissions through the use and [comprehensive/fully integrated management] of renewable energy (see figure below).

● Honda Environmental Performance Standards

To move our products along these scenarios, in fiscal 2012 we established the Honda Environmental Performance Standards (HEPS), an independent product classification and certification system designed to shed light on how Honda products are contributing to achievement of the three scenarios outlined above. Under HEPS, products are grouped into three categories, each with its own requirements for certification.

By making all new Honda products compliant with one of the three standards, we will make steady progress toward realizing zero CO_2 emissions.

HEPS Hi Efficient Products

Products that emit less CO_2 emissions because of 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_2 emissions during use compared to preceding models.

HEPS Innovative Products

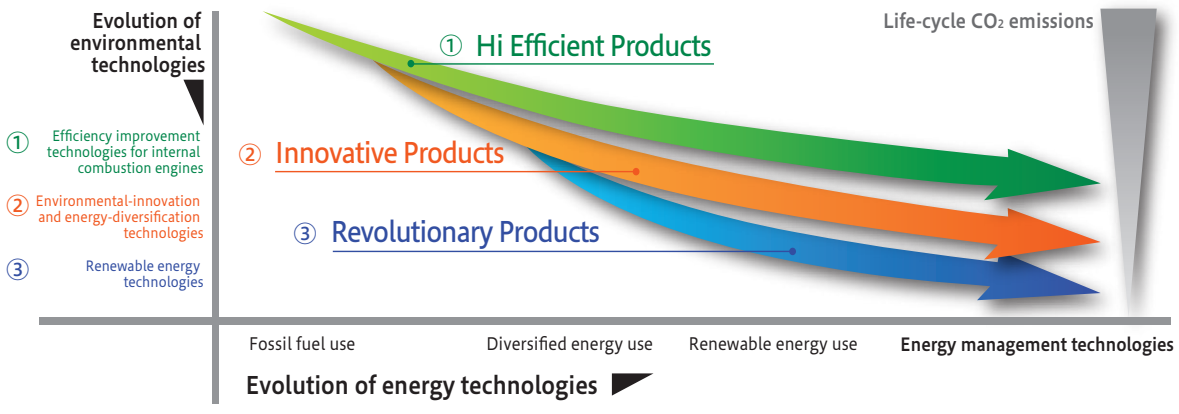
Products that emit less CO_2 because they use an environmentally innovative technology or alternative energy source. This category includes motorcycles that incorporate Honda's patented Idle Stop System, automobiles that incorporate hybrid technologies or direct-injection engine technologies, and power products with a new electronic governor technology for regulating engine speed. 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_2 emissions during use compared to preceding models.

HEPS Revolutionary Products

Products that generate or use energy from renewable sources or help manage the generation and consumption of such energy, thereby contributing to the elimination of CO_2 emissions. This category includes products that incorporate electromotive technologies or technologies for generating or using renewable energy (e.g., hydrogen fuel for automobiles, solar cells for power products).

Product-based scenarios for addressing climate change and energy issues



■ HEPS-compliant models released in FY2013

● 38 HEPS-compliant models released in FY2013

We reviewed products to see how many met the HEPS requirements. In fiscal 2013, 18 motorcycles models, 16 automobile models, and 4 power products—a total of 38 models—were HEPS-certified.

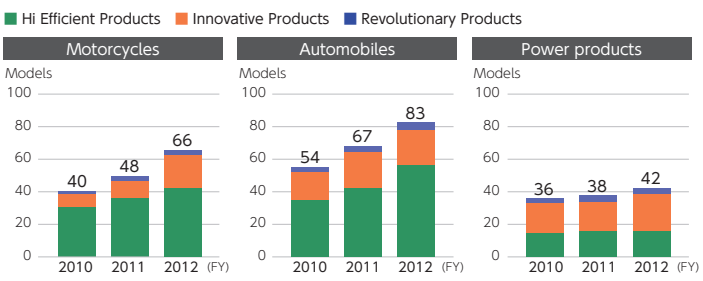
Cumulatively, this brings the number of HEPS-compliant products to 66 motorcycle models, 83 automobile models, and 42 power product models, or 191 models in total.

By region, 67 models in Japan, 48 models in North America, 58 models in Europe, 28 models in South America, 63 models in Asia & Oceania, and 26 models in China are now HEPS-certified.

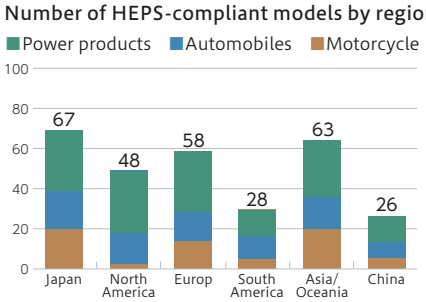
● Examples of HEPS-compliant models released in FY2013

		HEPS Hi Efficient Products	HEPS Innovative Products	HEPS Revolutionary Products
Definition		Products with a more efficient internal combustion engine that emits less CO_2	Products that use unconventional energy sources or innovative environmental technologies that emit less CO_2	Products designed to reduce or eliminate CO_2 emissions by harnessing renewable energies or facilitating total energy management
Performance parameter		CO_2 emissions from product use		
Compliant products (examples)	Motorcycles	 Super Cub C50  PCX150  CBR125R  Dio110	 Integra  MSX  XRE300  CB300R	 EV-neo  Kushi
	Automobiles	 N-ONE  Brio  ILX  Crosstour	 Accord PHEV  CITY CNG  Civic Diesel  Fit twist Flex	 Fit EV  FCX Clarity
	Power products	 GX390 engine  GX690 engine	 EU9i GP LPG generator  HSM1390 i hybrid snowblower  MCHO1.0 household cogeneration unit  Salad CG FFV300 gas-powered tiller	 Solar modules  Graspa HRE330 electric lawnmower  Monpal ML200 scooter  Miimo 300 robotic lawnmower

Global number of HEPS-compliant models



Number of HEPS-compliant models by region

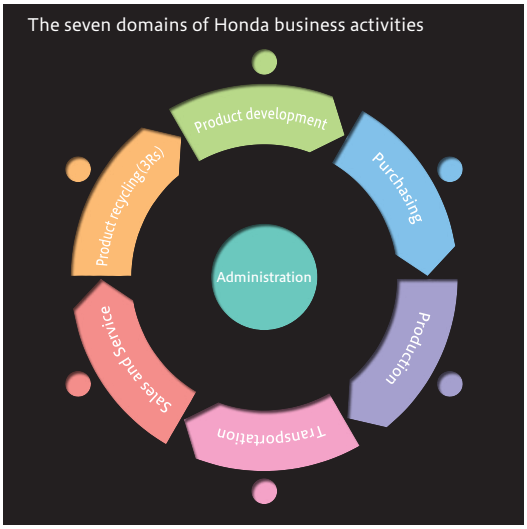


1. FY2011 data were calculated based on standards set in FY2012.
2. Certain certifications were corrected following a reassessment of performance data.

• Environmental initiatives in our business activities

Reducing the amount of CO_2 emitted by our products is not all we are trying to do for the environment. Given our philosophy of reducing impacts across entire product life cycles, we were quick to start reducing the environmental impacts of our business activities themselves. Specifically, we divided our business activities into seven domains and have sought to reduce impacts by being aware of all the factors in each domain that place stress on the environment.

We believe that steadily reducing environmental impacts from both our business activities and products will help us achieve the Honda Environmental and Safety Vision and also lead to recognition of Honda as a company society values.



Environmental efforts based on life-cycle assessment

Honda's Business Activities

Life cycle stages in Honda's business activities	Factors considered to impact the environment
Product development	Greenhouse gases Exhaust emissions Raw materials Noise/Vibration Substances of concern
Purchasing	Greenhouse gases Raw materials Waste Water use Wastewater
Production	Exhaust emissions Noise / Vibration Substances of concern
Transportation	Greenhouse gases Waste
Sales and Service	Greenhouse gases Removed parts CFCs Waste
Product recycling (3Rs)	Greenhouse gases End-of-life products
Administration	Greenhouse gases Waste

Honda's Response

Reduce environmental impacts from business activities

Major initiatives in each domain

- Promote "green laboratories"
  - ・Energy and resource conservation
  - ・Zero waste and emissions* initiatives
- Promote "green purchasing"
  - ・Environmental management
  - ・Energy conservation at suppliers
  - ・Resource conservation
  - ・Zero emissions activities at suppliers
- Promote "green factories"
  - ・Environmental management
  - ・Energy and resource conservation
  - ・Zero waste and emissions initiative
- Promote "green logistics"
  - ・Environmental management
  - ・Increase transportation efficiency
  - ・Use less packaging
- Promote "green dealers" (automobiles, motorcycles, power products)
  - ・Environmental management
  - ・Increase energy efficiency
  - ・Do more for environmental conservation
- Increase parts collection, reuse, and recycling
- Properly process end-of-life products
- Provide technical support for recycling
- Promote "green offices"
  - ・Environmental management
  - ・Energy conservation
  - ・Use resources effectively
- Social contribution activities

Reduce environmental impacts from products

Product-based initiatives

Make products HEPS-compliant

Hi Efficient Products
Efficiency improvement technologies for internal combustion engines

Innovative Products
Environmental innovation and energy diversification technologies

Revolutionary Products
Renewable energy technologies

* The aim of zero emissions initiatives is to reduce waste and substances of concern as near as possible to zero.

Biodiversity Initiatives

Climate change and energy issues are not our only concerns. We also pay close attention to biodiversity as an issue relating to environmental conservation, because our business activities can have an impact on vital natural resources. Tree-planting and water-recycling initiatives at our plants in the 1960s, and our Community Forest program launched in 1976, demonstrate the deep roots of our commitment to environmental conservation and living in harmony with local communities. In 2011, we created the Honda Biodiversity Guidelines as part of the contributions we strive to make to global environmental conservation, a goal set forth in our Honda Environment Statement.

• Honda Biodiversity Guidelines

Basic Statement

We recognize, under the Honda 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.

Priority Activities

1. **Development of Environmental Technology**
   We will contribute to the conservation of biodiversity by developing and disseminating technologies for fuel-efficient vehicles, next-generation cars, and energy-production and other technologies for the reduction of environmental impacts.
2. **Initiatives Based on Corporate Activities**
   We will work to reduce environmental impacts and ensure the effective use of resources through efficiency improvements.
3. **Cooperation with Communities**
   We will implement community-based activities in cooperation with stakeholders, using expertise accumulated by Honda through its initiatives to protect ecosystems, such as the Community Forests and Hello Woods initiatives.
4. **Disclosure and Sharing of Information**
   We will share information with society by disclosing the outcomes of our activities.

Established in May 2011

● Our greatest contribution: reducing environmental impacts from products and operations

Resource exploitation, runaway development, pollution, climate change —— these and many other impacts of human activities threaten biodiversity. As a manufacturer of personal mobility products, we see our business activities as being most closely associated with the growing environmental impacts resulting from emissions of greenhouse gases (GHGs) and various other pollutants.

We believe that minimizing the environmental impacts that result from our business activities and products represents the greatest contribution we can make to protecting Earth's myriad life forms. We created the Honda Biodiversity Guidelines to set priorities in this effort, focusing our energies on developing environmental technologies and reducing impacts in our business activities, alongside initiatives to operate in harmony with local communities.

1. Develop technologies to reduce impacts on the environment

We will develop technologies to reduce the environmental impacts of personal mobility, since this represents the greatest contribution we can make. Technologies include fuel-efficient and next-generation vehicles, and technologies that harness alternative energies.

2. Make business activities species-friendly

We aim to make our business activities more sustainable in themselves, by releasing less environmental pollutants, including GHGs, waste, and substances of concern.

3. Work to protect nearby ecosystems

We have already gained a wealth of knowledge about how to maintain and restore ecosystems through our Community Forest and Hello Woods initiatives.

Working in collaboration with nearby communities, we will use this knowledge and experience to implement programs to protect local species and make our business activities friendlier to them.

4. Communicate openly with the public

We will endeavor to openly communicate with the public about the details and outcomes of activities we implement from the new perspectives offered by these biodiversity guidelines.

• Collaborating with local communities

● For biodiversity conservation

Honda conducts various initiatives to reduce environmental impacts from its products and business activities, based on the recognition that success in this area is most vital to the conservation of biological diversity. Forging positive relationships with local communities and partnering with them to preserve and cultivate nearby habitats is also an important endeavor in this regard.

● Community Forest initiative

Following the thinking of Honda founder Soichiro Honda, who said that no concrete walls should be built to separate local communities from the grounds of Honda facilities, Honda used trees instead of walls to mark the boundary of its Sayama (now Saitama) Factory in 1964.
In 1976, this idea was expanded with the launch of the Community Forest initiative, a program to plant indigenous trees at each facility and use natural ecosystems to cultivate forests with numerous tree species. The forests were managed like the forests surrounding shrines, where native trees are left and woodland is cultivated by leaving it as untouched and natural as possible.
Now the Community Forests at Honda facilities have finally grown to resemble true forests. Birds make their nests in trees 20 meters high, small mammals are a common sighting, and luscious greenery and seasonal flowers bring peace of mind to Honda associates and local residents.

● Biodiversity surveys at major business sites

With a view to establish its own biodiversity policy, Honda carried out biodiversity surveys from 2011 to 2012 to assess the natural environments surrounding our operations and determine what kinds of organisms and how many inhabit them. These surveys also included a factual survey of the Community Forest initiative spanning the three decades since its launch. Based on this, Community Forest management methods were reassessed.

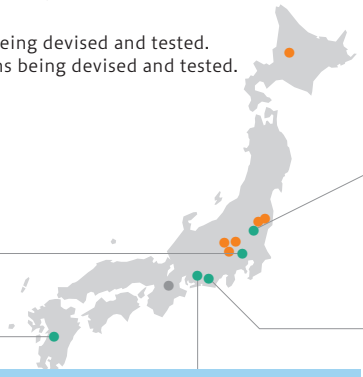
● Introducing satoyama methods

The survey results revealed several problems with the Community Forests, which had grown far larger than had been assumed three decades earlier. Trees overhanging roads were obstructing passage, large quantities of leaves were accumulating in surrounding neighborhoods, and non-native species that were propagating in the forests were found to pose a possible threat to nearby ecosystems.
In order to improve this situation, we revised our Community Forest management policy from one based on a laissez-faire approach to one involving active management. We decided to introduce satoyama practices, such as thinning and pruning trees and removing foreign species, to help maintain biological vitality and diversity and make the forests more functional and beneficial to local communities.

Summary of biodiversity survey results in Japan

In accordance with sangen-shugi, the Japanese principle of going to the actual place, observing the actual situation and basing decisions on actual facts, field surveys and literature reviews were carried out from 2011 to 2012 on the environments and biological communities surrounding our five main factories. The results of the research are being used to develop a Honda action plan on biodiversity conservation.

●= Survey completed prior to 2011. Actions being devised and tested.
●= Survey carried out from 2011-2012. Actions being devised and tested.
●= Survey planned for 2013 or later.



● Sayama Plant, Saitama Factory
Birds of prey and other relatively large animals observed. The birds may be using the premises as a feeding ground or resting place. Orchids were found in the Community Forest, which may be a safe haven for these rare species.

● Mooka Plant, Tochigi Factory
Significant danger of invasion of foreign plants due to the site being located in an urban area. Forest elements that remain on site may be functioning as a habitat and as a green corridor within the city.

● Kumamoto Factory
Biological species are remarkably more numerous compared to other factories due to it being a riparian environment with a site area of 80 hectares. Foreign grasses are especially conspicuous in wetland areas and may cause native species to disappear. Countermeasures are being devised.

● Hosoe Plant, Hamamatsu Factory
Environment is maintained as grassland without trees and is one of the few inhabited by dragonflies and birds of prey. Birds that prefer to be close to the sea can be observed here.

● Aoi Plant, Hamamatsu Factory
A biotope maintained at the southwest end of the site may become a valuable habitat for local species, but species and conditions not native to the area are common, and the ecosystem may suddenly collapse due to the invasion of aggressive non-native species.

●Surveys expanded to major Honda subsidiaries in Japan

Based on the biodiversity survey results, an investigation into how business sites should benefit local ecosystems and human communities began at major Honda factories, with a view to starting trial runs in fiscal 2014. In addition, the scope of research was expanded to include major subsidiaries, with surveys beginning at five Honda R&D Co., Ltd. sites (Wako, Asaka, Tochigi, Tochigi Proving Ground, and Takasu Proving Ground) and the Hidaka offices of Honda Access Corporation. Moving forward, we will aim to establish the most suitable management methods at all Honda facilities as we strive toward harmonious relations with local communities.

●Initiative at Aoi Plant, Hamamatsu Factory

A biotope was constructed on the grounds of the Hamamatsu Factory's Aoi Plant in 2007. The biotope plays an important role in connecting with the local community, as it provides a venue for introducing visitors to the plant and for local elementary school students to study (see note).
The management method of this biotope was also reevaluated at the time of the biodiversity survey. In fiscal 2013, we continued work to create a healthier biotope, such as by removing aggressive non-native species and opening up spaces to increase sunlight access.

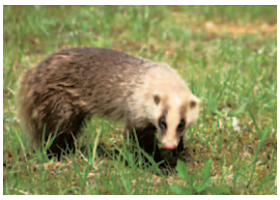
• Hello Woods activities

●Hello Woods, home to diverse wildlife

Hello Woods, located within the Twin Ring Motegi speedway complex in Motegi, Haga-gun, Tochigi Prefecture, opened in 2000 to help foster closer connections between people, nature, and mobility. We have made various efforts to restore this expansive, 460-hectare plot of satoyama ecosystem (see below) after decades of neglect. The site now has various facilities for teaching children about nature in a fun-oriented, outdoor setting.
At Hello Woods, we have worked for more than 10 years to restore the satoyama ecosystem, such as by carrying out systematic thinning, bush cutting, tree planting, and redevelopment of fallow fields. Motegi is originally an area rich in species diversity, as it possesses the unique weather characteristics of both southern and northern Japan. Capitalizing on these characteristics, Hello Woods has been participating in Monitoring Sites 1000*, a project run by Japan's Ministry of the Environment since 2008, by carrying out fixed-point observations of the ecosystem. In this way, the Hello Woods initiative is restoring this rich ecosystem and even helping to establish new biological communities.
We are using the satoyama development and ecosystem conservation know-how we gain through this initiative to inform initiatives in other regions and strengthen ties with local communities.

Wildlife spotted at Hello Woods


Large Japanese field mouse (Apodemus speciosus)


Japanese badger (Meles meles anakuma)


Wild boar (Sus scrofa)


Japanese hare (Lepus brachyurus)


Japanese squirrel (Sciurus lis)


Japanese giant flying squirrel (Petaurista leucogenys)

*Since fiscal 2009, Hello Woods has been a participant in Monitoring Sites 1000, a national ecosystem-monitoring project launched by Japan's Ministry of the Environment. As a fixed observation point for six of the nine survey categories (flora, birds, medium and large mammals, frogs, butterflies, and fireflies) Hello Woods submits survey reports for the community of Motegi-machi in Haga-gun, Tochigi Prefecture.

The Satomaru, a wood hauler currently under development to reduce work in the restoration of satoyama


Thinning, while necessary to maintain satoyama, is being abandoned because of the difficult labor involved, such as cutting trees on steep slopes and transporting cut wood off-site.

Today, satoyama are deteriorating throughout Japan. Forestry work such as periodic thinning is necessary to maintain satoyama, but carrying felled trees and branches to the foot of the mountain is hard work. Forestry work is often abandoned because of a lack of profitability.
In response, Honda is developing the Satomaru, a wood hauler that uses the intelligence technology of Honda Robotics to automatically navigate through the mountains, in order to reduce the burden of maintenance work and assist in satoyama restoration.

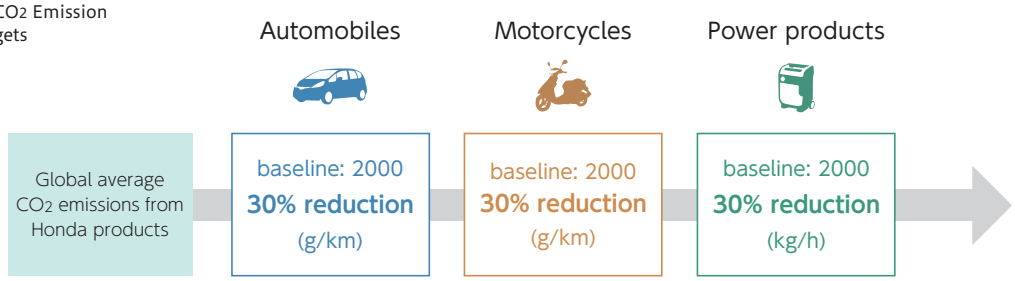
Note: Read more about biodiversity initiatives in Case 20 of "Environmental Documentary—Honda Face ." (http://world.honda.com/environment/face/)

Progress in Meeting Environmental Targets

• 2020 Product CO_2 Emissions Reduction Targets

Reducing CO_2 emissions from our products is a necessary step in combating climate change and energy issues, the greatest challenges to our business. That is why we created the 2020 Product CO_2 Emissions Reduction Targets, through which we seek to reduce the average amount of CO_2 emitted per unit of automobiles, motorcycles, and power products by 30% from 2000 levels by 2020. We hope to achieve these targets by developing more efficient technologies and marketing more energy-efficient products.

2020 Product CO_2 Emission Reduction Targets



● Regions covered:
Japan, North America, Europe, Asia/Oceania, China, and South America, covering more than 90% of global sales by volume of each product category.

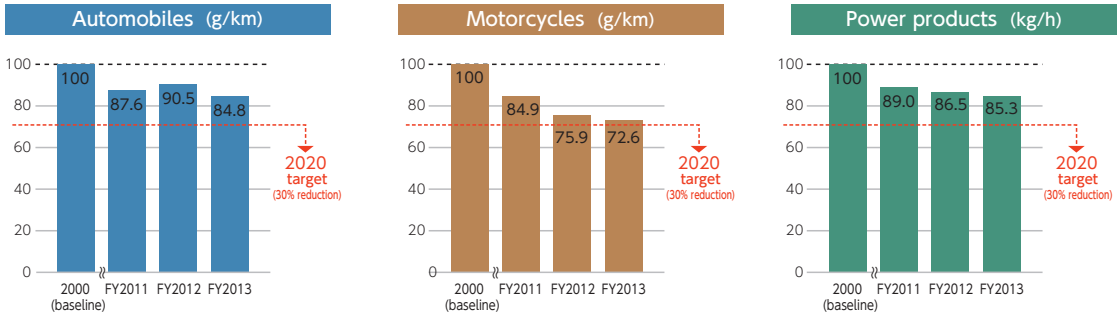
• Current progress in achieving the targets

Automobile fuel efficiency increased with the introduction of redesigned core models such as the CR-V and Accord. CO_2 emissions declined substantially year-on-year thanks to the moderate recovery of the U.S. market and steady expansion of the Asian market, driving a large increase in sales.

Motorcycle CO_2 emissions saw another year-on-year decline, driven by increased sales from the introduction in Thailand of the Click 125i, a commuter vehicle with improved fuel efficiency, and increased sales of the fuel-efficient PCX150 in Thailand, BeAT in Indonesia, and Activa in India.

Sales of large engines, which have comparatively higher per-unit emissions, increased in North America. Meanwhile in Europe, sales of low-emission household cogeneration units and zero-emission robotic lawn mowers increased, contributing to a slight year-on-year decline in CO_2 emissions for power products as a whole.

Progress in achieving the 2020 Product CO_2 Emission Reduction Targets



• Mid-term plans

● Formulating detailed plans for fiscal 2014

In our effort to minimize CO_2 emissions and all other environmental impacts stemming from our products, we created a detailed mid-term plan for product-related environmental initiatives through fiscal 2014. By following this plan, we will not only increase the energy efficiency of our products but also make improvements across their life cycles by practicing sustainable design for improved 3R performance, reducing emissions from products, and carrying out stricter management of substances of concern used in our products.

Recognizing the significant impact that our business activities have on the environment, we likewise formulated a detailed mid-term plan for operations-related environmental initiatives, with the end goal of realizing the Honda Environmental and Safety Vision. By following this plan we will reduce product life-cycle CO_2 emissions, reuse and recycle more resources, and strive to minimize water use, among other activities. Believing that these initiatives should cover all our business activities, including our supply chains, we will actively promote environmental management at our suppliers, focusing especially on greenhouse gas emissions.

Mid-term plans and results for product-related environmental initiatives

Milestones on the road to 2020		Mid-term plans for product-related environmental initiatives (FY2012 – FY2014)
Climate change and energy	Achieve global targets for reducing average product CO_2 emissions, with the end goal of steadily reducing product life-cycle emissions over the long term	1 Achieve best-in-industry fuel efficiency and accelerate technology penetration: Motorcycles: Expand use of electronic fuel-injection system (PGM-FI) and low-friction engines, especially in commuter vehicles Automobiles: Phase in upgrades to engine and transmission lineups, starting in 2012 Power products: Expand application of new electronic self-tuning regulator (STR) governor, developed for the iGX engine
		2 Establish and deploy next-generation electromotive technologies: Motorcycles: Market electric motorcycles that meet local needs in developed (Japan: leased) and emerging (China) countries Automobiles: Launch multiple models (especially compact vehicles) equipped with IMA hybrid technology in Japan; currently developing mid-size and larger plug-in hybrid and battery electric vehicles, with plans to launch products in Japan and the U.S. and commence production in China in 2012. Power products: Improve electric lawnmowers and expand lineup through model additions, especially in Europe
	Market new products to reduce CO_2 emissions from mobility and other products	3 ・Launch new thin-film solar cell modules with world's highest module conversion efficiency and deploy technology globally ・Conduct demonstration testing of next-generation personal mobility systems in cities in Japan, the U.S., and China ・Through joint-implementation of the E-KIZUNA Project with Saitama City, conduct demonstration testing of the Honda Smart Home System (HSHS) with an aim to cut household CO_2 emissions by 50% from 2000 levels by 2015
Material and water resources	Ramp up 3R efforts	4 Products: Continue to promote structural design with an emphasis on weight reduction; higher throughput yields; easier recycling and maintenance; and sustainable design with an emphasis on easily recycled materials and use of recycled resins
Substances of concern	Reduce exhaust emissions	5 Steadily reduce exhaust emissions to comply with tighter emission regulations in various countries
	Manage substances of concern used in products more strictly	6 ・Promote management of substances used in products and find alternatives to substances of very high concern ・Operate global management systems for substances used in products to comply with applicable regulations in various countries

Results of fiscal 2013 initiatives		
Climate change and energy	1	Motorcycles: Launched the PCX150, a next-generation compact scooter equipped with an engine with enhanced durability, quietness, and fuel efficiency (June 2012) Launched the Super Cub 50 equipped with a high-efficiency engine that employs extensive low-friction technologies (May 2012) Automobiles: Launched an Accord for the North American market equipped with a newly developed engine and CVT that realizes top-class fuel efficiency (September 2012) Launched a Civic for the European market equipped with a diesel engine incorporating extensive efficiency improvements and weight-reduction technologies (December 2012) Launched a Civic for the South American market that employs the FFV technology Flex One, eliminating the need for a secondary fuel tank (February 2013) Power products: Launched new gas-powered products to support energy diversification: the EU9i GP propane gas-powered portable generator (August 2012); and the Salad CG FFV300 tiller, which runs on butane gas canisters (March 2013)
	2	Motorcycles: Continued leasing the EV-neo electric scooter Continued sales of the Kushi, an electric bicycle for the Chinese market Automobiles: Launched the Accord PHEV (North America, January 2013) and Accord Hybrid (Japan, June 2013) equipped with Sports Hybrid i-MMD Began leasing the Fit EV in Japan (August 2012) and the U.S. (July 2012) Power products: Launched Miimo, a robotic lawn mower equipped with a lithium-ion battery, in the European market (April 2013)
	3	・Japan: In Saitama Prefecture, began demonstration testing of a house equipped with the Honda Smart Home System (April 2012) ・Continued demonstration projects using next-generation personal mobility systems in cities in Japan, the U.S., and China
Material and water resources	4	・Reduced the weight of parts in automobiles by employing tailored blanks and technologies for joining dissimilar metals such as steel and aluminum ・Built a system for extracting rare earths from used nickel metal hydride batteries from hybrid vehicles and recycling them as material for new nickel metal hydride batteries
Substances of concern	5	Made consistent efforts to reduce exhaust emissions to comply with tighter emissions regulations in various countries
	6	・Continued to promote the management of substances used in products and find alternatives to substances of very high concern ・Continued to operate global management systems for substances used in products, to comply with applicable regulations in various countries and reduce risk

Mid-term plans and results for operations-related environmental initiatives

Milestones on the road to 2020		Mid-term plans for operations-related environmental initiatives (FY2012 – FY2014)
Climate change and energy	Strengthen initiatives that span entire product life cycles	1 Global operations: Reduce CO_2 emissions per unit of production by 5% by FY2014 (baseline: FY2009)[1]
		2 Purchasing domain: ・Promote measurement and reduction of suppliers' GHG emissions under the revised Green Purchasing Guidelines
		3 Production domain: ・Install cutting-edge environmental technologies at Yorii Plant (production scheduled to begin in 2013) and make preparations to deploy the technologies globally ・Set benchmarks for energy use and set higher efficiency standards
		4 Transportation domain: ・Increase transportation efficiency in each region by implementing modal shifts, deploying more fuel-efficient trucks, etc.
		5 Sales and services, administration, product development domains: ・Promote energy conservation by encouraging eco-etiquette and more efficient use of facilities
Material and water resources	Ramp up 3R efforts	6 Production domain: ・Strengthen resource-use-reduction initiatives by increasing throughput yields to reduce by-products ・Collaborate with suppliers to increase use of metal scraps ・Maintain zero landfill waste performance (Japan and Europe)
		7 End-of-life product recycling: ・Make steady efforts to comply with end-of-life vehicle recycling laws in various countries
	Minimize water use	8 Production domain: Reduce use according to conditions in each region, for example by conserving water and using recycled water in production processes
Substances of concern	Reduce VOC[2] emissions from production processes	9 Production domain: Develop VOC-emissions-reduction technologies for coating processes and expand application to overseas facilities and motorcycle coating processes
Biodiversity	Local conservation initiatives in accordance with the Honda Biodiversity Guidelines	10 Corporate initiatives: ・Educate suppliers on the destructive impacts of hazardous substances and water use on ecosystems Collaboration with local communities: ・Conduct biodiversity surveys at business sites in Japan ・Develop policies, guidelines, and practical know-how at each business site ・Assess possibilities of introducing biodiversity initiatives at overseas business sites
Environmental management	Strengthen global/regional promotional frameworks and increase disclosure of environmental data	11 Strengthen independent, voluntary promotional frameworks in each region, and strengthen global collaboration
		12 Expand Honda Environmental Annual Report into a global report, and increase disclosure of environmental data in each region

Results of fiscal 2013 initiatives		
Climate change and energy	1	Reduced average per-unit CO_2 emissions by 7% in FY2013 (baseline : FY2009)
	2	Promoted measurement of GHG emissions from suppliers in a broader range of activities covering product life cycles Asia/Oceania: Deployed the Energy Conservation Caravan to visit suppliers and monitor energy consumption
	3	Used energy use monitoring of each production process to make the production system more efficient Asia/Oceania: Made progress in switching from diesel generators to natural gas cogeneration systems
	4	Transportation modal shifts in each region South America: Began shifting to coastal routes and actively avoiding trucking for the transportation of motorcycles
	5	・Promoted energy conservation through eco-awareness and etiquette-raising activities and improvements in equipment use ・Installed high-efficiency devices (LED lighting, compressors, HVAC systems, IPM motors) North America: Increased the number of participants in the Green Dealer program launched the previous year and enhanced program development
Material and water resources	6	・Implemented measures to improve throughput yields in the design stage ・Increased use of stamping press scrap steel South America: Promoted sand mold recycling in the storage process
	7	Continued efforts to comply with the automobile recycling regulations of each country
	8	Promoted use of recycled water and water-conservation activities in each region Asia/Oceania: Introduced rainwater storage systems
Substances of concern	9	・Started using low-VOC coatings in coating processes ・Used low-VOC coatings for prototype models in product development North America: Introduced new processing equipment to reduce VOC emissions in the bumper coating process
Biodiversity	10	Conducted biodiversity surveys at business sites in Japan
Environmental management	11	Convened Regional Environmental Committees and trained environmental officers in all regions
	12	Issued a fiscal 2013 regional environmental report in each region (North America, South America, Europe, Asia & Oceania, China, and Japan)

Note 1: A single per-unit-of-production value was calculated by weighting the average reduction percentages for motorcycles, automobiles, and power products with the CO_2 emissions associated with their respective life cycles.
Note 2: VOC (Volatile Organic Compounds): Organic chemical substances that cause photochemical smog and are commonly used in the solvents of paints and thinners.

Products

Honda is contributing to the realization of a sustainable society where people can enjoy life by meeting mobility needs while reducing environmental impacts across product life cycles.

26 Honda R&D's top 4 discussion

28 Next-Generation Technology

30 Automobiles

36 Motorcycles

39 Power products

Balancing customer satisfaction and the global environment

Honda R&D's top 4 discuss the past and future of product development

Yoshiharu Yamamoto,
President, CEO and Director, Honda R&D Co., Ltd.
Toshihiko Nonaka,
Executive Vice President and Director in charge of Automobile R&D Center, Honda R&D Co., Ltd.
Tetsuo Suzuki,
Senior Managing Officer and Director in charge of Motorcycle R&D Center, Honda R&D Co., Ltd.
Takao Nishida,
Operating Officer and Director in charge of Power Product R&D Center, Honda R&D Co., Ltd.

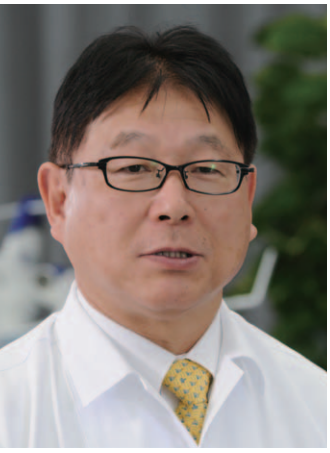
Honda R&D conducts visionary research and development aimed at creating products that always meet or exceed customer expectations. By being organizationally separate from Honda Motor Co., the company provides engineers with an environment where they can focus on their work and freely explore ways to create new value. The top four members of Honda R&D management were gathered and asked to discuss the results of fiscal 2013 and share their individual dreams for the future.

FY2013 highlights and the most anticipated products of FY2014

●Yamamoto: Before we talk about the future course of product development, let's first review what happened in fiscal 2013, focusing on any products or technologies whose achievements you would like to emphasize.

●Suzuki: For motorcycles, we added new mid-size models equipped with the super-efficient 700-cc engine released in 2011. We also expanded our lineup of small commuter scooters powered by the next-generation 125-cc eSP engine. Both engines contribute to major reductions in CO_2 emissions while offering fuel savings that make life easier for our customers.

●Nonaka: For automobiles, we began leasing in Japan the all-electric Fit EV which, as a zero-emission vehicle, provides the greatest environmental benefit. In North America, we released the Accord Plug-In, which comes with the most advanced powertrain in our Earth Dreams Technology line. Compared to other vehicles in its class, the Accord Plug-In is certainly the most efficient car in the world; even its internal combustion engine is top-of-the-line. In Japan, we released the N BOX+ and N-ONE mini-vehicles, which offer exceptional environmental performance and set the stage for a long line of Earth Dreams Technology products that will make appearances in the coming years.



Yoshiharu Yamamoto, President and CEO

●Nishida: For power products, we launched in Europe an environmentally responsible robotic lawnmower called Miimo. It doesn't use gasoline so it emits zero CO_2, and it cuts grass into really fine pieces that act as fertilizer, so there's no waste. And, of course, it mows the lawn by itself, creating time that the owner can put toward recreation and other things.

●Yamamoto: As you've all noted, we made steady progress last year in reaching our goal of creating products that offer outstanding environmental performance in all regions of the world. Now let's talk about products that are scheduled for release in fiscal 2014. There's not a lot we can say yet, but tell us in your own words what our customers can look forward to most in the coming year.

●Suzuki: This year we're planning to introduce new environmentally responsible engines to smaller motorcycle models to achieve our goal of having the most fuel-efficient products in each commuter category, a segment that sells around 15 million units globally. We will release mid-size models featuring a new 500-cc two-cylinder engine. These bikes will be fun to ride, of course, but they'll also be very fuel-efficient.

●Nonaka: I think the automobile our customers can look forward to most this year is the new Fit, a hybrid with a one-motor Earth Dreams Technology hybrid system that will be sold in most of the world. We completely revamped the engine and transmission, so it has amazing environmental and driving performance. It can aim at the most fuel-efficient vehicle in its class in the world.

●Nishida: In power products, we will release new large electric generators and snowblowers in developed regions such as Europe and Japan. We will introduce PGM-FI electronic fuel-injection systems to power products other than outboard engines for the first time, and also work on improving output and environmental performance. We've marketed a large number of agricultural products in developing countries, so we'll be working on improving the basic performance of these

Tetsuo Suzuki,
Director in charge of Motorcycle R&D Center

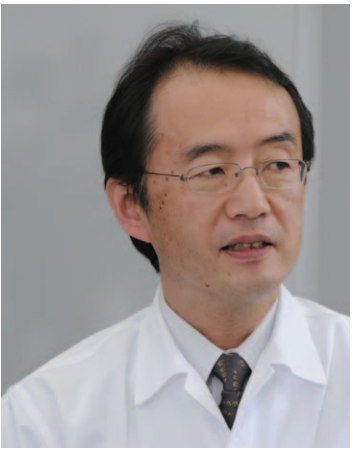
products. For example, a water pump for rice paddies we recently developed incorporates a new high-efficiency pumping technology that increases fuel efficiency by 20%. This technology will certainly have a positive impact on farming in developing countries, so keep an eye out for its release.

Global strategies for promoting a low-carbon economy

●Yamamoto: Honda set a target to reach 39 million units in global sales by the end of 2016, which means we need to reduce CO_2 emissions while also growing sales. What approach or perspective are engineers taking as they set out to solve this extremely challenging problem?

●Suzuki: For motorcycles, we're planning to more than double sales in developing countries by 2020. Because gasoline costs account for a large share of user income in these countries, high fuel economy is a major selling point in itself. The biggest challenge is figuring out how to make fuel-efficient products without raising costs. We've gone back to the drawing board and are in the process of thoroughly revising technologies.

●Nonaka: For automobiles, we're constantly working to make engines and transmissions more efficient, exteriors more aerodynamic, and vehicles lighter. We're developing weight-reduction technologies to drop not just 5 or 10 kg but a full 100 kg and take a big step forward in fuel efficiency. We're also expanding our Earth Dreams Technology hybrid lineup. People should get excited about the NSX, a next-generation supercar that will run like a real sportscar while being powered by a three-motor hybrid system that also has impressive environmental performance. Another goal that's farther down the road is downsizing. Honda is in fact the industry leader in technologies that reduce the size of the car without changing the interior space. And after that we'll develop smaller, supercharged engines. These are some of the ways we hope to keep CO_2 emissions from increasing as sales grow.



Takao Nishida,
Director in charge of Power Products R&D Center

●Nishida: The average household in Japan consumes 30% of its energy for mobility, 30% for electricity, and the remaining 40% for heating and cooling. Based on this, we are conducting research to increase the fuel efficiency of internal combustion engines and our home cogeneration unit, diversifying fuels, and deploying fuel cell technologies. When testing the Honda Smart Home System, we're striving for efficient energy management by looking at how electricity is stored and used. Our power products business has much to contribute to energy use in daily living, so we feel a sense of responsibility and purpose in helping to achieve maximum efficiency in the life-cycle of energy as it goes from generation to storage to use.

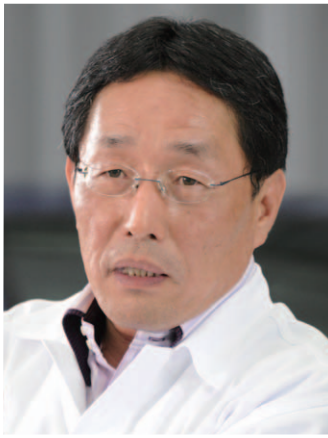
●Yamamoto: As always, we're striving to meet the world's needs by being ahead of our time. I'm sure our customers are looking forward to hearing more about each of these endeavors as they unfold.

What kind of future does R&D management envision?

●Yamamoto: Before closing, please tell us what kind of product you dream of creating as a product developer.

●Suzuki: The environment is important of course, but it's just one aspect. I don't agree with the practice of watering down the fun of riding a motorcycle to make it more eco-friendly. Having fun is one of the key things motorcycles are for. So I'd like to develop a product that represents the highest level of achievement in both enjoyment and environmental performance, one that makes a strong statement as a whole. That's what I dream of as someone who works with motorcycles.

●Nonaka: To Honda, the ultimate eco-car is the fuel cell vehicle (FCEV), which runs on electricity generated by the chemical reaction between hydrogen and oxygen. However, FCEVs are more expensive than EVs and aren't affordable enough yet to attract buyers. The other problem is refueling infrastructure. If we lived in a world where people could make and store hydrogen at home, Honda could produce compact FCEVs and sporty FCEVs and all kinds of other FCEVs; we could even have FCEV racing. I'm really determined to continue research and get FCEVs—in all forms—to our customers.



Toshihiko Nonaka,
Director in charge of
Automobile R&D Center

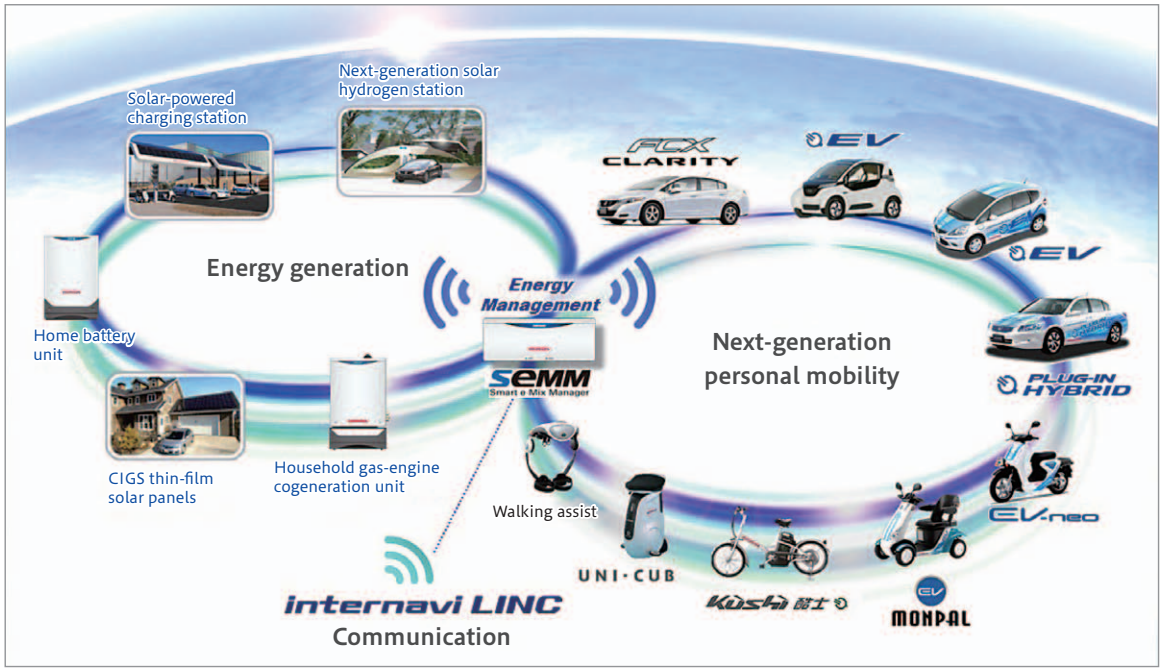
●Nishida: I want to make products that are environmentally friendly, of course, but I also want to make products that benefit the environment by being used. Honda power products help people raise crops, keep a healthy lawn, travel over the water. I dream of users stopping work for a moment to wipe the sweat off, and glancing up at a deep blue sky. It's meaningful experiences like that that I want to share with customers around the world. It's what inspires my work in product development.

●Yamamoto: Thank you for sharing. Your comments reminded me once again that Honda is a company of individuals, each with their own dreams about what motorcycles and automobiles and power products can become. One of my dreams, if I may, is to push internal combustion engines to the very limit of what's possible. The internal combustion engine has evolved continuously in the 100 years since it was developed, steadily approaching its theoretical limit. I want Honda to be the company to reach that limit—in other words, to develop the best internal combustion engine that humans are capable of conceiving. Another dream is to build a mobility society that doesn't get its energy by drilling into the earth but rather from solar and other renewable forms of energy. Developing fun, inspiring products in that context, I believe, is what will lead us to realizing the joy and freedom of mobility and a sustainable society where people can enjoy life.

Next-Generation Technology

CO2 E W Developing technologies and products that will get us to Triple Zero

Honda is developing next-generation technologies that will pave the way to new and exciting integration between electric personal mobility products and low-carbon energy generation systems—a development schemeconcept called "Honda Electric Mobility Synergy."



Honda Electric Mobility Synergy

■ Our vision of next-generation electric personal mobility and energy generation

● Honda Electric Mobility Synergy

Comprehensive management of the supply and demand of energy used for personal mobility and daily living is essential to achieving our mission to realize "the joy and freedom of mobility and a sustainable society where people can enjoy life." To make this happen, we need to expand and strengthen our introduction of next-generation personal mobility products—particularly electric products—and low-carbon energy generation systems, and develop advanced information and communication technologies to link them together.
Seeing the integration of home and mobility products—a concept we have named "Honda Electric Mobility Synergy"—as the way of the future, we are conducting research and development to create and improve the devices that will make up such networks.

● Honda Smart Home System

Since April 2012, we have been conducting experiments using a demonstration test home, in Saitama City, equipped with the Honda Smart Home System (HSHS), the core technology in Honda Electric Mobility Synergy. Based on the results of these experiments, our goal is to market products that contribute to a 50% reduction in CO_2 emissions from personal mobility and home living and, at some point in the not-so-distant future, develop new and more efficient technologies, such as renewable fuels, that will bring these emissions down to zero.

HSHS devices at the demonstration test home in Saitama (Smart e Mix Manager, gas-engine cogeneration unit, home battery unit)

Fleet of demonstration-version personal mobility devices (from left: plug-in hybrid vehicle, EV-neo scooter, electric vehicle, Monpal ML200 4-wheel scooter)

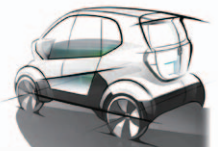
■ Next-generation personal mobility

Within Electric Mobility Synergy, Honda is also developing mobility devices based on new concepts that are radically different from ordinary automobiles and motorcycles. These devices will be the next generation of electric personal mobility products that enrich people's lives.

● Micro Commuter Prototype

The Micro Commuter Prototype β[1], is a micro-sized short-distance electric vehicle currently under development. Working with local governments, we plan to begin real-world testing[2] of this vehicle in the fall of 2013 to verify its potential in car-sharing applications and for providing short-distance mobility assistance to senior citizens. Our goal is to create a next-generation mobility device that helps Honda share the fun and joy of mobility with more people while placing minimum impact on the environment, and to market the device to local governments as a useful tool for community development programs.

Micro Commuter Prototype, announced in November 2012



Micro Commuter Prototype β

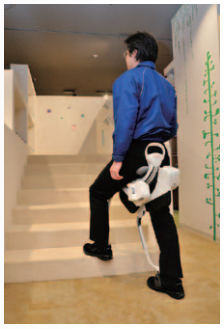
● UNI-CUB

The UNI-CUB is a personal mobility device that offers complete freedom of movement and is operated simply by shifting one's weight in the desired direction. The compact device fits comfortably between the legs, freeing the hands for other tasks. Designed to achieve integration with the human body for natural, intuitive movement, the UNI-CUB has been undergoing demonstration testing since June 2012 at the National Museum of Emerging Science and Innovation in Tokyo, with plans for initial use in shopping malls, museums, and other public spaces.

UNI-CUB at the office

● Walking assistance

Honda is developing wearable walking assist devices to help people continue to enjoy the freedom and joy of walking on their own two feet. Making full use of our research in robotics, represented by ASIMO, the world's most advanced humanoid robot, we are developing a device that helps the user lift his or her legs as they move forward and backward while walking, as well as a device that supports bodyweight to reduce the load on the user's legs. We are actively pursuing practical application of these devices by verifying their potential use in rehabilitation medicine and elderly care, and by collaborating with homebuilders to verify the in-home use of robot technologies.



Testing walking assist devices in various settings: for physical rehabilitation at Yufuin Kohseinenkin Hospital (left), for in-home use (right)

HF120 turbofan engine for light business jets
Toward an age of personal mobility in the sky

HF120 engine for light business jets

The HF120 turbofan engine for light business jets, which is currently under development in collaboration with General Electric based on design technologies developed by Honda, is in the last stage of testing for certification from the U.S. Federal Aviation Administration and European Aviation Safety Agency.

The engine is 10% more fuel efficient and requires less maintenance than existing engines in the same class, and it achieves significantly lower emissions and quieter operation than required by regulation. The HF120 will power the HondaJet, the first production model of which entered production last year, and is highly anticipated by other aircraft manufacturers as well as a next-generation engine with exceptional environmental performance.

1. A mobility device developed for marketing in Japan's "micro" vehicle class, the introduction of which is being considered by the Japan Ministry of Land, Infrastructure, Transport and Tourism, and in the EU's L7 category (heavy quadricycles; for EVs, maximum mass of 400 kg excluding the battery and maximum power output of 15 kW)
2. As of June 2013, Memorandums of Understanding (MOUs) have been signed with Kumamoto Prefecture and Miyakojima City in Okinawa

Automobiles

CO2 E W Developing technologies and products that will get us to Triple Zero

Honda is actively engaged in the development of hybrid and other advanced environmental technologies that will satisfy the growing global demand for more eco-friendly cars while delivering a fun driving experience unique to Honda.

Global

■ Enhancing and expanding hybrid technologies

● Intelligent Multi-Mode Drive, the world's most efficient hybrid system

In January 2013, Honda expanded the Accord lineup, one of the top-selling in North America, with the addition of the Accord PHEV. Its release introduced new value to the mid-size sedan class and marked the first adoption of a two-motor plug-in hybrid system in a Honda vehicle.

The biggest highlight of this model is that it employs Sport Hybrid Intelligent Multi-Mode Drive (i-MMD), a new Earth Dreams Technology[1] hybrid system. i-MMD, which is composed of a newly developed 2-liter straight four-cylinder Atkinson cycle engine, a high-efficiency two-motor electric CVT, and a high-capacity 6-kWh lithium-ion battery, was specifically designed to provide maximum carbon-reducing satisfaction and fun-to-drive performance in a mid-size vehicle.

The Accord Plug-In realizes a world-leading fuel economy of 115 MPGe[3] in all-electric mode, and offers a significantly farther EV driving range with its plug-in charging capability.

Plug-in and hybrid versions of the new Accord will go on sale in Japan in June 2013.

Accord PHEV launched in North America in January 2013

2.0-liter DOHC i-VTEC Atkinson cycle engine featured in the Sport Hybrid i-MMD Plug-in system

Two-motor electric CVT featured in the Sport Hybrid i-MMD Plug-in system

● Global hybrid vehicle sales top 1 million

Cumulative global sales of Honda hybrid vehicles surpassed 1 million units as of September 30, 2012—12 years and 11 months after the first-generation Insight was launched in Japan in 1999.

Left: Sport Hybrid i-MMD Plug-in lithium-ion battery (cut-away model) Right: Battery charger

■ Eco-car production and sales expanded in Asia

● Jazz Hybrid production begun in Thailand and Malaysia

Honda began local production and sales of the Jazz Hybrid (Japan: Fit Hybrid) in Thailand in July and in Malaysia in November 2012.

The Jazz Hybrid, a compact hybrid vehicle offering exceptional ride comfort and fuel economy, has sold more than 200,000 units worldwide (as of March 31, 2013). Honda will strengthen production systems in countries where the model is sold in order to deliver hybrid vehicles with speed, affordability, and low CO_2 emissions to customers in Asia, where demand for eco-friendly vehicles is expected to increase significantly in the years ahead.

Jazz Hybrid (Japan: Fit Hybrid)

● All-new Brio Amaze sedan released in Thailand

In November 2012, Honda released in Thailand the Brio Amaze, an all-new compact sedan based on the Brio five-door hatchback and compliant with Thailand's eco-car certification standards and the Euro 4 emission standard. In April 2013, we also introduced the Amaze, a model equipped with a model-exclusive 1.5-liter i-DTEC diesel engine, and began sales in India and Thailand.

Brio Amaze

1. "Earth Dreams Technology" is a next-generation powertrain technologies that greatly enhances both driving performance and fuel economy, building on advancements in environmental performance for internal combustion engines, transmission efficiency, and electromotive technologies to pursue a joy of driving unique to Honda.
2. Honda internal research
3. Miles per gallon of gasoline equivalent: A measure of the fuel economy of an electric vehicle by converting the amount of electrical energy it uses per distance traveled to an equivalent amount of energy derived from gasoline.

■ Lineup additions and localized development expansion in China

● Ciimo, the first model developed by Dongfeng Honda

In April 2012, Dongfeng Honda Automobile Co., Ltd. (Dongfeng Honda), a Honda automobile production and sales joint venture in China, announced and released for sale its first independently developed model, the Ciimo. The model was developed using the platform of the eighth-generation Civic by the Dongfeng Honda R&D Center. It features a 1.8-liter i-VTEC engine and realizes an impressive fuel economy of 6.9L/100km (China test cycle).

● Hybrid lineup enhancements, including the ILX luxury sedan

In July 2012, we announced in China the CR-Z, a hybrid sports car popular around the world. And at the Guangzhou Motor Show, which began in November, we announced plans to expand our lineup of hybrid vehicles and displayed the Insight, Fit Hybrid, and ILX, the first-ever Acura-brand luxury compact sedan powered by a hybrid system. We have also started preparations to begin hybrid production in China within the next three years.

■ Rollout of Earth Dreams Technology powertrains

● Civic upgraded to new 1.6-L i-DTEC diesel engine

In January 2013, Honda added a new Civic model to its European line featuring a new 1.6-liter i-DTEC diesel engine. This small diesel engine, the first Earth Dreams Technology component to be released in Europe, is the lightest in its class4 and achieves a CO_2 emissions performance of 94 g/km[5].

● i-DCD, a light and compact one-motor hybrid system

Sport Hybrid Intelligent Dual Clutch Drive (i-DCD), a newly developed one-motor hybrid system planned to go into Honda's next subcompact model, combines a newly developed 1.5-liter straight four-cylinder Atkinson cycle engine, a seven-speed DCT[6] with a built-in high-output motor, and a lithium-ion battery, and achieves at least a 30% efficiency improvement over conventional hybrid systems.

● Sport Hybrid SH-AWD and the next NSX

Sport Hybrid Super Handling All Wheel Drive (SH-AWD), Honda's first three-motor hybrid system, pairs a 3.5-liter direct-injected V6 engine with a seven-speed DCT with a built-in motor that controls torque to the left and right wheels independently. The system, which simultaneously delivers the acceleration performance of a V8 engine and the fuel economy of a straight four-cylinder engine, will figure as a central component in the next NSX sports car.

Ciimo

ILX premieres in China at the 2012 Guangzhou Motor Show

Left: Insight

Right: Fit Hybrid

Civic equipped with the new 1.6-L i-DTEC diesel engine

Prototype powered by the newly developed i-DCD one-motor hybrid system (left), and prototype powered by Sport Hybrid SH-AWD (right)

NSX Concept (Honda specifications) exhibited at the Geneva Motor Show in March 2013

4. Honda internal research (as of September 30, 2012)
5. Honda internal research (with 16-inch tires). Equivalent to 3.6 L/100 kM of fuel.
6. Dual Clutch Transmission

Japan

■ Fit EV leasing begun in Japan

● **Super efficient Fit EV built on uncompromising pursuit of efficiency**

Leveraging technologies we have been cultivating in the research and development of hybrid and fuel cell electric vehicles, in August 2012 we began leasing in Japan the Fit EV, a model designed to extract the most benefit and enjoyment from pure-electric propulsion. When tested using the JC08 cycle, the Fit EV achieved an exceptional battery-to-wheel efficiency of 106 Wh/km[1] and a 225-km cruising range per charge.

<Newly developed electric servo brake system>

We developed an electric servo braking system to maximize the amount of energy recaptured from the start of deceleration to just before stopping. The system also helps realize a smoother braking feel and enhanced regeneration performance.

<First to employ HFO-1234yf refrigerant in Japan[2]>

The Fit EV is the first vehicle in Japan to use in its air conditioner HFO-1234yf, a new refrigerant with 1/350th the global warming potential[3] of the conventional refrigerant, HFC-134a.

<First Honda vehicle to employ Bio-PET>

Bio-PET, a fabric made using sugar cane-derived material without impacting food supplies, is used for the seat and door trim.

<Sedan-level drag coefficient>

Capitalizing on another advantage of EVs—their motors generate less heat than gas engines—the Fit EV was made with a significantly smaller front grille, which is used for cooling. A flatter underbody surface and smoother rear bumper also enhance aerodynamic performance, leading to better energy efficiency.

■ N-ONE release and CR-Z partial redesign

● **Environmental technologies in the N-ONE**

Taking advantage of optimal roof arch placement, we gave the N-ONE, the third N-series model released in November 2012, a thinner roof. This created a lighter upper body and thus lower center of mass, which in turn led to a more stable, linear driving character. Additionally, through straight frame placement, a distinguishing characteristic of the N-ONE's center-tank layout, we improved body rigidity performance compared to conventional frames and enhanced rear stability. Adopting an all-in-one hot stamping and trimming process and other manufacturing technologies, we reduced the body-in-white weight by 10%.

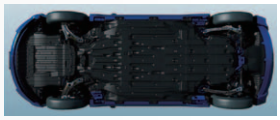
As part of our efforts to reduce the use of four heavy metals (lead, mercury, hexavalent chromium, and cadmium), which have an adverse effect on the environment and human health, we used mercury-free HID headlamps for the first time in a Honda mini-vehicle.

● **CR-Z now with lithium-ion battery**

The partially redesigned CR-Z announced in September 2012 was equipped with a lithium-ion battery—the first for a Honda hybrid in Japan—for enhanced motor output. New friction-reduction technologies in the engine and other improvements helped achieve a low fuel efficiency of 23.0 km/L (JC08 test cycle)[4].

Around 200 units of the Fit EV are planned to be leased to municipalities and corporations in Japan over a two-year period

Bio-PET fabric is used for seat and door trim



Small front grille (left) and streamlined underbody (right)

N-ONE

N-ONE HID headlamps, the first in a Honda mini-vehicle

CR-Z

Lithium-ion battery powers the CR-Z, the first for a Honda vehicle in Japan

1. Calculated based on the cruising distance and the amount of AC electricity needed to recharge the vehicle after driving. The efficiency rating and range mentioned here were determined using driving conditions set in the U.S. Actual performance may vary depending on driving conditions, driving style, and other factors. 2. Honda internal research (as of August 2012) 3. A measurement of how much heat a greenhouse gas traps in the atmosphere compared to the same mass of CO_2. CO_2 is assigned a global warming potential of 1. 4. Type with 16-inch wheels and CVT.

■ PHEV/EV demonstration testing in Japan

To identify and remove impediments to the full-scale public adoption of plug-in hybrid and electric vehicles (PHEVs, EVs), since December 2010, we have been conducting demonstration testing of next-generation personal mobility systems in real-life traffic environments in collaboration with Kumamoto Prefecture, Saitama Prefecture, and Saitama City to confirm their potential role in the future of mobility and effectiveness in reducing CO_2 emissions.

● Kumamoto Prefecture: Verifying applications and user receptivity

<Government car sharing>

We loaned EVs to Kumamoto Prefecture for use as government vehicles based on the premise that EVs will be well received by governmental organizations, since they typically use vehicles within a limited radius and can guarantee a charging space. We are testing this hypothesis and also studying CO_2 emissions-reduction benefits.

<Rental use in tourist hot-spots>

Perceiving the rental car market as an effective means of popularizing EVs and PHEVs, given the relatively short driving distances and high number of users, we are testing EVs and PHEVs for this application mainly in the Aso area of Kumamoto. Activities include the collection and analysis of user data through questionnaires.

<Ride sharing in mountainous areas and on coastal islands>

We loaned EVs to be used as welfare vehicles for the elderly in Amakusa, based on the premise that mountainous and remote island areas can easily benefit from them. We are verifying our hypothesis based on driving and charging histories and user interviews.

● Saitama Prefecture: Verifying utility and convenience

<Government car sharing>

As in Kumamoto Prefecture, we loaned EVs to Saitama Prefecture to verify their CO_2 emissions-reduction benefits and utility as government vehicles.

<Park and ride>

We are testing EVs and PHEVs using a solar charging station at Kagohara Station (JR East) in Kumagaya, based on the premise that these vehicles are well suited to park-and-ride commuting applications (in which commuters parks their cars at a public transit connection), which typically involve relatively short drives of a fixed distance.

<"Rail and ride" tours>

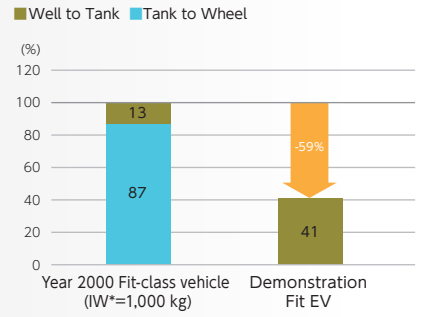
Using EVs and PHEVs, we are hosting tours that start from Chichibu Station (Chichibu Railway) and travel in a loop through the scenic Chichibu region, based on the premise that these vehicles are well suited to traveling through mountainous areas given their high torque and regenerative braking capabilities and that the eco-friendliness of a product encourages greater user understanding and satisfaction. Activities include measuring performance such as energy/fuel efficiency and EV cruising distance and collecting user responses.

● Saitama City: Verifying EV receptivity in metropolitan areas for carbon emission reduction

We began verifying a shared ownership model in which individual EV and PHEV users lend their vehicle for use by the local government or company where they work.

PHEV demonstration test vehicles (Japanese specifications) based on the U.S. Accord were sequentially lent out to Kumamoto Prefecture (5 cars), Saitama Prefecture (4 cars), and Saitama City (1 car), starting in October 2012

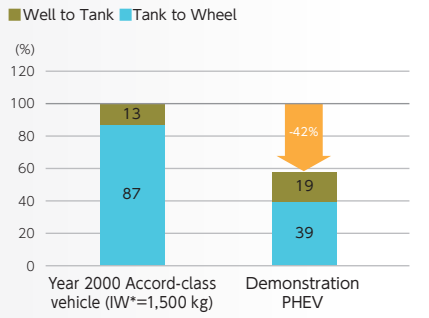
CO_2 emission reduction benefit (Honda estimates)



*Inertia weight

EV demonstration test vehicles (Japanese specifications) based on the Fit EV were sequentially lent out to Kumamoto Prefecture (5 cars), Saitama Prefecture (4 cars), and Saitama City (1 car), starting in October 2012

CO_2 emission reduction benefit (Honda estimates)



At 'rail and ride' tours held in Chichibu, Saitama Prefecture, in October 2012, monitors in 7 EVs and 7 PHEVs enjoyed driving along a roughly 40-kilometer route through the mountains

Japan

■ Alternative energy deployment

● FCX Clarity fuel cell electric vehicle

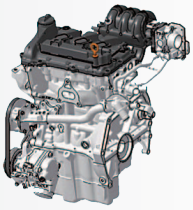
In March 2012, working in collaboration with Saitama Prefecture and Iwatani Corporation under commission by Japan's Ministry of the Environment, we installed Japan's first solar-powered hydrogen station[1] at the Saitama Prefectural Office near Tokyo. We also delivered an FCX Clarity fuel cell electric vehicle (FCEV) for the prefecture's use as a government vehicle and are currently verifying its ease-of-use as well as its effectiveness in reducing CO_2 emissions and helping to move Japan toward a low-carbon economy.

The high-pressure electrolyzer we developed for our new solar hydrogen station has eliminated the need for the compressor used in the previous system by integrating the electrolysis and compression processes, and can produce approximately 1.5 kilograms of hydrogen in 24 hours with less noise and in less space than the original unit. The FCX Clarity, meanwhile, is capable of supplying enough electricity to satisfy the electricity needs of the average Japanese household for approximately six days, and can be used as a mobile source of power in emergencies.

Viewing fuel cells as the ultimate clean-energy solution, we have been proactively developing technologies to support alternatives to fossil fuels, reduce emissions, and lessen the impacts of mobility and energy use on the global climate.

1. Honda internal research

An FCX Clarity FCEV receives hydrogen from a solar hydrogen station installed at the south entrance to the Saitama Prefectural Office



The N-ONE engine employs a lightweight, high-rigidity cylinder block; lightweight, high-rigidity crankshaft, and aluminum sump with integrated stiffener

■ Noise reduction technologies

● Reducing acceleration noise

Honda is also actively working to reduce vehicle noise. To reduce noise from major sources during acceleration, a particularly large component of car noise, we are redesigning related components in the engine, air intake and exhaust systems, and tires.

The N-ONE mini-vehicle, released in Japan in November 2012, incorporates the following technologies to achieve an exceptionally low level of noise (regulatory limit: 76 dB [A]).

Engine noise reduction technologies

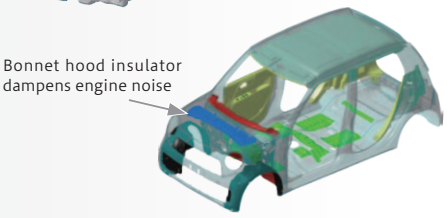
- Lightweight, high-rigidity cylinder block
- Lightweight, high-rigidity crankshaft
- Aluminum sump with integrated stiffener
- Bonnet hood insulator
- Front inner fender insulator
- Engine compartment underbody cover

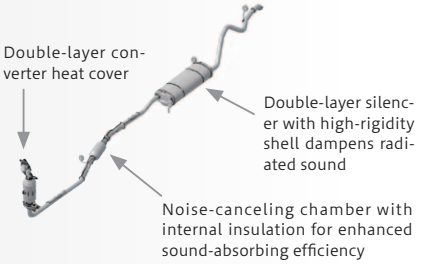
Air intake noise and radiated sound reduction technologies

- High-rigidity air filter box
- High-rigidity resonator chamber

Exhaust noise and radiated sound reduction technologies

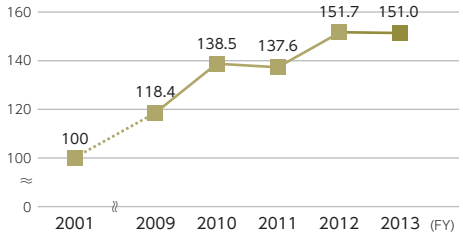
- Noise-canceling chamber
- Double-layer silencer
- Double-layer converter heat cover



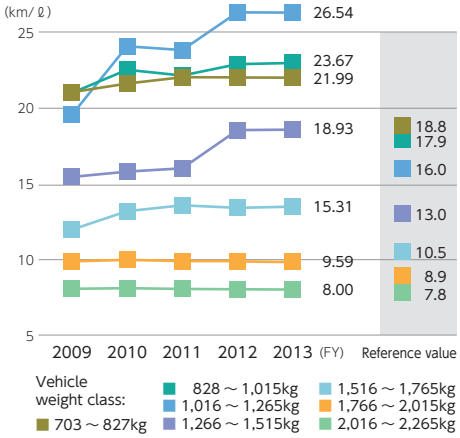


Environmental indicators (Japan)

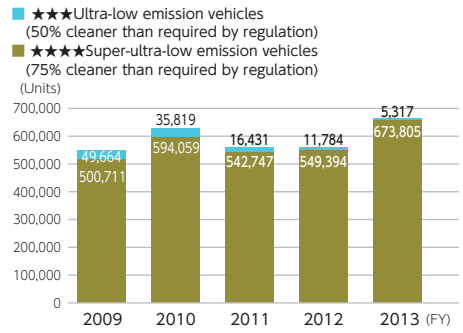
Average automobile fuel efficiency in Japan (FY2001=100)



Average fuel efficiency of vehicles that comply with the FY2010 standards, classified by weight

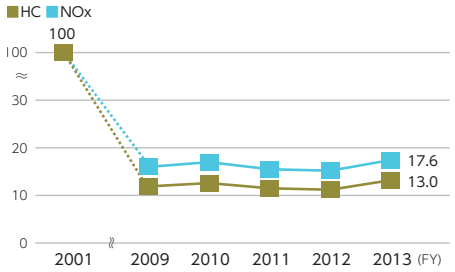


Sales results for low-emission vehicles



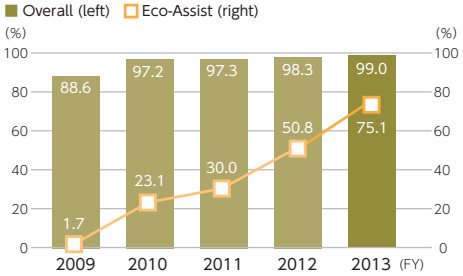
In fiscal 2013, 679,112 vehicles, or 95% of all Honda passenger cars sold, met low-emission certification criteria.

HC and NOx emissions from Honda vehicles in Japan (FY2001=100)



In fiscal 2013, we reduced HC emissions by 87.0% and NOx emissions by 82.4% from fiscal 2001 levels.

Percentage of vehicles with eco-driving support systems



We equip many of our models with tools for helping drivers apply fuel-efficient driving techniques. In addition to fuel economy meters and other eco-driving support systems, we have been installing our Ecological Drive Assist (Eco Assist)[3] system in a growing number of vehicles. This system is designed to help drivers improve their fuel efficiency by providing real-time feedback on their car operation and also optimally controlling air conditioning and other systems.
In fiscal 2013, eco-driving support systems were installed in 99.0% of Honda passenger cars sold in Japan, with 75.1% of vehicles featuring an Eco Assist system.

3. The Eco Assist system works in multiple ways. In "Econ" mode, priority is given to fuel economy, and the vehicle automatically controls the engine, motor, CVT, and air conditioning system to effectively improve fuel efficiency. It also includes a coaching function, which changes the background color of the speedometer according to how efficiently acceleration and braking are applied, and a coaching function that shows the driver's eco-driving score.

Motorcycles

CO2 E W Developing technologies and products that will get us to Triple Zero

In fiscal 2013, Honda strengthened its motorcycle lineup by expanding the application of two next-generation engines introduced the previous year, launched a new mid-size engine, and improved and expanded existing technologies to boost environmental performance worldwide.

Global

■ Expanding application of next-generation global 700-cc engine

● New CTX cruiser series announced

In February 2013, we announced at the International Motorcycle Show in Chicago, Illinois, U.S., the CTX700N and CTX700, the first two models in the new CTX series, based on the development concept "Comfort Technology eXperience."

CTX is a series of mid-size bikes developed in pursuit of technologies that provide superior comfort by all measures and give the rider more riding comfort, convenience, and excitement.

The engine in this series is a next-generation water-cooled four-stroke straight two-cylinder 700-cc engine, the same adopted in the NC700S, NC700X, and Integra models released in 2011. This environmentally responsible engine incorporates automobile fuel technologies for a 40% fuel efficiency improvement over conventional engines in the same class, while displaying powerful torque characteristics at low and medium rpm. By expanding the lineup of models that use this engine, we will seek to raise the environmental performance of our mid-size bikes worldwide.

The CTX700N and CTX700, produced at Kumamoto Factory in Japan, went on sale in the U.S. in February and April 2013, respectively, and are slated for a Japan release in summer 2013.

Naked-style CTX700N

CTX700 with cowling

■ New two-cylinder 500-cc engine produced in Thailand

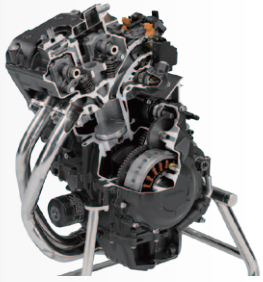
● First genuine mid-size sport bikes produced in ASEAN

At EICMA 2012, held in November 2012 in Milan, Italy, we announced the CBR500R, CB500F, and CB500X, three new sport bikes with a newly developed water-cooled straight two-cylinder 500-cc engine.

This series, launched as three distinct models to fit a variety of lifestyles while still incorporating the latest design trends, is the first set of genuine mid-size sport bikes to be produced in the ASEAN region, and was developed to target entry-level and downsizing users in developed countries and users in developing countries who are switching to a larger bike. The engine, with its reshaped ports and valves and other improvements, offers easy handling at low to mid-range speeds as well as sporty performance at high speeds. Due to various friction-reducing enhancements, it also realizes class-leading fuel economy[1] and exceptionally quiet operation. The inclusion of a PGM-FI electronic fuel injection system, HECS3 exhaust system combining a three-way catalytic converter and O_2 sensor[2], and an air induction system results in super clean exhaust.

The CBR500R, CB500F, and CB500X, produced in Thailand, went on sale in Thailand, Europe, and the U.S. in December 2012. Sales of a smaller, 400-cc model, produced at Kumamoto Factory and designed for the Japanese market, also began in Japan.

CBR500R with full cowling (top), naked-style CB500F (bottom left), and crossover-concept CB500X (bottom right)



Newly developed water-cooled straight two-cylinder 500-cc engine featured in the first genuine mid-size sport bikes built in ASEAN

1. Honda internal research
2. Device that detects oxygen in exhaust gas to monitor the state of fuel combustion in the engine.

Improving global environmental performance

Lineup of eSP scooters expanded

Announced in 2011 and introduced to markets in such models as the Click 125i, Vario Techno 125, and PCX, the eSP next-generation global scooter engine, boasting 25% better fuel economy compared to conventional engines in the same class[3], has been expanded to a growing line of models. In Vietnam the SH was released in June 2012, the Air Blade in December, and the Lead in April 2013. Sales of the SH were also begun in Europe in September 2012, and in Thailand in April 2013. The Lead is scheduled to go on sale this summer in Japan as well.

By continuing to apply this engine in other scooters produced around the world, we plan to increase the number of environmentally advanced scooters on a global basis.

PGM-FI models expanded in Indonesia

Last year we pledged to install our fuel-saving PGM-FI electronic fuel-injection system in all motorcycles produced in Indonesia by 2013 year-end.

PGM-FI is a technology that electronically optimizes the amount of fuel injected into each cylinder, thereby allowing the bike to emit cleaner exhaust emissions while operating at maximum power and fuel performance. This "all-FI declaration" anticipated Indonesia's new emission standards for two-wheeled vehicles.

To meet this goal, we released in September 2012 the Beat-FI and in December the CBR150R. The FI adoption rate was 52% as of 2012 year-end.

Flexible-fuel motorcycles lineup expanded in Brazil

In Brazil, we expanded our lineup of flexible-fuel motorcycles, machines that, by being able to run on a mixture of gasoline and environmentally responsible bioethanol, reduce CO_2 emissions and fuel costs at the same time. Adding to our existing lineup of the CG150 Titan, CG150 Fan, Biz, and NXR150 Bros, we released the larger-capacity CB300R and XRE300.

New technical center completed in India

In January 2013, after finishing the installation of Honda's first wind tunnel test chamber in India, we began full operation of a new motorcycle technical center housing the research and development, production (engineering), purchasing, and quality divisions of our motorcycle business.

The center, built on the property of Honda Motorcycle and Scooter India (Private) Ltd.'s (HMSI) Manesar Plant, is now the workplace of some 200 associates gathered from HMSI and Honda R&D (India) Private Ltd. The facility was designed to promote collaboration and higher work efficiency, putting Honda in the best position to deliver good products to our Indian customers with speed, affordability, and low CO_2 emissions.

SH

Air Blade

Lead

Beat-FI

CBR150R

XRE300

CB300R

The new technical center at HMSI's Manesar Plant houses Honda's first advanced wind tunnel test chamber for research and development in India

3. Honda internal data

Japan

■ Motorcycle initiatives in Japan

● Super Cub 50 gets complete redesign

In May 2012, we announced the fully redesigned Super Cub 50, the most fuel-efficient road vehicle on the planet[1]. Based on a "new basic Cub" design concept, we sought to provide more advanced features and better utility at an affordable price.

The engine in the new Super Cub 50 is an air-cooled single-cylinder four-stroke 50-cc engine with extensive use of low-friction technologies for increased efficiency. We improved handling significantly by boosting engine output while keeping fuel performance at 110 km/l (tested at constant speed of 30 km/h), adopting a two-stage clutch system with a separate clutch assembly for starting and shifting gears, improving frame rigidity, lengthening the wheel base, and including an electric starter in all model variations.

We achieved a more affordable price for the Super Cub 50, produced by Sundiro Honda Motorcycle Co., Ltd. in China, by pursuing efficiency in all steps in operations from materials procurement through production.

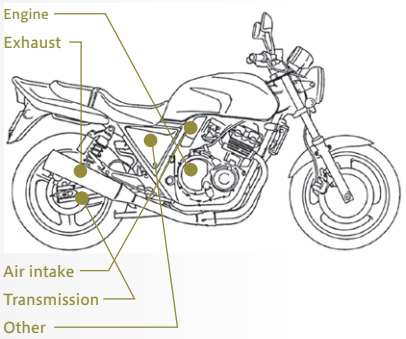
The new Super Cub 50 features a new engine with a maximum output of 2.7 kW, up from the previous model's 2.5 kW, and comes in five colors, including Pearl Harvest Green (top), Smart Blue Metallic (bottom left), and Virgin Beige (bottom right)

● Noise reduction technologies

Motorcycles generate noise and vibration in all sorts of places. We have worked to reduce noise by analyzing these sources using state-of-the-art technologies. As a result, our products are as required by noise regulations in Japan.

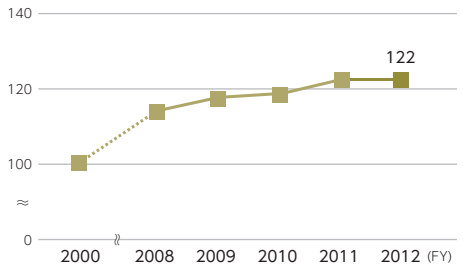
Engine: Use more rigid materials
Exhaust: Increase volume, use multi-chamber structures
Intake: Increase volume, use more rigid materials for outer casings
Transmission: Quiet drive chain, drive sprocket damper
Other: Sound dampening rubber

Sources of noise on a motorcycle and noise reduction strategies by source



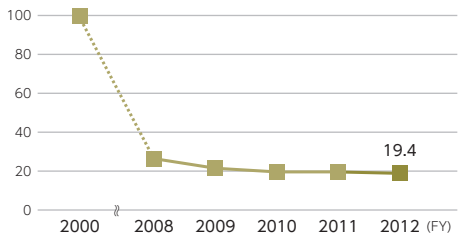
■ Environmental data in Japan

Average motorcycle fuel efficiency in Japan (FY2001=100)



We have introduced numerous fuel-efficient models to meet our target to reduce CO_2 emissions by 30% by 2020 compared to FY2001 levels. So far we have achieved a 22% increase in average fuel efficiency from FY2001.

Average HC and NOx emissions from motorcycles in Japan (FY2001=100)



As of FY2011, all new models sold in Japan[2] complied with the 2006 and 2007 emission regulations, with average HC and NOx emissions from these vehicles dropping to less than 1/5 that of FY2001 levels. This performance was maintained in FY2013 as well.

1. Honda internal research
2. 2006 standards for type 1 scooters and mini-bikes, 2007 standards for type 2 scooters and small motorcycles

Power Products

CO2 E W Developing technologies and products that will get us to Triple Zero

Besides personal mobility products, Honda also develops generators, tillers, outboard engines, lawn mowers, and other power equipment that enrich people's lives. We strive to improve the environmental performance of these products in order to help drive the transition to a low-carbon global economy.

Global

Miimo robotic lawn mower

■ Miimo robotic lawn mower

● **Sales in Europe begun in April 2013**

Miimo, a robotic lawn mower developed for households in Europe, moves by itself in a random pattern over a pre-designated area until the entire lawn is cut.

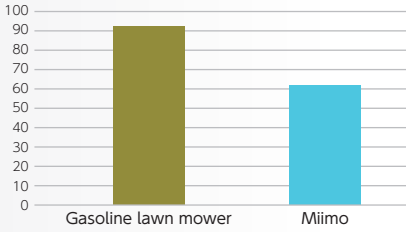
Powered by a rechargeable lithium-ion battery, Miimo automatically mows the lawn on the owner's preselected day and time, cutting the grass into a fine mulch that acts as a natural fertilizer and eliminates the need to bag and dispose of clippings. With Miimo, owners can keep their lawn looking beautiful without wasting time and energy on mowing.

Miimo detects when its battery is running low and automatically returns to its charging station when it needs to recharge. Battery-powered motor propulsion and optimized blade speed made possible through the application of a blade disk with fan significantly reduces noise. It emits a sound power level far lower—32 dB(A) lower—than the conventional gasoline lawn mower, less than the sound of tree leaves rustling in the wind.

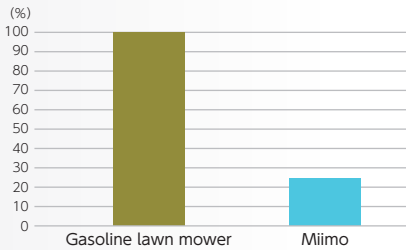
The high-performance lithium-ion battery is lighter and has a larger energy capacity than lead and nickel–metal hydride batteries, and since it degrades less over many hours of use, it has a longer replacement cycle and so is better for the environment.

Miimo not only emits zero CO_2, CO, HC, and NOx during operation, but also has dramatically lower life-cycle CO_2 emissions, roughly 75% lower than that of a gasoline lawn mower of the same class[1].

Sound power level
dB(A)



CO_2 emission reduction benefit (Honda estimates)



1. Compared to the HRG415 based on the same lawn size. Electricity CO_2 emission factor (410 g/kWh) is based on the IEA's "Energy Balance of OECD Countries 2010 Edition."

Japan

■ Energy diversification

Energy diversification for power products provides such benefits as lower CO_2 emissions during operation; easier purchasing, use, and storage of fuel; and reduced energy risk in emergencies. Honda believes in these objectives and actively supports energy diversification through the development of power products that use non-gasoline fuels.

Following the release of butane gas-powered ENEPO EU9i GB generator and Pianta FV200 rotary tiller in 2009, we expanded our alternative energy lineup with the addition of two more gas-powered products in 2012.

● EU9i GP propane gas-powered portable generator

We developed a portable electric generator that can run on propane gas during power outages and other emergencies, and began deliveries of the product to LP gas equipment distributors in August 2012.

The EU9i GP was developed based on the EU9i, an existing gasoline generator with a power inverter (rated output 900 VA), following the 2011 Great East Japan Earthquake and subsequent surge in Japanese consumer demand for emergency household generators. As the industry's first low-pressure propane gas[1]-powered generator[2] with extended[3] and easy operation, it uses propane gas, which is widely used in home appliances in Japan and is less likely than gasoline to degrade, and is easy to hook up.

The appliance uses propane gas already available in the home, making it that much easier to generate power when it is needed most. Our original sine wave inverter creates a steady supply of high-quality electricity on par with utility power, allowing users to charge their lighting apparatus, smart phones and other telecommunication devices and power their computers and televisions with peace of mind.

The EU9i GP realizes a 15% reduction in CO_2 emissions over gasoline generators of the same output and significantly lower exhaust emissions than the voluntary limits set by the Japan Land Engine Manufacturers Association[4].

● Salad CG FFV300 butane gas-powered tiller

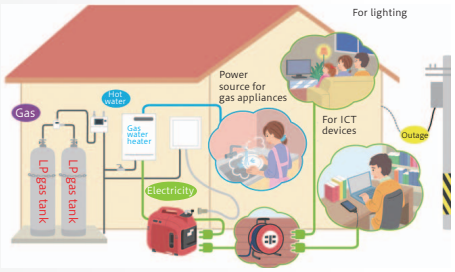
In March 2013, we began sales of the Salad CG FFV300, an easy-to-use tiller that runs on widely used household gas canisters.

Based on the FF300 self-propelled gasoline tiller, the Salad CG FFV300 is made for customers with mid-size vegetable plots (100-330 m2). As a step up from the entry-level Pianta FV200, it features a foldable handle for more convenient transport and storage, and offers the same superior tilling performance and operability of the FF300 while running on common household butane gas canisters, which are easy to purchase, use, and store. This allows for easy engine starting and fuel replacement, while simplifying fuel management and long-term storage.

By introducing the Salad CG FFV300, we aim to capture new demand in the home garden market by meeting the needs of home garden enthusiasts who wish to cultivate larger-sized.

EU9i GP propane gas-powered portable generator

Major features
- Sine wave inverter delivers stable supply of utility-grade electricity
- Two units operating in parallel can generate up to 1,800 VA
- Operable in temperatures from -15 °C to 40 °C
- Chokeless engine makes startup easy
- Super quiet (same noise level as the gasoline-powered EU9i)



Installation concept

Salad CG FFV300
butane gas-powered tiller

Major features
- Uses widely available, easy-to-use butane gas canisters
- No fuel clogs; smooth startup even after long-term storage
- Handle folds down without the use of tools for easy and compact storage
- Tills continuously for 55 min. (about 157 m^2) in first gear[5], 50 min. (about 490 m^2) in second gear on one canister (250 g) of gas
- Low, central placement of a vertical shaft engine and forward placement of Honda's proprietary co-axial counter-rotating tine drive system (Active Rotary System), the working part of the machine, makes deep tilling easy for first-time users

1. Gas pressure of 2.0 to 3.3 kPa as stipulated by the "Law Concerning the Securing of Safety and the Optimization of Transaction of Liquefied Petroleum Gas"
2. First portable generator with a 1-kVA-class output capable of running on common propane gas (low-pressure LP gas) (Honda internal research)
3. EU9i GP can run for approximately 100 hours on 50 kg of propane
4. 68% less HC and NOx, 81% less CO (Honda internal research)
5. Soil hardness 15-20 mm, tilling depth 10 cm, without attachment

Global

Always conscious of the environmental impact of its manufacturing operations, Honda is working hard to take environmental responsibility to ever higher levels around the world through operating management systems in six regions worldwide.

42 Global Environmental Management

47 Global Environmental Impact

48 Overview of Regional Environmental Initiatives

Global Environmental Management

Honda has created an institutional framework to put into practice the environmental principles articulated in the Honda Environment Statement, and has expanded it to the global level.
We are actively working to build environmental management systems at all business sites and obtain ISO 14001 certification at certain sites.

• Environmental management promotion structure

■ Organizational structure

In December 1991, Honda created what is now the Japan Environmental Committee and assigned it a central role in governing the environmental affairs of the company. This structure has been expanded into a global environmental management system with regional environmental committees in North America, South America, Europe, Asia & Oceania, and China. In March 1995, the World Environment and Safety Committee was established to manage environmental as well as safety initiatives (see note), through which Honda aims to create a motorized society that is safe for all people. The World Environment and Safety Committee discusses, determines, and reviews annual plans for implementing environmental conservation activities at the global level based on mid-term business plans, and has created an environmental management system that integrates activities on the global level with those on the factory floor. The company's president and CEO currently chairs the committee, a reflection of Honda's recognition that environmental issues, especially climate change and energy, are critical to Honda's business operations.

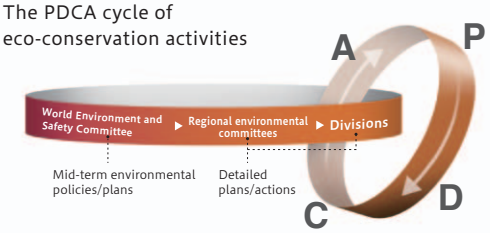
The World Environment and Safety Committee develops mid-term policies and plans for global environmental initiatives based on mid-term policies and management plans determined by the Management Council. Individual divisions prepare detailed plans for each region and business area, and then finalize the overall plans after discussion and approval by the regional environmental committees.

The regional environmental committees discuss and evaluate annual achievements under the plans and, based on the results, create new targets and plans with the objective of achieving mid-term policies and plans. The progress of environmental initiatives by Honda Group companies, as well as themes affecting multiple domains around the world, are reported to the World Environment and Safety Committee and then factored into the next year's annual plans and the next mid-term business plans and policies. Honda follows the Plan-Do-Check-Act cycle to promote continuous improvement in environmental performance in each region: Japan, North America, South America, Europe, Asia/Oceania, and China.

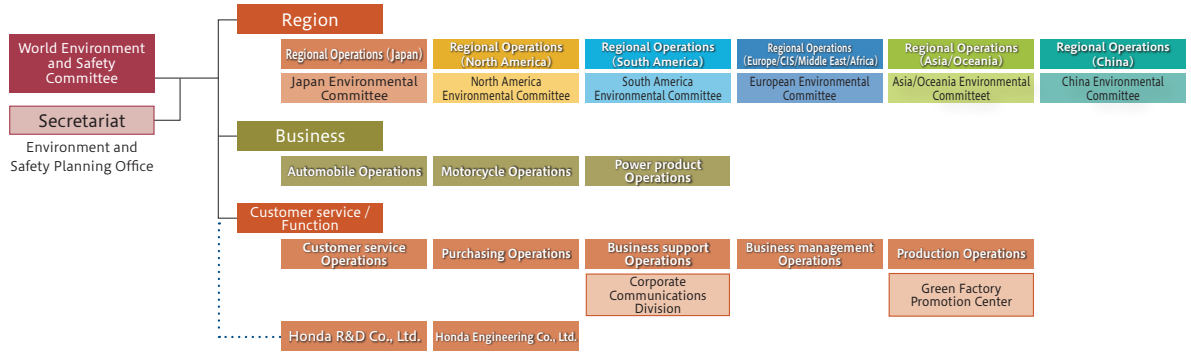
One hallmark of this system is that planning and implementation are not simply delegated to specialized staff, but that all associates are expected to be involved. The basic thinking is that all associates should be actively tackling environmental issues as a part of their daily work.

Note: For information on safety initiatives, see the Honda CSR Report and Honda Driving Safety Promotion Activities.

The PDCA cycle of eco-conservation activities



Honda's organizational structure for environmental affairs



as of June 2013

■ Regulatory compliance

In accordance with the Honda Environment Statement, Honda introduces environmental management systems at all business sites and in each division, promotes continuous efforts to improve environmental performance, and strives to comply with voluntary environmental standards that are more stringent than national and regional regulations.
We revised the Honda Conduct Guidelines in April 2013 (formulated 2010) and are implementing it throughout the Honda Group in Japan and worldwide. The document calls on Honda associates to comply with laws and regulations, company rules, and social norms and, for the purposes of environmental conservation, to strive to reduce environmental impacts in one's work by conserving and recycling resources and energy in accordance with environmental laws and regulations, company policies, and internal standards. We have appointed corporate directors to serve as Compliance Officers, and work systematically to enhance compliance and risk management under the supervision of directors in charge of each part of the organization.

Honda Conduct Guideline
http://world.honda.com/conductguideline/

■ Emergency protocols

In anticipation of accidents and emergencies that could cause environmental pollution, each factory and division has clearly-defined procedures for preventing pollution.

• Environmental management at Honda business sites

Along with development of environmental management systems at the group-wide level, we have been introducing such systems at each business site in order to continuously improve their environmental performance and to control environmental pollutants. We have been working actively to acquire ISO 14001, an international certification for environmental management, particularly at our production facilities.
After acquiring certification at each of our five major production facilities in Japan, we combined their certification for integrated operation of their management systems. Going forward, we plan to promote acquisition and expand our integrated system to include environmental management of the Saitama Factory's Yorii Plant, newly completed in March 2013. We also combined the certification registration for Honda head office buildings and district buildings in fiscal 2012.
We will continue developing our environmental management systems and seeking ISO 14001 certification (or in Europe, EMAS). We will continue working to ensure that business sites with certified environmental management systems remain certified, and also continue to apply the PDCA cycle at each site for continuous improvement in reducing the environmental impact of our operations.

ISO 14001-certification status worldwide (as of March 31, 2013)

Note: Includes facilities of Honda Motor Co., Ltd. and its major consolidated subsidiaries and affiliated companies.

• Disclosure of total GHG emissions

■ Honda GHG emissions in FY2013

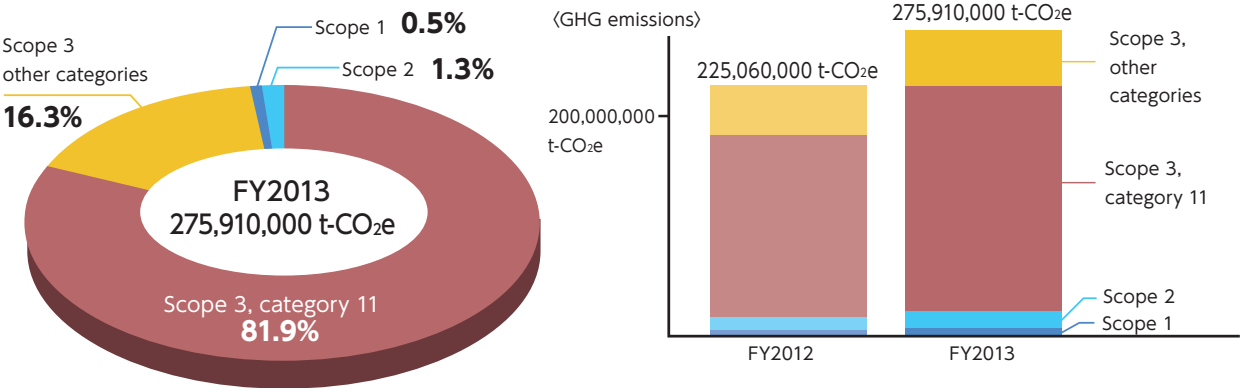
As a responsible company operating in the mobility industry, Honda believes in the importance of calculating and disclosing greenhouse gas (GHG) emissions in order to drive progress in initiatives to reduce global emissions.
As the first milestone in this endeavor, in August 2012 Honda became the world's first mobility company to disclose estimates of all GHG emissions from its entire value chain in conformity with the Greenhouse Gas Protocol (GHG Protocol)[1], currently the world's most widely used GHG emissions accounting standard. Honda released estimates of not only emissions from our own business activities (scope 1 and 2), but also all upstream and downstream activities (scope 3), from the procurement of raw materials, to the transportation and customer use of Honda products, and finally to the treatment of end-of-life products[2]
Now we are taking steps to get a more accurate reading of the emissions that come from our entire value chain. We are doing this by expanding the boundaries of data collection[3] and improving the accuracy of calculation methods used for categories that account for the largest percentage of scope 3 emissions (other indirect emissions).
As a result, the latest calculations show that GHG emissions from Honda business activities in fiscal 2013 were 4,950,000 t-CO_2e, and total value chain emissions, which also includes other indirect emissions, were 275,910,000 t-CO_2e.
We hope to leverage these improvements in data measurement and management to devise more effective emission reduction strategies.

1. Published by the World Business Council for Sustainable Development and the World Resources Institute
2. Read more about Honda's GHG emissions disclosure efforts in Case 19 of "Environmental Documentary—Honda Face." (http://world.honda.com/environment/face/)
3. Additional emissions captured by expanding the scope of data collection in fiscal 2013 accounted for approximately 7% of total emissions.

●GHG emissions from the entire Honda value chain

		FY2012	FY2013
Scope 1*	direct emissions from Honda business activities	1,240,000 t-CO_2e	1,410,000 t-CO_2e
Scope 2*	indirect emissions from energy use	2,960,000 t-CO_2e	3,540,000 t-CO_2e
Scope 3*	other indirect emissions	220,860,000 t-CO_2e	270,960,000 t-CO_2e
Emissions from entire value chain (total of scope 1, 2, and 3)		225,060,000 t-CO_2e	275,910,000 t-CO_2e
Other totals:			
All emissions from Honda business activities (scopes 1, 2)		4,200,000 t-CO_2e	4,950,000 t-CO_2e
Emissions from use of sold products (scope 3, category 11*)		195,880,000 t-CO_2e	225,950,000 t-CO_2e

●Breakdown and changes in Honda GHG emissions



*See notes on page 45 for detailed descriptions of scope 1, scope 2, scope 3, and category 11 of scope 3.

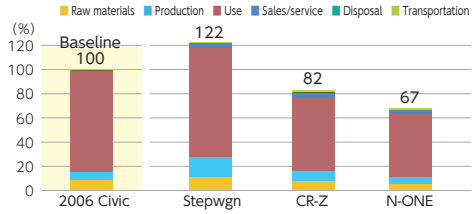
■ Promoting lifecycle assessment (LCA)

We have been developing our own methods to reduce the environmental impacts of our business activities and across product life cycles, from production through disposal.

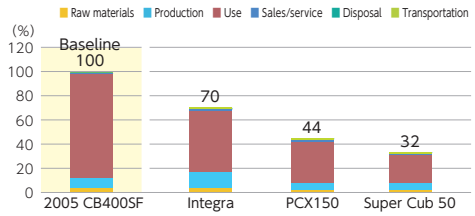
In March 2002, we built the Honda Life-Cycle Assessment (LCA) Data System, a system for measuring CO_2 emissions from all business activities, and since then have been making focused efforts to meet reduction targets set for each domain—production, purchasing, sales and services, administration, transportation, and so forth.

In fiscal 2007, we began operating a new, model-specific LCA system for calculating the life-cycle emissions of a single vehicle, from the procurement of raw materials through disposal. The LCA data of each product model obtained through this system is being used to develop more effective strategies for reducing life-cycle emissions.

LCA results for major automobile models released in FY2013 (Japan)



LCA results for major motorcycle models released in FY2013 (Japan)



*Honda's model-specific LCA system assumes a product lifetime driving distance of 100,000 km for automobiles and 50,000 for motorcycles. These figures are different from those assumed for scope 3, category 11 emissions under the GHG Protocol.

■ Reducing GHG emissions from use of sold products

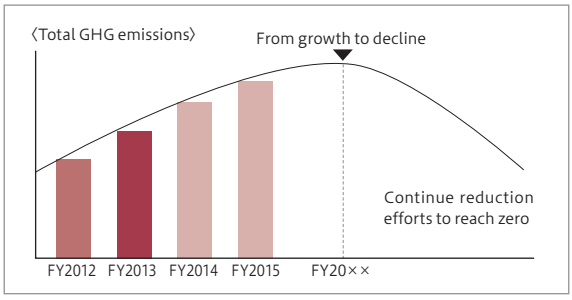
Scope 3, category 11 emissions, emissions from use of products sold to our customers, accounted for more than 80% of emissions that took place across our value chain. This means that determining how to reduce GHG emissions from the use of Honda products poses the greatest challenge to reducing total emissions.

The biggest step in reducing emissions from product use is improving fuel efficiency. We set a 2020 target to reduce global average product CO2 emissions by 30% from 2000 levels, based on which we will strive to improve product fuel efficiencies year after year.

During this time, however, we still expect our scope 3, category 11 emissions to continue growing. Production growth, which follows global economic growth, particularly in Asia, is occurring at a faster rate than improvements in fuel efficiency, so the net effect will be an increase in GHG emissions.

But still, at some point we need to turn this growth curve downward. Honda's vision is to reach a point where total emissions from product use are declining even as production is expanding.

To achieve that turnaround, we set our own standards called the Honda Environmental Performance Standards (HEPS). The goal is eventually to reduce environmental impacts to zero, an initiative we call Triple Zero. Along with HEPS we developed scenarios that represent the steps we plan to take in reducing GHG emissions by complying with the standards, including improving product fuel efficiency and increasing use of renewable energy.



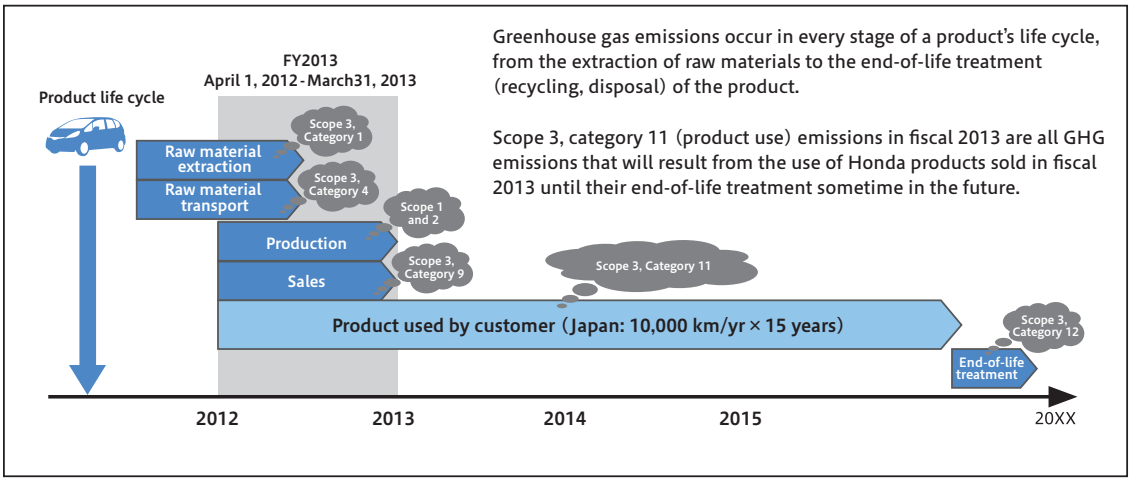
Emissions from Honda operations: Conceptual projection

- Scope 1: Direct GHG emissions from business activities, as defined by the GHG Protocol (examples: combustion of fuel oil at a manufacturing plant, emissions from work vehicles and company cars). The scope 1 figures presented in this report include all GHGs emitted directly by Honda Motor Co. and its 461 consolidated subsidiaries and affiliated companies worldwide.
- Protocol 2: Indirect GHG emissions from a company's use of energy, as defined by the GHG Protocol (examples: electrical energy used by a manufacturing plant or office). The scope 2 figures presented in this report include all GHGs emitted directly by Honda Motor Co. and its 461 consolidated subsidiaries and affiliated companies worldwide.
- Scope 3: Other indirect GHG emissions not included in scope 1 and scope 2, as defined by the GHG Protocol. Scope 3 is systematically broken down into 15 categories (examples: category 11 includes emissions arising from the use of sold products; category 12 includes emissions arising from the end-of-life treatment of sold products).
- The category 11 figures presented in this report represent the cumulative amount of greenhouse gases that will have been emitted by products sold by Honda in fiscal 2012 (automobiles, motorcycles, power products) as a result of their use by customers from the time they received those products until they dispose of them in the future. The "scope 3, other categories" figures presented in this report are the sum of emissions from categories 1, 2, 3, 4, 5, 6, 7, 10, 12, and 15. As per the GHG Protocol, Honda excludes categories 8, 13, and 14 from its calculations, as these categories are either not part of Honda business activities or emissions from these categories are accounted for in other categories.

● **The thinking behind scope 3, category 11 (emissions from product use)**

Scope 3, category 11 accounts for more than 80% of all CO_2 emissions that occur in Honda's value chain. The reason category 11 is so large is because it includes not only the CO_2 that Honda products sold in fiscal 2013 emitted in fiscal 2013, but also the CO_2 those products will emit in the future. In other words, when a customer in Japan purchases a Honda vehicle, we expect that customer to drive the vehicle 10,000 km a year for 15 years[*1]. Scope 3, category 11 is where we calculate all the CO_2 that will be emitted during that time.

Scope 3 includes future emissions because it is based on an accounting method that counts emissions not when they occur but when the business activities that will result in those emissions occur. The 26 million automobiles, motorcycles, and power products that Honda sold to customers around the world in fiscal 2013 will continue emitting CO_2 as they are used and until they are disposed of at some point in the future. Scope 3 says that these emissions are the result of Honda having sold its products in fiscal 2013.



*1 Annual distance traveled, product lifetime in years: Based on the WBCSD's SMP Model developed by the International Energy Agency

Expanding environmental accounting worldwide

Honda discloses information on the emissions treatment, waste disposal, environmental management, remediation and prevention as well as the overall environmental efficiency of our business in order to advance environmental management on a practical level and realize our environmental vision. These data serve not only as an indicator of corporate value for external stakeholders but also as a reference for making administrative management decisions regarding environmental initiatives.

As a result, for fiscal 2013 we are disclosing the environmental conservation expenditures that were recorded in Japan in the format suggested by the GRI Guidelines[*2], which is the same format used last year to disclose automobile R&D expenditures in North America. These changes have been made in an effort to improve the accuracy of data collected from our operating sites worldwide and to determine an appropriate method for disclosing sustainability information from our global operations.

● Environmental conservation expenditures in Japan

	Investments (million yen)	Expenditures (million yen)
Emissions treatment	2,285	2,352
Waste disposal	254	1,102
Environmental management	564	6,301
Remediation	0	4
Prevention	16,456	186,513
Total	19,559	196,272

2. International guidelines issued by the Global Reporting Initiative (GRI) to promote concrete action for environmental, social, and economic progress. At the end of this report is an index specifying the pages in this report where the general standard disclosures and environmental performance indicators required by the guidelines can be found.

Global Environmental Impact

Japan N. America S. America Europe Asia/Oceania China

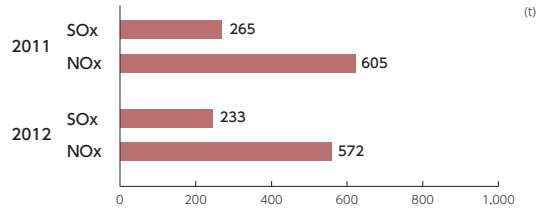
Energy consumption

Companies covered:Nearly all consolidated subsidiaries and affiliated companies of the Honda Group
Notes:· Purchased electricity has been converted to joules using the international standard 3.6 GJ/MWh.
· Calculations based mainly on energy consumed by stationary sources.
· A terajoule (TJ) is a unit of energy, "tera" meaning 10^{12}.

Greenhouse gas emissions

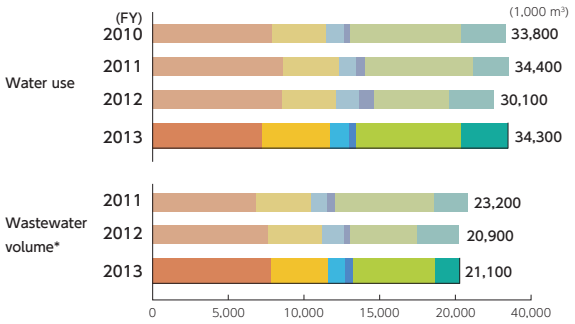
Companies covered:Nearly all consolidated subsidiaries and affiliated companies of the Honda Group
Notes:· Greenhouse gas emissions were calculated while referring mainly to the WRI and WBCSD's 2004 "The Greenhouse Gas Protocol (Revised Edition)."
· Calculations based mainly on emissions from stationary sources.

Atmospheric pollutants



Companies covered:Nearly all consolidated subsidiaries and affiliated companies of the Honda Group
Notes:· Calculations based on fuel consumption.

Water use, wastewater volume



Companies covered:
Nearly all consolidated subsidiaries and affiliated companies of the Honda Group
*Disclosure of wastewater volume begun in fiscal 2011.

Waste generated, landfilled

Companies covered: Nearly all consolidated subsidiaries and affiliated companies of the Honda Group

Notes:
· Landfilled amounts for waste outside Japan also include other waste treatment methods
· Figures for Japan indicate amounts actually brought to landfills.

Environmental data for manufacturing, by region (FY2013)

			Japan	N. America	S. America	Europe	Asia/Oceania	China
Energy	Purchased electricity	(1,000 MWh)	1,560	1,820	322	151	1,020	590
	Natural gas	(1,000 GJ)	85	6,410	240	526	1,200	893
	Liquefied petroleum gas	(1,000 GJ)	806	273	336	7	1,260	296
	Diesel	(1,000 GJ)	8	301	41	7	1,690	98
Waste	Landfilled waste	(t)	0	6,700	1,300	0	3,900	16,400
	Volume recycled	(t)	414,000	394,000	66,000	47,000	188,000	110,000
Water use	Municipal water	(1,000 m³)	3,590	3,130	210	660	5,850	4,120
	Groundwater	(1,000 m³)	4,400	2,110	1,730	10	3,440	0
	Rainwater	(1,000 m³)	50	90	80	0	20	0

Note: LNG is not included.

Notes:
·Historical figures have been adjusted to reflect an increase in the number of companies covered and more detailed analysis of the data.
·The data of companies added to Honda's consolidation during the reporting year and companies that have been excluded from the consolidation due to a merger, liquidation, or other change, are not included.
·Totals with more than three digits have been rounded to three significant digits.

Regional Environmental Topics

North America

Zero-waste-to-landfill efforts in North America

Honda has achieved virtually zero waste to landfill at production facilities in North America. Now, Honda's U.S. sales subsidiary, American Honda Motor Co., Inc. has undertaken an initiative at nine parts delivery centers in the U.S. to eliminate waste. Three of these centers, which ship millions of parts each year to dealerships, have already achieved zero waste to landfill through their focused effort in recycling, reusing, and reducing the use of packaging materials. American Honda also has started a Dealer Recycling Program, aimed at achieving the cleanest and most environmentally friendly dealer network in the industry. Although voluntary, most Honda and Acura automobile dealers in the U.S. are participating in the program.

CO_2 E W

The parts distribution center in Chino, California, was the first to achieve zero waste to landfill

Supporting customers' and dealers' switch to solar

In February 2013, American Honda Motor Co., Inc. initiated a new partnership with SolarCity, America's leading provider of solar power systems for businesses and homes. Through this partnership, Honda is making it easier for Honda and Acura customers and dealers to convert to solar power for a significant portion of their energy requirements and to reduce their CO_2 emissions. Thousands of phone inquiries were received in the first five weeks after the launch of the program. The number of contracts reached 473, totaling 1.5 megawatts (MW) of solar power being installed at customers' homes and at dealerships.

CO_2 E W

A solar power system being installed at a customer's home

South America

Honda becomes first automaker in Brazil to undertake wind generation

Honda Automóveis do Brasil Ltda. (HAB), a Honda automobile production and sales subsidiary in Brazil, announced plans to become the first automaker in Brazil to invest in wind power generation to minimize the environmental footprint of its business activities.

With a goal to begin operation in September 2014, the company will build a wind farm in the city of Xangri-lá in Rio Grande do Sul, the southernmost state in Brazil (approximately 1,000 kilometers south of HAB's automobile production plant in Sumaré, São Paulo). The wind farm is expected to generate approximately 85,000 MWh of electricity per year, equivalent to HAB's annual electricity needs for automobile production, and reduce CO_2 emissions by more than 2,200 tons annually.

CO_2 E W

At the press conference

Highest recognition earned in Brazilian GHG Protocol Program

In 2012, Honda Automóveis do Brasil Ltda. (HAB) was granted the Gold Seal by the Brazilian GHG Protocol Program for the best results published in a greenhouse gas inventory*.

HAB gathered special attention in the 2011 program for being the only automaker to earn the Gold Seal. In 2012, HAB released its inventory of GHG emissions from all three scopes, which include direct emissions from its own business activities, indirect emissions from purchased energy use, and all other indirect emissions from its value chain, earning itself the Gold Seal for a second consecutive year.

CO_2 E W

Gold Seal earned in Brazilian GHG Protocol Program

*GHG inventory: An accounting or database of all greenhouse gases emitted and sequestered within a given geographical area and time frame, typically on a national and annual basis.

CO_2 E W The symbols on the left are displayed for technologies and products that contribute to the realization of Triple Zero.

CO_2 CO_2 emission reduction/ elimination technology

E Energy risk reduction/ elimination technology

W Waste reduction/elimination or 3R technology

• Europe

Honda wins green plant award in Turkey

Honda Turkiye A.S. (HTR), a Honda affiliate in Turkey, received the "Environmentally Friendly Plant Award" from the Turkish Healthy Cities Association. The association's member municipalities praised HTR's tree-planting activities in Kargalı Village, held as an Environment and Corporate Responsibility Project in 2011 and 2012.

The Turkish Healthy Cities Association was founded in 2005 and currently has a membership of 46 cities. The association encourages manufacturers to invest in the environment through its Environmentally Friendly Plant Award. A total of 36 plants have been selected to receive the award.

CO_2 E W

Environmentally friendly factory award ceremony, held on March 1, 2013

Honda signs MoU for market introduction of fuel cell electric vehicles in Nordic countries

In September 2012, Honda and other automakers signed in Copenhagen a Memorandum of Understanding (MoU) with organizations from the Nordic countries to support the market introduction of fuel cell electric vehicles (FCEVs) and hydrogen refueling infrastructure from 2014 to 2017. The MoU is aimed at generating further dialogue with public and private stakeholders in Norway, Sweden, Iceland, and Denmark on accelerating the market introduction of FCEVs.

Honda announced in September 2012 that an all-new FCEV model for Japan, the U.S., and Europe would be launched in 2015. Signing the MoU signified Honda's commitment to FCEVs as the ultimate zero emission technology.

CO_2 E W

MoU was signed at the 3GF conference in Copenhagen.

• Asia/Oceania

Supra X125 earns award for best emissions in Indonesia

The Indonesian Ministry of Environment announced the results of a pollutant emissions test aimed at ranking vehicles with the cleanest exhaust emissions. The Supra X125 PGM-FI Helmet-in, a motorcycle produced and sold by PT Astra Honda Motor in Indonesia, won the award for the best quality of exhaust emission in the motorcycle class.

In 2011, Honda declared that it would install its PGM-FI (Programmed Fuel Injection) technology in all motorcycle models produced in Indonesia by the end of 2013, getting ahead of the new emission standard for two-wheeled vehicles scheduled to take effect in Indonesia in 2013. Honda announced the award-winning Supra X125 PGM-FI Helmet-in in November 2011 as the first step toward installing PGM-FI in all models.

CO_2 E W

Supra X125 PGM-FI Helmet-in, winner of the award for the best quality of exhaust emission

Participated in public-private initiative to promote E85 ethanol use in Thailand

In Thailand, the public and private sectors collaborate to organize the "E85 Clean Energy Drive for Thailand's Future", an initiative for promoting the use of renewable E85 (85% ethanol and 15% gasoline).

The initiative is the first collaboration of its kind between companies in the energy and automotive industries demonstrating their potential and readiness to develop the ethanol industry in Thailand. Mr. Pitak Pruittisarikorn, Executive Vice President of Honda Automobile (Thailand) Co., Ltd. (HATC), Honda's production and sales affiliate for automobiles in Thailand, participated in the opening ceremony. The caravan of vehicles used the new Honda Civic fuelled by E85 ethanol

CO_2 E W

The opening ceremony of the "E85 Clean Energy Drive for Thailand's Future"

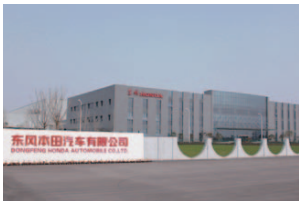
• China

Dongfeng Honda's second plant demonstrates environmental leadership in Chinese industry

Dongfeng Honda Automobile Co., Ltd. (Dongfeng Honda), a Honda automobile production and sales joint venture in China, completed construction and began operation of a second plant in July 2012. With an annual production capacity of 100,000 units, the second plant brings Dongfeng Honda's total production capacity to 340,000 units per year, when combined with the first plant's 240,000 units.

The second plant boasts industry-leading environmental performance in China, emitting 20% less CO_2 than the original plant, and featuring numerous innovations including the world's first height-adjustable conveyor system for vehicle assembly, a shortened coating process with remarkably lower CO_2 emissions, and Honda's first engine assembly line with full parts-set delivery (see note).

CO_2 E W



Dongfeng Honda's second plant, located four kilometers northeast of its existing plant in Wuhan, Hubei province

Honda announces new five-year tree-planting project in Inner Mongolia

Honda has been planting trees as a responsible corporate citizen of China since 2000. For the five years from 2008 to 2012, some 1,200 associates planted 700,000 saplings across 467 hectares in the Inner Mongolia Autonomous Region.

In 2013, we announced a new five-year joint tree-planting project, increasing the number of participating joint ventures from 14 to 16. Employing the slogan, “The future moves with us,” Honda aims to promote a greener future through associate volunteering and contribute to the sustainable development and environmental advancement of Chinese society.

CO_2 E W

Associates who participated in the first tree-planting project and the planted field

• Japan

Honda Environment website recognized in Kankyo-goo (Eco-goo) Awards

The Environment section of the Honda Worldwide website received the Global Warming Measures Award in the Corporate Category of the 12th Kankyo-goo (Eco-goo) Awards. The awards are presented by NTT Resonant Inc., which operates the largest environmental information website in Japan, Kankyo-goo, to recognize and commend companies, governmental institutions, organizations, and individuals that contribute to environmental conservation and social progress through effective Web-based communication.

Honda's Environment website drew acclaim for presenting information in a way that encourages individual action by stakeholders. The documentary-like feel of Honda Face, which focuses on how associates at Honda research institutes and factories are tackling environmental issues, struck a chord with the judges and contributed to Honda winning the award.

CO_2 E W

Honda's Environment website was among 11 websites selected for the award.

Hamamatsu Factory receives Hamamatsu City's Top Runner Grand Prize

The energy conservation activities at Hamamatsu Factory were selected for Hamamatsu City's Top Runner Grand Prize for Alternative Energy and Energy-Conservation Initiatives in fiscal 2012. Business entities that own offices in Hamamatsu City apply for the recognition, providing examples of activities matching 29 items specified by the city. A panel of academia and other experts discuss and decide on the winners. The prize Hamamatsu Factory received was in Environmentally Friendly Offices of Major Firms category.

Hamamatsu Factory was highly commended for its ongoing environmental initiatives including installation of solar panels with a total generation capacity of 430 kW, introduction of high-efficiency equipment such as LED lighting and ceiling cassette air-conditioners, and energy-saving architectural solutions using clearstory windows and skylights.

CO_2 E W

Awards ceremony held in the Hamamatsu City mayor's office on March 15, 2013

Note: Read more about Dongfeng Honda's environmental initiatives in Case 25 of "Environmental Documentary—Honda Face." (http://world.honda.com/environment/face/)

Japan

Japan's role in the global Honda Group is to spread forward-looking environmental management to other parts of the world and lead the group toward ever-smaller environmental impacts.

52 Tackling Environmental Issues in Japan

55 Environmental Management in Japan

60 Environmental Impact in Japan

61 The Seven Domains of Honda Business Activities

62 The Seven Domains of Honda Business Activities: Targets and Results

Tackling Environmental Issues in Japan

Honda operations in Japan need to perform a central role in demonstrating the environmental principles articulated in the Honda Environment Statement. We will accelerate efforts to tackle environmental problems to keep the global Honda Group moving closer to realizing the Honda Environmental Vision.

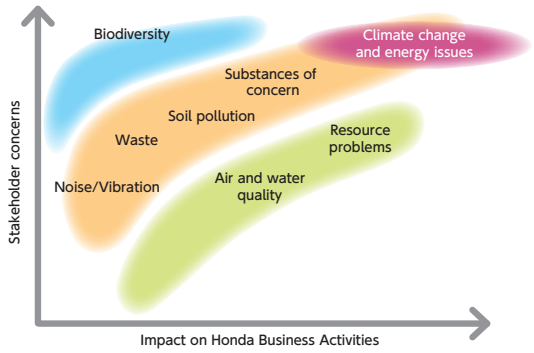
• Current assessment of environmental issues in Japan: "Climate change and energy our greatest challenge"

In Japan, Honda works to identify the impacts of its business activities and products on the global environment from a life-cycle perspective and organizes them within the context of Honda's global environmental management.

Based on the global Honda Group's decision to combat climate change and energy issues as top priorities, Honda Group companies in Japan have set CO_2 emissions reduction targets and implemented reduction initiatives of their own in every domain of their operations. As a result, they have already succeeded in building relatively highly efficient operational systems, and going forward, they want to raise the bar on CO_2 reduction initiatives worldwide and support the entire Honda Group in realizing reductions. Honda Group companies in Japan are showing leadership with regard to other environmental initiatives as well.

Since the majority of Honda product development operations are located in Japan, initiatives in Japan serve an important role in reducing and eliminating substances of concern used in products around the world.

Honda's general assessment of environmental issues in Japan



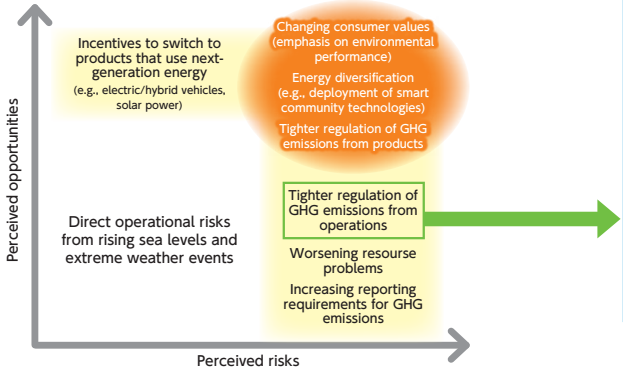
• Japan's assessment of opportunities and risks of climate change and energy issues

Honda goes through a comprehensive risk management process once a year in Japan just like on the global level. The Japan Environmental Committee assesses risks and opportunities and, when necessary, submits its findings to the World Environment and Safety Committee. Once approved, these findings are used by business and functional operations, as well as their respective divisions, in the formulation and actual implementation of management policies and strategies in Japan.

The risks and opportunities of climate change and energy issues currently anticipated in Japan are shown in the figure below. Honda Group companies in Japan manage these issues strictly given the large number of laws and regulations that target these issues and the significant risks they pose to business activities in Japan.

For example, in response to the Law Concerning the Rational Use of Energy, all divisions in Japan work together to reduce energy use, the results of which we share with the public once a year through this report. In addition, to manage the risks associated with greenhouse gas (GHG) emissions from products, and to diversify energy sources, we are installing photovoltaic systems on all our production facilities in Japan, building demonstration test homes for the Honda Smart Home System (HSHS), and developing the next-generation of smart mobility systems, among other initiatives.

Specific examples of risks and opportunities identified in Japan



Regulations Targeting Greenhouse Gas Emissions

Law Concerning the Rational Use of Energy
Applies to:
- Energy used for business activities in Japan
- Energy used by businesses that ship cargo in large volumes

Act on Promotion of Global Warming Countermeasures
Applies to:
- Greenhouse gas emissions from business activities in Japan

Saitama Prefectural Ordinance to Promote Global Warming Countermeasures
Applies to:
- Greenhouse gas emissions from all business sites located in Saitama prefecture.

Note: Major laws and regulations that apply to Honda

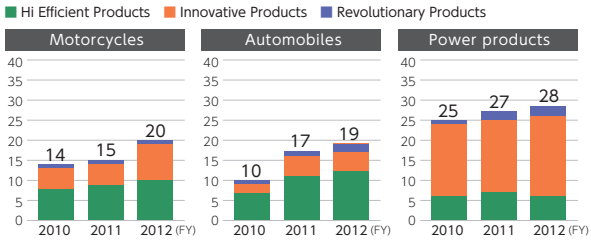
• Honda Environmental Performance Standards (HEPS)

Examples of HEPS-compliant models released in Japan in FY2013

	Hi Efficient Products	Innovative Products	Revolutionary Products
Compliant products (examples) Includes products developed in 2010 or earlier	 N-ONE  N BOX  Stepwgn  Super Cub 50	 CR-Z  Integra  EU9i GP propane-powered generator	 Fit EV  Graspa HRE330 electric lawnmower

A total of 8 models—5 motorcycle models, 2 automobile models, and 1 power product model—released in fiscal 2013 earned HEPS certification. This brings the number of HEPS-compliant products to 20 motorcycle models, 19 automobile models, and 28 power product models, or 67 models in total.

Number of HEPS-compliant models in Japan



*FY2011 figure was determined by applying HEPS to products released before the standards were issued.
*Certain certifications were corrected following a reassessment of performance data.
*See Honda website for HEPS-compliant models other than those shown above.

• Mid-term plans for operations-related environmental initiatives in Japan

Setting numerical targets for fiscal 2014

Honda has been working for years to reduce the environmental impacts of its business activities. In 2004, we institutionalized our Green Factory initiative, launched in 1997, by creating the Green Factory Promotion Center in Japan, through which we continue to assist plants worldwide in minimizing environmental pollutants. Given the importance of reducing impacts across our supply chains as well as other business activities, we are actively managing the environmental performance of our suppliers in accordance with our Green Purchasing Guidelines, published and later revised in 2011.

In our mid-term plan for realizing the Honda Environmental Vision, we expanded the scope of requirements for setting CO_2 emissions reduction targets from solely production to all domains at Honda Motor Co. and major group companies[1]. Ahead of other group companies around the world, our Japanese operations are also setting and working toward reduction targets for water, waste, and VOC[2] emissions and product recycling rates.

● Mid-term plans for operations-related environmental initiatives in Japan: numerical targets

Milestones on the road to 2020		Mid-term plans for environmental initiatives (FY2012-2014)
Climate change and energy	Strengthen initiatives that span entire product life cycles	1 Honda Motor Co. and major group companies[1]: Reduce CO_2 emissions per unit of revenue by 5% by FY2014 (baseline: FY2001)
		2 Transportation (as a high-volume shipper): Reduce CO_2 emissions per ton-kilometer of cargo shipped by 10% by FY2014 (baseline: FY2007)
Material and water resources	Ramp up 3R efforts	3 Honda Motor Co. and major group companies[1]: Reduce waste per unit of revenue by 5% by FY2014 (baseline: FY2001)
		4 Maintain zero landfill waste performance at Honda Motor Co. and consolidated manufacturing subsidiaries[3]
		5 Maintain at least a 70% ASR[4] recycling rate for end-of-life automobiles
		6 Increase effective recycling rate for motorcycles to 95% by FY2016
	Minimize water use	7 Honda Motor Co. and major group companies[1]: Reduce water use per unit of revenue by 5% by FY2014 (baseline: FY2001)
Environmental pollutants	Reduce VOC emissions from production processes	8 Reduce VOC emissions per unit of coated automobile body surface area by 30% by FY2014 (baseline: FY2001)

1. Honda R&D Co., Ltd., Honda Engineering Co., Ltd., and Honda Access Corporation
2. VOC (Volatile Organic Compounds) : Organic chemical substances that cause photochemical smog and are commonly used in the solvents of paints and thinners.
3. All consolidated business sites in Japan
4. ASR: Automobile Shredder Residue

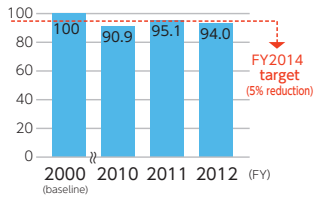
● **Progress in meeting mid-term targets**

Having recovered from the effects of the Great East Japan Earthquake and Thai floods, in fiscal 2013 we were able to return to normal operations throughout the year. Progress was made as planned in meeting the mid-term targets and measures for operations-related environmental initiatives. Thanks to energy conservation measures, energy use remained the same even as production volume rose from the prior year. CO_2 emissions declined only slightly due to a worsening of emission factors published by electric utilities.

Progress in meeting mid-term targets and measures taken for operations-related environmental initiatives in Japan

1 CO_2 emissions from operations

(per unit of revenue)

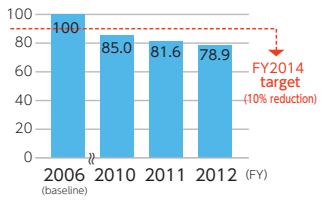


〈Measures taken to achieve target〉

- Measure and graph energy use for each process and revise production systems for higher efficiency
- Expand Honda Green Action to the entire group (power conservation, cool-biz, warm-biz)
- Install high-efficiency devices (LED lighting, compressors, HVAC systems, IPM motors)
- Promote measurement of GHG gas emissions from suppliers in a broader range of activities covering product life cycles

2 CO_2 emissions from transportation

(per ton-kilometer)

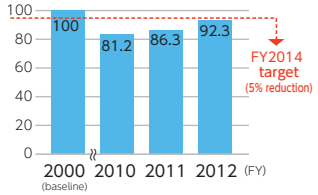


〈Measures taken to achieve target〉

- Increase transportation efficiency by implementing modal shifts
- Improve truck fuel efficiencies

3 Waste from operations

(per unit of revenue)



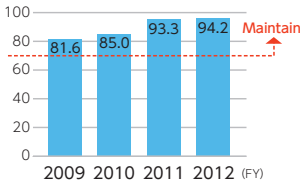
4 Landfill waste from operations

Achieved zero waste-to-landfill target at all consolidated business sites in Japan (131/131 companies)

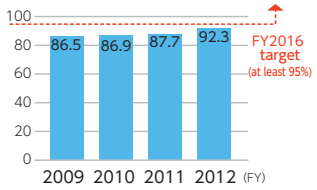
〈Measures taken to achieve target〉

- Increase use of stamping press scrap metal
- Reduce packaging by expanding application of interior and exterior returnable containers
- Develop process for extracting rare earth metals from IMA batteries
- Properly process IMA batteries through our own collection system

5 ASR recycling rate



6 Motorcycle recycling rate

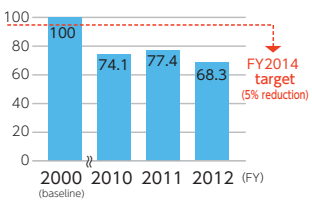


〈Measures taken to achieve target〉

- Maintain effective recycling rates for end-of-use products

7 Water used in operations

(per unit of revenue)

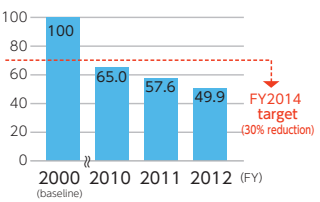


〈Measures taken to achieve target〉

- Use recycled water and rainwater
- Promote water conservation activities

8 VOC emissions from production

(per unit of coated automobile body surface area)



〈Measures taken to achieve target〉

- Introduce low-VOC coatings to coating processes
- Use low-VOC coatings for prototype models in product development

Environmental Management in Japan

Since launching the Japan Environmental Committee in 1991, Honda has been developing and expanding its institutional framework to put into practice the environmental principles articulated in the Honda Environment Statement. We have also strengthened our environmental auditing and pollution prevention systems, provided associates with solid training, and practiced other principles of an environmentally responsible organization.

• Environmental management promotion system

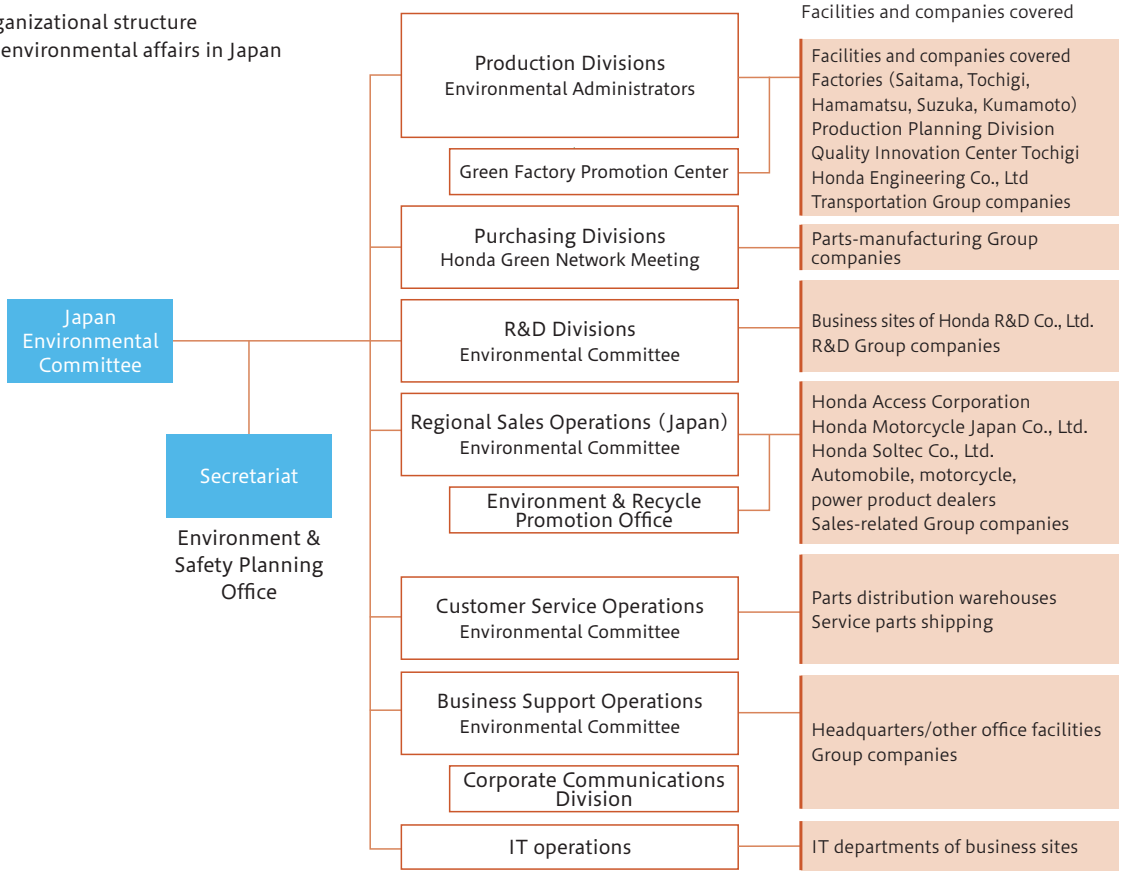
In December 1991, we established the Japan Environmental Committee to ensure that environmental initiatives in Japan are executed to the highest standards and to maintain our leadership in the field. The committee holds meetings in each division to promote environmental impact reductions, product and parts recycling, and other improvements at facilities used by each division, in transportation, and at group companies. Executive officers and administrators from production, purchasing, sales, customer service, and business support operations, as well as Honda R&D, all take part in committee activities.

The Japan Environmental Committee's role is to propose mid-term environmental policies and targets based on analysis of social trends related to the environment and to review progress in meeting targets set by each division. It proposes measures to address cross-divisional challenges and strives to maintain and achieve continuous improvements in environmental performance in Japan.

Each division sets its own targets based on the mid-term plans for environmental initiatives decided by the committee, and then follows the PDCA cycle to reduce environmental impacts, including those at associated facilities and group companies, and improve environment-related projects and measures.

Since fiscal 2006, the committee has worked to bolster initiatives at financially consolidated group companies in Japan.

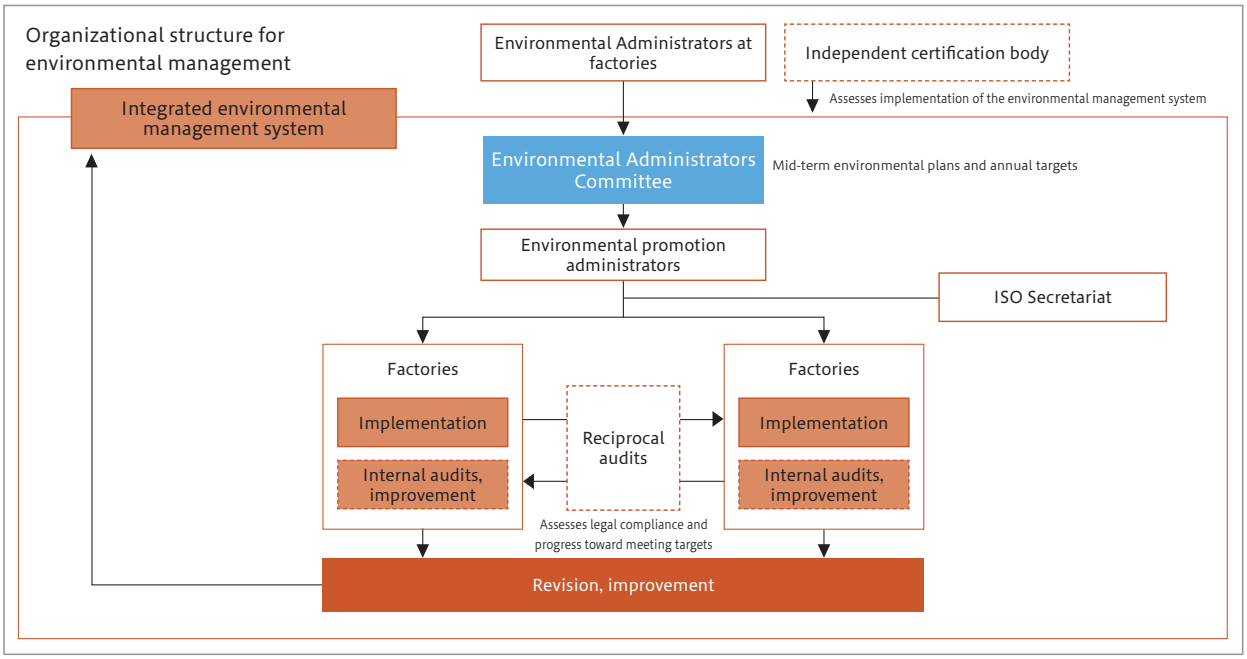
Organizational structure for environmental affairs in Japan



As of June 2013

• Environmental auditing

The following is a summary of environmental management activities in production, a part of our operations with a particularly large environmental footprint.
Environmental initiatives at production facilities in Japan follow mid-term plans created by the Environmental Administrators Committee and environmental management programs based on annual targets.
We acquired ISO 14001 certification at all factories (Saitama, Tochigi, Hamamatsu, Suzuka, Kumamoto) by fiscal 1998, integrated them in fiscal 2011, and expanded the integrated system to include management of the Saitama Factory's newly completed Ogawa Plant in fiscal 2012. Going forward, we plan to expand the integrated system further to include management of the Saitama Factory's Yorii Plant, newly completed in March 2013. We will continue to capitalize on management practices that are geared toward ongoing improvement, including application of the PDCA cycle to legal compliance and environmental measures, and the coordination of environmental policies through the operation of all production facilities under a single environmental management system.
This environmental management system is also subject to internal auditing, including auditing within individual factories and reciprocal auditing between factories. External audits are carried out by certification bodies.
Last fiscal year, we took immediate steps to remedy 17 issues that were identified by external audits. We also continued to expand our internal audit capabilities by training 103 additional internal audit staff.



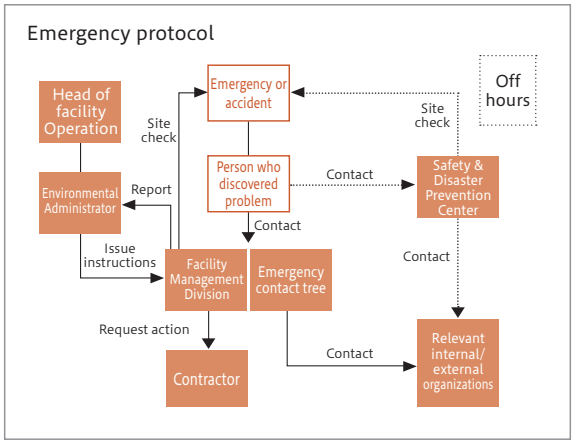
• Environmental compliance and pollution prevention

● Product recalls

In the event of a potential environmental problem relating to a product, Honda takes appropriate and timely market-based action, including product recalls, in accordance with environmental laws and regulations. There were no environment-related product recalls in fiscal 2013.

● Emergency protocol

In anticipation of potential accidents or emergencies that could cause environmental pollution, each factory and division has clearly defined procedures for preventing and mitigating pollution. Emergency drills and training events are held regularly in Japan to increase emergency preparedness.



● Legal compliance

In October 2012, it was found that we had imported and sold service parts containing asbestos exceeding the limit specified by the Enforcement Order of the Industrial Safety and Health Act. We responded to the incident promptly in compliance with the law, including the final disposal of parts recalled from customers and parts taken off the shelf.

● Compliance with Japan's PCB Special Measures Law

In fiscal 2013, we properly disposed of four transformers and one high-pressure capacitor containing PCBs. We will continue to properly dispose of the remaining 767 units of transformers, capacitors, and other devices containing PCB oil, annually report storage information to the proper authorities, and manage these devices to prevent leaks and other accidents.

● Preventing air and water pollution

To prevent air and water pollution, we set voluntary standards that are more stringent than regulatory limits for plant effluent and exhaust gas from combustion systems, and regularly measure and monitor pollutant amounts.

● Other issues

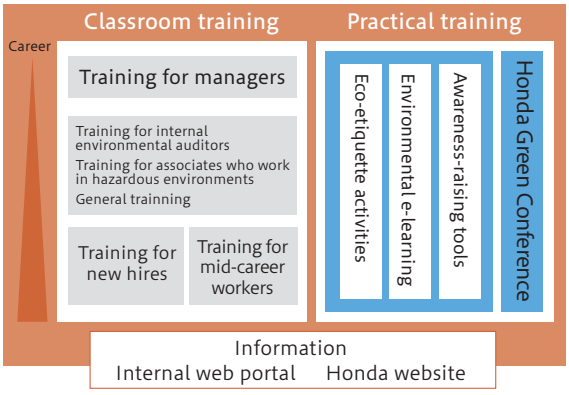
We actively promote activities in our Green Factory Initiative in hope of coexisting harmoniously with the communities around our production facilities.
We have also increased monitoring of soil and groundwater through observation wells at factory sites.

[URL] http://www.honda.co.jp/environment/report/data/ (in Japanese only)

• Environmental education

● Providing systematic environmental education

Honda provides a systematic environmental education program for associates to ensure that they understand the magnitude of the mobility industry's environmental responsibility and to direct their attention toward ways they can help protect the environment in their individual duties.
We take a two-pronged approach to education: classroom training for new hires, associates who have been promoted, and associates working in hazardous environments; and practical training to raise environmental awareness of associates in their daily work. Learning is enhanced in an environment where all associates have access to comprehensive information through our internal web portal and the Honda website.



● Classroom training

All of our business sites, subsidiaries, and affiliated companies plan and implement environmental educational programs based on their respective environmental management systems. During their initial training, new associates acquire basic knowledge about the natural environment, the circumstances surrounding the mobility industry, and Honda's environmental initiatives. For new associates who undergo hands-on training at factories following their initial training, factory managers brief associates on environmental policies and initiatives unique to their workplace and foster an understanding of the environmental requirements of manufacturing processes. The same training is provided to mid-career workers. Associates also receive training whenever they transfer to a different workplace. New managers are given an understanding of the level of environmental awareness and knowledge that is expected of them and a review of the direction Honda is taking on the environment. Regular classes and training sessions are also held for associates who work in hazardous environments and for internal environmental auditors.

● Practical training

Practical training is offered on a continual basis and is geared toward raising environmental awareness with applications in day-to-day operations and sharing environmental best practices that cannot be covered by classroom training alone.

<Honda Green Action>

・Eco-etiquette activities

To implement environmental initiatives effectively, our associates need to be sensitive to environmental issues and act within their power to effect change. In 2009, Honda Motor Co. launched an initiative to spur individual action, called Honda Green Action, and expanded the initiative to the rest of the Honda Group in 2010.

・Environmental e-learning

We started an environmental e-learning program to complement the environmental management system content covered in the classroom.

The e-learning program promotes greater involvement in environmental efforts by providing general knowledge and information on world trends surrounding each environmental issue, particularly issues addressed by Honda Green Action initiatives. Offering the e-learning program through the company intranet ensures that anyone can take courses regardless of their position or expertise, leading to increased awareness for all associates.

In fiscal 2013, the first course in the program, climate change, one of Honda's top priorities, was released. A new course on energy issues is scheduled for release in fiscal 2014.

We hope to release a new course every year to further promote environmental activities.

Screenshot of environmental e-learning course "Honda Environmental Certification Exam: Climate Change"

・Awareness-raising tools

In Honda Green Action, various tools are created to bring associates' attention to the many things they can do on their own to protect the environment.

During Environment Month held every year in June, Honda distributes awareness posters and stickers promoting energy conservation. In fiscal 2013, computer accessories and a screen saver urging associates to save energy and not to overcharge their laptops were also distributed. Sticker themes were also expanded to include water conservation and waste sorting.

Motivated by these tools, associates take individual action to reduce environmental impacts in their daily activities.

PC accessories (top), "save energy" sticker (bottom left), "save water" sticker (bottom right)

・Honda Green Conference

The Honda Green Conference has been held every year since 1999 to share best practices for reducing environmental impacts within the Honda Group in Japan, and to encourage such practices to take root in our organizations. Conferences are also held annually by each business domain. And once every three years, the entire Honda Group also holds a conference to present the results of longer-term initiatives. The next conference is planned to be held in December 2013.

Promotional poster for Global Green Conference 2013 to be held at Twin Ring Motegi in December 2013

Leafel takes the stage, online and in real life

Leafel, Honda's environmental mascot, is doing everything he can to help a wider audience understand Honda's environmental initiatives. His dedicated website, "Leafel's Forest" (in Japanese only), features various content such as "Leafel's Story" and "Leafel's Secrets" and also includes announcements on events in Japan where he plans to make an appearance.

Leafel's Forest
http://www.honda.co.jp/leafel/



Environmental accounting

In addition to tallying the costs associated with environmental activities and investments, Honda also discloses information on the material, economic, and customer benefits of these activities and investments, as well as the overall environmental efficiency of our business. These data, which are made available to our external stakeholders, not only serve as indicators of our corporate value but are also used as a reference for making administrative decisions regarding environmental innovation. Going forward, we will continue working to improve the accuracy of these data, including those reported by consolidated subsidiaries and affiliated companies in Japan.

● Cost of environmental conservation activities and investments in fiscal 2013

Category		Major activities and investments	FY2013 Investments (million yen)	FY2013 Expenditures (million yen)	FY2012 Investments (million yen)	FY2012 Expenditures (million yen)
Business area costs	Pollution prevention costs	● Air, water, and soil pollution prevention	59	1,795	548	1,682
	Global environmental conservation costs	● Global warming mitigation, ozone depletion prevention, and other conservation activities	2,226	557	1,129	709
	Recycling costs	● Waste processing, treatment, reduction, elimination, and recycling	254	1,102	10	882
Upstream/downstream costs		● Collection, recycling, resale, and proper disposal of products manufactured and sold ● Industry organization and other membership fees	527	528	0	868
Management costs		● Installation, operation, and acquisition of certification for environmental management systems ● Environmental impact monitoring and measurement ● Management and training of associates and organizations responsible for environmental conservation (expenses for environment-related communications activities)	35	5,579	0	5,723
Research and development costs		● Research, development, planning, and design for impact reductions across product life cycles (R&D costs for advanced eco-cars, including EVs and PHVs)	16,456	186,513	18,287	158,679
Local conservation costs		● Environmental improvement measures, including ecosystem protection, cleanups, green space development, and natural landscape conservation ● Local conservation and communication activities (beach cleanups and watershed conservation activities)	2	194	0	165
Environmental damage costs		● Remediation of polluted soil	0	4	0	130
Total			19,559	196,272	19,974	168,838

Notes: Companies covered: Honda Motor Co., Ltd., Honda R&D Co., Ltd., Honda Engineering Co., Ltd. Accounting period: April 1, 2012 to March 31, 2013 Some figures are estimated values. Guidelines, guidebooks, and other environmental accounting publications by Japan's Ministry of the Environment were used as references. Figures were calculated on a cash-flow basis with depreciation and amortization expenses excluded.

● Material benefits

		FY2013	FY2012	Difference
Energy use	TJ	13,300	12,500	800
Water use	1,000㎥	4,790	4,770	20
CO_2 emissions	t-CO_2	656,800	553,200	103,600
CO_2 emissions from transportation (as a high-volume shipper)	t-CO_2	64,400	62,100	2,300
Total waste generated	t	198,000	175,000	23,000
ASR recycling rate	%	94.2	93.3	0.9
VOC emissions	t	2,660	2,840	-180
PRTR emissions	t	820	770	50

● Economic benefitst

〈Effect on revenue and expenses〉

		FY2013	FY2012
Income from sale of valuable waste materials		2.4 bil	2.8 bil
Cost reductions from saved energy	From installed technologies	0.2 bil	0.2 bil
	From behavioral changes	0.1 bil	0.1 bil
Total		2.7 bil	3.1 bil

〈Customer benefits〉

We have been driving reductions in CO_2 emissions by improving the fuel efficiencies of our products.

In fiscal 2013, better average fuel efficiency brought our automobile customers in Japan approximately 17.0 billion yen in savings, resulting in a cumulative savings of 213.6 billion yen since fiscal 2001.

■ Method used to calculate customer benefits

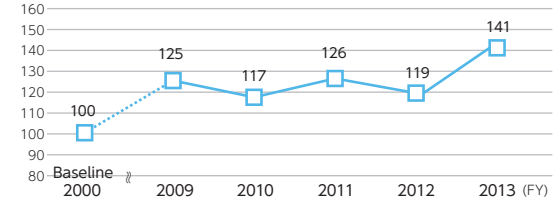
Change in average fuel efficiency1 each fiscal year × average distance traveled2 × average gasoline price in each fiscal year3 × number of vehicles owned4

1. Based on the 10-15 test cycle
2. Average distance traveled per year according to the motor vehicle transportation statistics complied by Japan's Ministry of Land, Infrastructure and Transport (=10,000 km)
3. Source: Oil Information Center, the Institute of Energy Economics, Japan
4. Cumulative total, taking into account new vehicle sales and average vehicle history

〈Environmental efficiency〉

We use the following formula to define and measure the environmental efficiency of our business activities and promote continuous improvement in environmental management. Environmental efficiency in fiscal 2013 was 41% higher than it was in 2000.

Environmental efficiency = Business size (net sales) ÷ Environmental impact (CO_2 emissions)



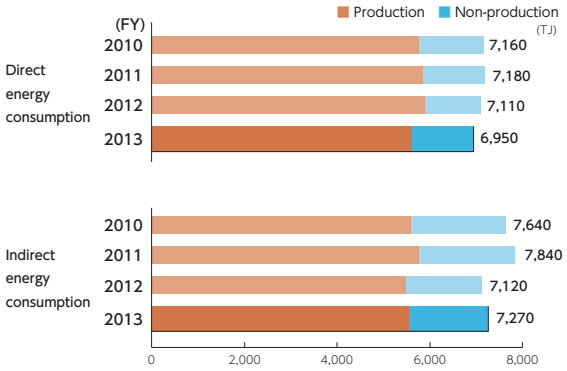
Japan

Environmental Impact in Japan

Through our Green Factory initiative, we strive to make our production facilities in Japan the pride of the communities in which they operate. We are working to conserve energy, cut waste, and reduce environmental impacts in other areas as well by promoting green logistics, green dealers, and green offices.

Note:
1. Historical figures have been adjusted to reflect an increase in the number of companies covered and more detailed analysis of the data.
2. Totals with more than three digits have been rounded to three significant digits.

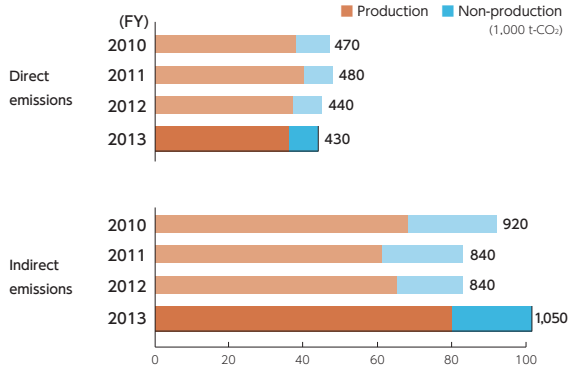
Energy consumption



Companies covered: All consolidated subsidiaries and affiliated companies of the Honda Group in Japan

- Purchased electricity has been converted to joules using the international standard 3.6 GJ/MWh.
- Calculations based mainly on energy consumed by stationary sources.
- A terajoule (TJ) is a unit of energy, "tera" meaning 10^{12}

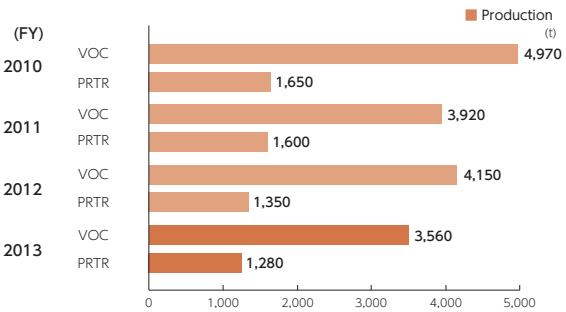
Greenhouse gas emissions



Companies covered: All consolidated subsidiaries and affiliated companies of the Honda Group in Japan

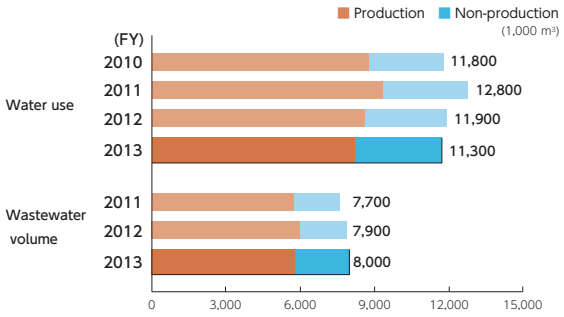
- For information about greenhouse gas calculation methods, see the MOE/ METI (2004) "Greenhouse Gas Emissions Calculation and Reporting Manual, ver.3.4" and WRI/WBCSD (2004) "The Greenhouse Gas Protocol (Revised Edition)."
- CO_2 emissions from purchased electricity are calculated for each utility based on the latest emission factors.
- Calculations based mainly on emissions from stationary sources.

Other waste and emissions



Companies covered (FY2013): Honda Motor Co., Ltd. and nearly all production-related consolidated subsidiaries and affiliated companies

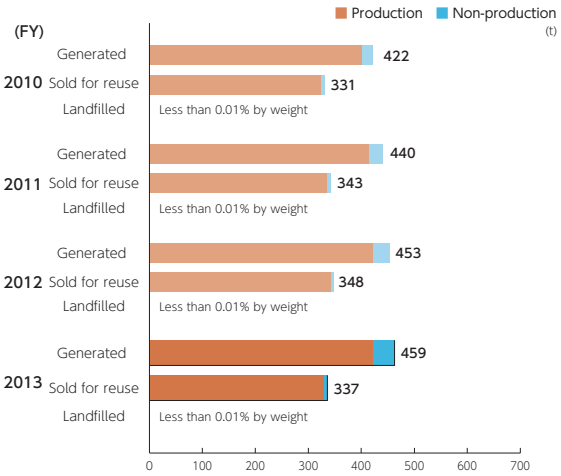
Water use, wastewater volume



Companies covered (FY2013): All consolidated subsidiaries and affiliated companies of the Honda Group in Japan

- Disclosure of wastewater volume began in fiscal 2011.
- Wastewater volume data are partially based on estimates.

Waste



Companies covered (FY2013): All consolidated subsidiaries and affiliated companies of the Honda Group in Japan

The Seven Domains of Honda Business Activities

To facilitate progress in reducing the environmental impacts of our business activities, Honda divides these activities into seven domains, one for each stage in the lives of our products—from development through end-of-life. Each domain sets its own annual and mid-term policies and targets for environmental initiatives.

See the following page for annual targets and results.

CO_2 E W The symbols on the left are displayed for technologies and products that contribute to the realization of Triple Zero.

CO_2 CO_2 emission reduction/ elimination technology

E Energy risk reduction/ elimination technology

W Waste reduction/elimination or 3R technology

The Seven Domains of Honda Business Activities: Targets and Results

In fiscal 2013, we implemented a wide range of initiatives to achieve the strict targets we set for each domain. We will strive to reduce our environmental impact even further as we pursue the fiscal 2014 targets.

Domain	Policy			FY2013 targets
Product development	Promote "green laboratories"	Honda R&D	Energy and resource conserv ation	Per-unit CO_2 emissions: 5% reduction from FY2001
				Per-unit water use: 20% reduction from FY2001
			Zero waste and emissions[2]	Per-unit waste generation: 30% reduction from FY2001
Purchasing	Promote "green purchasing"		Energy and resource conservation at suppliers[1]	Suppliers[1]: reduce per-unit CO_2 emissions
				Suppliers[1]: reduce per-unit water use
			Zero waste and emissions[2] at suppliers[1]	Suppliers[1]: continue zero landfill waste initiatives
				Suppliers[1]: measure waste generation and reduce per-unit waste generation
				Continue to control chemicals used in products in accordance with Honda's chemical control standards
Production	Promote "green factories"		Energy and resource conservation	CO_2 emissions per automobile produced: 2% reduction from FY2011
				CO_2 emissions per motorcycle produced: 2% reduction from FY2011
				Maintain current levels of per-unit water use
			Zero waste and emissions[2]	Maintain zero landfill waste performance
				Maintain current per-unit amount of waste generation Maintain current levels of per-unit VOC[3] emissions
		Honda Engineering[6]	Energy and resource conservation	Per-unit CO_2 emissions: reduced by 14% from FY2001
				Per-unit water use: reduced by 27% from FY2011
			Zero waste and emissions[2]	Per-unit waste generation: reduced by 7% from FY2011
Transportation	Promote "green logistics"		Improve transportation efficiency	Per-unit CO_2 emissions: 10% reduction from FY2007 (finished vehicle and component parts set[4] distribution)
				Per-unit CO_2 emissions: 53% reduction from FY2001 (transportation of service parts)
				Per-unit CO_2 emissions from warehouses: 41% reduction from FY2001
			Use less packaging	Packaging per unit of component parts set[4]: Continue to reduce packaging material use
				Service parts: Continue to simplify packaging materials
Sales and Service	Automobiles	Promote "green dealers"	Increase energy efficiency	Per-unit CO_2 emissions from automobile sales companies (consolidated subsidiaries and affiliated companies): 2% reduction from FY2011
	Motorcycles			Per-unit CO_2 emissions from motorcycle sales companies (consolidated subsidiaries): 2% reduction from FY2011
	Power products			Per-unit CO_2 emissions from power products sales companies (consolidated subsidiaries): 2% reduction from FY2011
Product recycling (3Rs)	Automobiles	Properly process end-of-life automobiles		Maintain stable operation of recycling systems
				Recycle materials from end-of-life automobiles
	Motorcycles	Properly process end-of-life motorcycles		Maintain stable operation as a back-up motorcycle recycling system
	Service parts	Collect and increase reuse of parts		Continue to collect and reuse reusable parts
				Continued to collect IMA batteries
Administration	Promote "green offices"		Energy conservation	CO_2 emissions from all 14 facilities[5]: reduced by 2% from FY2011
			Use resources effectively	Waste generated by all 14 facilities[5]: reduced by 2% from FY2011
				Per-unit water use at all 14 facilities[5]: reduced by 2% from FY2011

○ : Achieved, △: ≧ 95% achieved, ×: < 95% achieved

1. All direct suppliers of consolidated group companies.
2. Zero waste and emissions initiatives: Efforts to reduce waste and environmental pollutants to as close to zero as possible.
3. VOC (Volatile Organic Compounds): Organic chemical substances that cause photochemical smog and are commonly used in the solvents of paints and thinners.
4. Component parts set: A sets of parts exported for final assembly in the product's target market.
5. From fiscal 2012 data, includes all nine office buildings (Aoyama, Wako, Shirako, Yaesu, Sapporo, Sendai, Nagoya, Osaka, Fukuoka) of Honda Motor Co., Ltd. and all facilities of 12 consolidated group companies and one educational institution in Japan: Mobilityland Corporation, Honda Kaihatsu Co. Ltd., Honda Sun Co., Ltd., Honda Commtec Inc., Honda Airways Co., Ltd., Honda Trading Corporation, Honda Finance Co., Ltd., Rainbow Motor School Co., Ltd., Kibonosato Honda Co., Ltd., Honda R&D Sun Co., Ltd., Circuit Service Creates, Japan Race Promotion Inc., and Honda Technical College. (Japan Techno Co., Ltd. and KP Tech Co., Ltd. were liquidated in fiscal 2012.)
6. The target "continue to reduce emissions of PRTR-listed substances" shown in last year's report was omitted this year due to major progress in reducing these emissions.
PRTR (Pollutant Release and Transfer Registers) are national or regional databases of information on the environmental release and off-site transfer of potentially hazardous chemical substances from industrial and other facilities.

Note: A summary of Honda Access Corporation's annual results is available on the company's website (in Japanese only).

●Ongoing targets●
・Automobiles: At least 90% recyclable for all new and completely redesigned models
・Motorcycles: At least 95% recyclable ・Power products: At least 95% recyclable

FY2013 results	Score	FY2014 targets	See
Per-unit CO_2 emissions: 19% reduction from FY2001	○	Per-unit CO_2 emissions: 6% reduction from FY2001	P65
Per-unit water use: 26% reduction from FY2001	○	Per-unit water use: 20% reduction from FY2001	P65
Per-unit waste generation: 31% reduction from FY2001	○	Per-unit waste generation: 27% reduction from FY2001	P65
Per-unit CO_2 emissions: reduced by 20% from FY2001	○	Suppliers[1]: reduce per-unit greenhouse gas emissions	P68
Per-unit water use: reduced by 1% from FY2009	○	Suppliers[1]: reduce per-unit water use	P68
Continued zero waste-to-landfill initiatives	○	Suppliers[1]: continue zero waste-to-landfill initiatives	P68
Per-unit waste generation: reduced by 19% from FY2009	○	Suppliers[1]: measure waste generation and reduce per-unit waste generation	P68
Continued to manage chemicals in accordance with the Honda Chemical Substance Management Standard	○	Continue to manage chemicals in accordance with the Honda Chemical Substance Management Standard	P68
CO_2 emissions per automobile produced: reduced by 7% from FY2011	○	CO_2 emissions per automobile produced: reduced by 3% from FY2011	P70
CO_2 emissions per motorcycle produced: reduced by 6% from FY2011	○	CO_2 emissions per motorcycle produced: reduced by 3% from FY2011	P70
Per-unit water use: reduced by 6% from FY2011	○	Maintain current levels of per-unit water use	P71
Maintained zero waste-to-landfill performance	○	Maintain zero waste-to-landfill performance	P71
Per-unit waste generation reduced by 4% from FY2011	○	Maintain current per-unit amount of waste generation	P71
Per-unit VOC[3] emissions (automobiles): reduced by 20% from FY2011	○	Maintain current levels of per-unit VOC[3] emissions	P71
Per-unit CO_2 emissions: reduced by 40% from FY2001	○	Per-unit CO_2 emissions: reduced by 15% from FY2007	P72
Per-unit water use: reduced by 18% from FY2011	×	Per-unit water use: reduced by 22% from FY2011	P72
Per-unit waste generation: increased by 2% from FY2011	×	Per-unit waste generation: reduced by 3% from FY2011	P72
Per-unit CO_2 emissions: 21% reduction from FY2007 (finished vehicle and component parts set[4] distribution)	○	Per-unit CO_2 emissions: 15% reduction from FY2007 (finished vehicle and component parts set[4] distribution)	P74
Per-unit CO_2 emissions: 57% reduction from FY2001 (transportation of service parts)	○	Per-unit CO_2 emissions: 57% reduction from FY2001 (transportation of service parts)	P75
Per-unit CO_2 emissions from warehouses: 48% reduction from FY2001	○	Per-unit CO_2 emissions from warehouses: 49% reduction from FY2001	P75
Packaging per unit of component parts set: 53% reduction from FY2001	○	Packaging per unit of component parts set[4] Continued to reduce packaging material use	P75
Service parts: Continue to simplify packaging materials	○	Service parts: Continue to simplify packaging materials	P75
Per-unit CO_2 emissions from automobile sales companies (consolidated subsidiaries and affiliated companies): 6% reduction from FY2011	○	Per-unit CO_2 emissions from automobile sales companies (consolidated subsidiaries and affiliated companies): 3% reduction from FY2011	P77
Per-unit CO_2 emissions from motorcycle sales companies (consolidated subsidiaries): 19% reduction from FY2011	○	Per-unit CO_2 emissions from motorcycle sales companies (consolidated subsidiaries): 3% reduction from FY2011	P77
Per-unit CO_2 emissions from power products sales companies (consolidated subsidiaries): 10% reduction from FY2011	○	Per-unit CO_2 emissions from power products sales companies (consolidated subsidiaries): 3% reduction from FY2011	P77
Maintained operation of recycling systems	○	Maintain stable operation of recycling systems	P80
Recycled resin (polypropylene) from 230,000 replacement bumpers	○	Recycle materials from end-of-life automobiles	P80
Maintained stable operation as a back-up for motorcycle recycling systems	○	Maintain stable operation as a back-up motorcycle recycling system	P81
Collected and recycled 280,000 used oil filters	○	Continue to collect and reuse reusable parts	P80
Collected 3,100 IMA batteries	○	Continue to collect IMA batteries	P80
CO_2 emissions from all 14 facilities[5]: reduced by 3% from FY2011	○	CO_2 emissions from all 14 facilities[5]: reduced by 3% from FY2011	P83
Waste generated by all 14 facilities[5]: reduced by 1% from FY2011	×	Waste generated by all 14 facilities[5]: reduced by 1% from FY2011	P84
Per-unit water use at all 14 facilities[5]: reduced by 7% from FY2011	○	Per-unit water use at all 14 facilities[5]: reduced by 3% from FY2011	P84

Reducing impacts from development processes

Product Development

At Honda, we're aggressively pursuing development of fuel-efficient products because we recognize that reducing CO_2 emissions from product use is critical to the preservation of the global environment. That's why we're also working to reduce the carbon footprint of the development processes themselves, pursuing the motto "low-carbon development of low-carbon products," and reducing various other environmental impacts from these processes as well.

Three executive officers discuss strategies to cut carbon emissions from facilities, equipment, and work processes at Honda R&D

Tetsuya Tsutsui
Automobile R&D Center
Director and Operating Officer

Fumihiko Nakamura
Motorcycle R&D Center
Operating Officer

Kiyoshi Fujii
Power Products R&D Center
Operating Officer

Realizing low-carbon development through fundamental process reform

● Tsutsui: We embarked on a fundamental reform of development processes and organization for automobiles, adopting the motto “low-carbon development,” because we believe that major transformations are needed to reduce CO_2 emissions in this division. In fiscal 2013, we put a lot of effort into measuring and monitoring energy use to get a detailed picture of who is using how much electricity with what equipment and to identify problems with that picture. In the fall of this year, fiscal 2014, we’ll finish attaching smart meters to all of our large machines. We also plan this year to launch a special IT system that will allow associates to share new ideas and turn our newly acquired data into action.

● Nakamura: We started energy and emissions monitoring for motorcycles about five years ago. We found that roughly 80% of the CO_2 emissions from our motorcycle R&D center came from electricity use, and the majority of electricity use was the result of using testing equipment. It turns out that running a machine just one time that recreates a 100 kilometer-per-hour (62 mile-per-hour) wind, for example, consumes an enormous amount of electricity. So we've been working to save energy by minimizing the number of test machines, which involves consolidating machinery so we can use them more efficiently and figuring out how to perform multi-functional tests with single machines. We have one year left in a five-year plan to reduce the number of test machines by 30%. We are also shortening testing times by transitioning from a development method that uses many prototypes to conduct tests to one that constructs prototypes more cost-effectively based on precise computer simulation using DPM (see note).

● Fujii: If one pillar of environmental advancement in product development is process reform, the other must be energy efficiency upgrades of buildings and facilities. We're focusing on striking the right balance between environmental performance and working conditions—for example, replacing air conditioners with energy-efficient models instead of forcing associates to tolerate discomfort in order to keep the thermostats at a certain setting. In that way, we want to achieve both workplace comfort and work efficiency. We'd like to continue to achieve CO_2 emissions reductions by progressively improving the quality of our workplaces so that associates are more motivated to work toward reductions.

● Tsutsui: To meet the needs of the day, it's important that we make constant efforts to improve development processes. The challenges are different depending on the product. In the case of automobiles, the environmental impacts of development have been growing with the introduction of hybrid technologies. Expanding motorcycle sales in Asia will require us to develop a greater number of models. And power product development volume is also growing. We would like to devise low-carbon development processes that are appropriate for each of these product segments. As iron sharpens iron, as they say, we will work together to achieve our common mission.

Note: Digital Prototype Modeling, a method of using computer simulations to test designs without building prototypes

• Environmental initiatives at Honda R&D

● Energy and resource conservation

Honda R&D Co., Ltd. endeavored to conserve energy in fiscal 2013 as it pursued its goal of reducing CO_2 emissions by 5% from fiscal 2001; achieving a 19% reduction.

Energy conservation activities in fiscal 2013 included sending out "energy patrols" to find incidents of wasteful use and shutting the power down on days when facilities were closed.

Seeing the damage it sustained in the 2011 earthquake and tsunami as an opportunity, Honda R&D renovated buildings at multiple sites to increase their earthquake resistance and thus secure the safety and peace of mind of associates. It also introduced more efficient equipment during the reconstruction, such as LED lighting, new heat source equipment, central air conditioners with more efficient motors, and more efficient room air conditioners.

The Takasu Proving Ground met Hokkaido Electric's strict power-saving target, a 7% reduction from peak demand (kW) in summer and winter of fiscal 2010, by thoroughly revising equipment operation schedules and making smart adjustments to its HVAC and HVAC heat source management methods, which also led to a reduction in energy use (kWh).

Honda R&D also worked to cut water use by 20% from fiscal 2001; it achieved a 26% reduction. Water-conservation strategies included recycling water used in road surface testing at the Tochigi Proving Ground, and increasing rainwater use at the Automobile R&D Center in Wako, Saitama Prefecture. CO2 E W

● Zero waste and emissions

Honda R&D's target for waste and emission reduction in fiscal 2013 was a 30% reduction from fiscal 2001. By ramping up waste separation efforts and converting more waste into salable material, and by reducing cloth waste from cleaning, it achieved a 31% reduction.

The Automobile R&D Center in Wako, which began operation of a new spray booth in January 2012, has been promoting reductions in chemical emissions by switching to low-VOC[1] paint for prototype vehicles. Moreover, all sites select paint thinners that contain lower levels of hazardous chemicals. CO2 E W

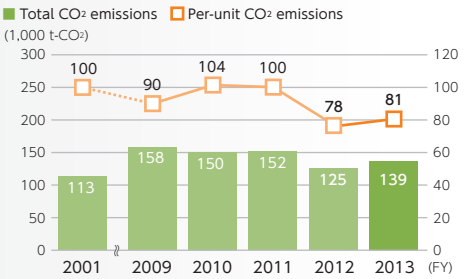
● Low-carbon development project launched

Honda R&D, a researcher and developer of automobiles, motorcycles, and power products, is Honda's key product development organization.

At the Automobile R&D Center in Tochigi Prefecture (Tochigi R&D Center), senior management and the facilities management and R&D divisions have been collaborating on a Carbon-Smart Development Project since 2010 under the slogan "low-carbon development of low-carbon products[2]."

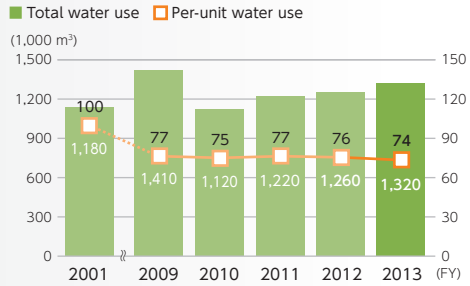
In this project, the Tochigi R&D Center set a 2020 CO_2 emissions reduction target for its entire operations. By adding carbon intensity as a performance metric for development activities and revamping test and development methods based on its findings, the center met its target for the period through 2012. To achieve further improvements going forward, it started developing and training associates in the use of new energy monitoring tools, which will be used to reduce energy consumption in a growing range of activities. CO2 E W

CO2 emissions

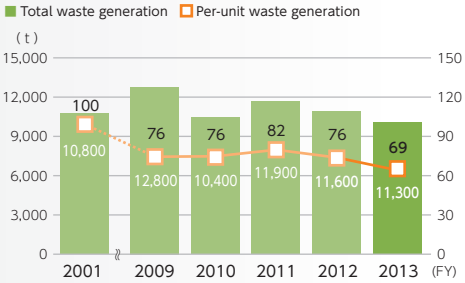


*0.378 t-CO2/MWh was used as the CO2 emission factor for electricity

Water use

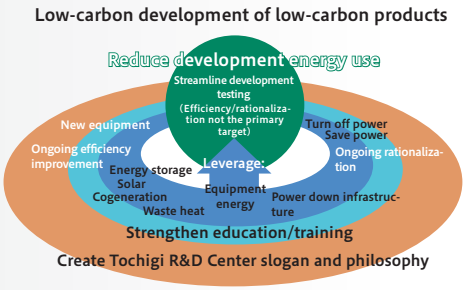


Waste generation

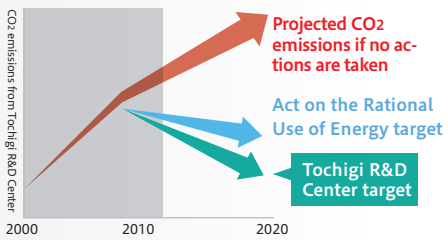


*Historical figures have been adjusted to reflect an increase in the scope of data

Tochigi R&D Center
Carbon-Smart Development Project



Carbon-Smart Development
Project emissions reduction target



1. Volatile organic compounds: Organic substances that cause photochemical smog and are commonly used in the solvents of paints and thinners.
2. Read more about the Carbon-Smart Development Project in Case 15 of "Environmental Documentary—Honda Face." (http://world.honda.com/environment/face/index.html)

Toward greener materials and parts

Purchasing

Because many of the materials and parts that make up Honda products are purchased from suppliers, collaboration with these suppliers is essential to reducing environmental impacts at every stage in the life cycles of our products. We created the Honda Green Purchasing Guidelines to direct us in the procurement of materials and parts that have a low environmental impact and are produced by low-impact business activities. By sharing and implementing these guidelines with suppliers, we are striving to reduce environmental impacts across product life cycles.

Executive officer × Operating manager
Discussion

Chief Operating Officer for Purchasing Operations
Naoto Matsui

General Manager of Purchasing Global Operations Planning Office*
Isao Nishioka

*As of May 31, 2013

Supply chain environmental management holds key to reducing Honda's environmental impact

●Matsui: The purchasing domain is where we work with R&D to determine optimal parts specifications, evaluate suppliers in terms of Q (quality), C (cost), D (delivery), D (development) and E (environment), and procure parts from the best suppliers in the world. The majority of parts that go into making Honda products are purchased. This means that for a company involved in personal mobility, purchasing plays a vital role in delivering environmentally responsible products to customers.

●Nishioka: The suppliers that manufacture parts for Honda emit a far greater amount of CO_2 than does Honda. And since we do business with thousands of suppliers worldwide, reducing environmental impacts in partnership with these suppliers is key to reducing environmental impacts at every stage in the life cycles of our products.

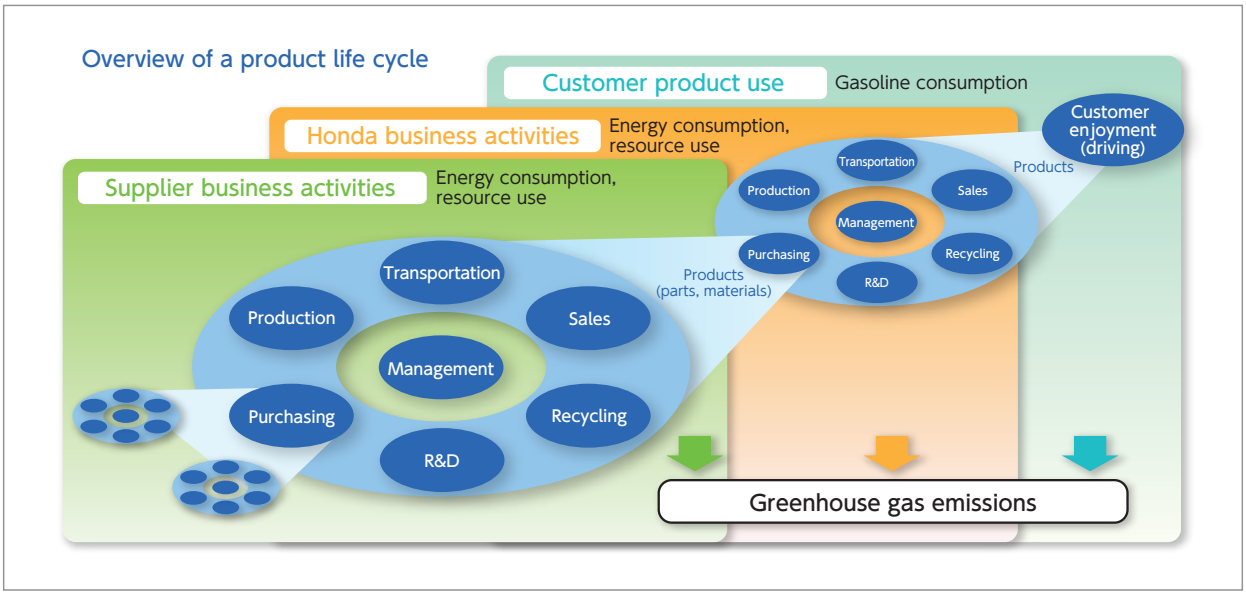
●Matsui: We've come to recognize our environmental and social responsibility as a corporation with an increasingly globalized parts procurement system for motorcycles, automobiles, and power products, so we established the Global Purchasing Planning Office to strengthen our work in this area. We think we have an obligation to society and our customers to work globally to reduce environmental impacts. That's why we've defined the ideal purchasing operation—our long-term goal—as one with a low-carbon global supply chain.

●Nishioka: We planned three stages to achieve this. The first was the creation last year of a Grand Environmental Design and the communication of Honda's environmental policy. Next is the collection of CO_2 emissions data in order to get an accurate picture of the current situation and prepare for reduction management. And the last is the execution of CO_2 reductions. Japan is leading these activities and has already moved on to the third stage, with reductions in CO_2 emissions becoming evident in some suppliers. The Environmental Award was created last year to honor suppliers that have demonstrated outstanding performance with an award of appreciation. Thanks in part to this initiative, the number of suppliers that are working with Honda to reduce life-cycle impacts has grown by approximately 20%, which I think is a very significant outcome.

●Matsui: In order to accelerate these initiatives globally, we believe it's important for senior management at each supplier to place environmental problems on their agenda as a management issue, as Honda has done, and take action with a sense of urgency.

●Nishioka: Since the personal mobility industry involves so many companies, we believe teaching and sharing Honda's policy with suppliers is one of the roles of the purchasing domain. We hope to continue engaging supplier managers in an active dialogue on this topic.

●Matsui: Our final aim is to realize the lowest possible emissions in all life-cycle stages from parts manufacturing to product disposal, and to achieve this throughout the Honda purchasing domain.



■ Environmental management in the purchasing domain

● Honda Green Purchasing Guidelines

The aim of the Honda Green Purchasing Guidelines is to realize a low-carbon economy through measuring and reducing the environmental impacts of suppliers that provide us with materials and parts for Honda products, as well as the rest of our global supply chain.

Honda has established a Grand Environmental Design for the realization of this low-carbon global supply chain, and is promoting initiatives through the following three steps:

1. Communication of Honda's environmental policies
2. Promotion of preparations for CO_2 reduction management
3. Roll-out of a PDCA method for CO_2 reduction

CO_2 E W

●GHG calculation standards and supplier briefings

We hold meetings with suppliers to explain our standards for calculating greenhouse gas (GHG) emissions so they can measure and reduce their emissions in accordance with the Honda Green Purchasing Guidelines. In fiscal 2013 these briefings covered an explanation of the practical matters of calculating actual emissions and submitting reduction plans, in addition to an explanation of our policies for reducing environmental impacts across product life cycles, the central theme of our guidelines. Briefings were held twice, once each for East and West Japan, facilitating the attendance of even more suppliers.

CO_2 E W

● Honda Green Network Meeting

The Honda Green Network Meeting (HGNM) is held twice a year for communicating our environmental initiatives and for sharing and expanding the application of best practices.

CO_2 E W

Revised Green Purchasing Guidelines (as of January 2011)

Policies		●Promote purchasing of environmentally responsible products ●Add environment category to supplier evaluations (quality, cost, delivery, development)
Control items	Management	Build environmental management systems for products and in every domain of our business activities
	Operations	Manage environmental impacts in every domain (e.g., GHG emissions)
	Products	Launch products with improved fuel efficiency
		Control substances of concern
Applies to:		All suppliers worldwide

A supplier briefing on GHG calculation standards

A working group (see right) was launched in fiscal 2013 to share and discuss more flexible initiatives for factories, where production processes and equipment differ according to the supplier. We will continue to promote environmental conservation by our suppliers through this working group in addition to the existing Honda Green Network Meeting.

● Supplier briefings on chemicals management

Chemicals management at Honda covers our entire supply chain and is implemented on a continuous basis with all suppliers in accordance with the Honda Chemical Substance Management Policy[1].
A supplier briefing was held at the Honda Wako Building in January 2013, at which a new Chemical Substance Management Policy was explained to suppliers to ensure compliance with the latest regulations of each country. CO2 E W

● Presentation of the Environmental Award for suppliers

We honor suppliers that demonstrate outstanding performance in four categories—development, cost, quality, and parts—with an award of appreciation. The Environmental Award, created in fiscal 2012, shows our appreciation and respect to suppliers that have made efforts in line with the Honda Green Purchasing Guidelines and shown exceptional progress in reducing environmental impacts in their business activities, the purchasing stage of our product life cycles. The second presentation of this award was made in fiscal 2013. A greater number of suppliers deepening their understanding and concern for the reduction of environmental impacts has helped to broaden the scope of efforts to reduce impacts across product life cycles. CO2 E W

■ Energy and resource conservation at suppliers[2]

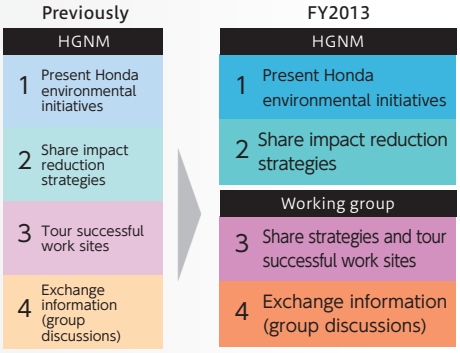
● CO_2 emissions and water use

We try in various ways to help suppliers reduce CO_2 emissions and water use in every domain of their business activities.
For CO_2 emissions reduction, we have continued to expand the application of energy monitoring, which forms the basis of energy conservation initiatives. Through the Energy Conservation Caravan initiative, we visited suppliers' production facilities and, after surveying and analyzing electricity use in each process, proposed ways to reduce energy use, an activity closely tied to CO_2 emissions.
We also pursued energy and water use reductions by identifying equipment that remained in stand-by mode during non-operating hours and weekends and ensuring they were turned off completely, and have expanded this strategy to also include non-production activities. As a result, per-unit CO_2 emissions from 32 suppliers covered by our calculations in fiscal 2013 fell by 20% from fiscal 2001, while per-unit water use declined by 1% from fiscal 2009.
We will continue to measure CO_2 emissions from our supply chain to reduce product life-cycle emissions. CO2 E W

■ Zero waste and emissions initiatives at suppliers

● Waste generation

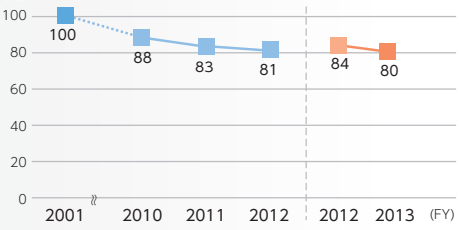
Per-unit waste generation by the 32 suppliers covered by our calculations in fiscal 2013 declined by 19% from fiscal 2009, due to ongoing efforts to increase material throughput yields. Suppliers also maintained their zero waste-to-landfill performance. CO2 E W



FY2013 Honda Green Network Meeting

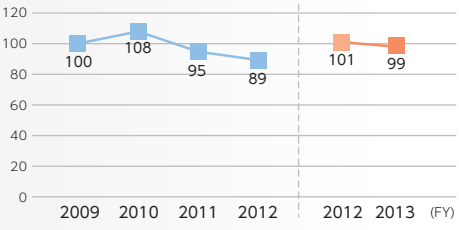
Work site tour (top), Group discussion (bottom)

Per-unit CO_2 emissions



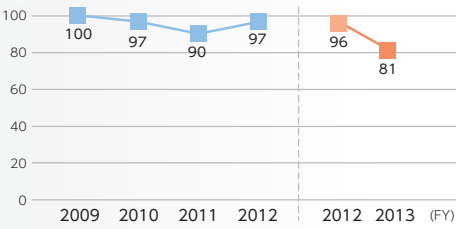
*Scope of suppliers changed

Per-unit water use



*Scope of suppliers changed

Per-unit waste generation



*Scope of suppliers changed

1. Read more about environmental impact reduction efforts in the purchasing domain in Case 27 of "Environmental Documentary—Honda Face." (http://world.honda.com/environment/face/).
2. All direct suppliers of consolidated group companies.

Making factories people friendly and environmentally responsible

Production

As a manufacturer, Honda combines energy and materials and, through various processes, and transforms them into products. We strive to minimize impacts on the global environment in all areas of these activities. We are also committed to improving the quality of local environments in collaboration with the communities in which we operate. In a move toward realizing the Honda Environmental and Safety Vision, we are conducting manufacturing in pursuit of Triple Zero and of producing low-impact products at low-impact factories our neighbors can be proud of.

Executive officer × Operating manager

Discussion

Chief Production Officer, Head of Automobile Production
Takashi Yamamoto

General Manager of Green Factory Promotion Center
Yuji Mukano

Achieving the synergies between people and plant that are necessary for environmental leadership in production

●Yamamoto: Honda's production domain in Japan comprises the manufacturing activities of eight plants at five factories. Together, these facilities produced 880,000 automobiles, 160,000 motorcycles, and 730,000 power products[1] in fiscal 2013. Since manufacturing uses energy and material resources directly, this domain has the highest environmental impact of our operations. We've taken responsibility for this by setting and working toward strict targets in accordance with our mission to produce low-impact products at low-impact factories.

●Mukano: The most impressive action we took in fiscal 2013 from a social perspective was to introduce electric generators at all of our plants. As public concern over electricity shortages continued, we installed systems to make our plants self-sufficient in electricity so as not to deprive ordinary households of power, especially in emergencies. Compartmentalizing our monitoring of energy use has been a major help in developing more effective environmental measures. For example, connecting a power meter to each machine so we could measure the amount of power consumed by each process rather than just the plant as a whole has allowed individual associates to find ways to use power efficiently and realize substantial cuts in power consumption. This in turn led to our achieving the fiscal 2013 targets.

●Yamamoto: Although it's possible to reduce the energy load of a plant by introducing the latest equipment, the only way to realize further reductions is to support the ingenuity of the people who operate that equipment. In this respect, human innovation and effort is becoming increasingly important. You never know what radical new ideas our associates will come up with by questioning convention.

●Mukano: That's right. I think it's important to continue building on such initiatives. Our annual Green Conference, where associates present outstanding examples of environmental measures, plays an extremely important role in this. We need to move more quickly to spread the important ideas that are conceived on the factory floor to other business sites.

●Yamamoto: Turning now to the outlook for next year, I think the biggest topic is the Yorii Plant, which will go into operation in July. As one of our production headquarters, the plant has adopted cutting-edge environmental technologies to facilitate a 30% reduction in CO_2 emissions compared to our existing automobile plants.

●Mukano: One of the most notable aspects of this plant is the amount of work that went into determining the impact that building and operating the plant would have on the surrounding environment and keeping that impact to a minimum. Biotopes were constructed on the premises and linked to an ecological corridor that extend as far as the existing Ogawa Plant so that wildlife may come and go as they please. As a result of efforts like this, it has been shown that the number of rare species has actually increased since the construction.

●Yamamoto: The Yorii Plant also will play an important role in conveying the latest environmental technologies and methods to Honda plants across the globe. I hope the new plant will be able to execute each project effectively and make a solid start as an environmental frontrunner that sets new standards for Honda globally.

1. Includes general-purpose engines and OEM products

●Flow of energy and materials through production in Japan in FY2013

Input

Energy: 8,750 TJ
Solar generated: 1,310 MWh

Material inputs:
Purchased steel, aluminum, and other metals: 248,000 t
PRTR[1]-listed substances: 3,160 t

Water: 3,234,000 m³

See below for CO_2 emission factors

Production related business activities

Heat recovered from group facilities: 466 t

Output

GHG emissions: 378,000 t-CO_2
・CO_2 emissions from energy and non-energy sources: 376,000 t-CO_2
・Non-CO_2 GHG emissions: 2,000 t-CO_2e

Release and transfer of chemical substances:
・Released to atmosphere: 815 t ・Released to hydrosphere: 2 t ・Transferred off-site: 49 t

Waste
・Total waste generated: 164,600 t
・Waste landfilled: 0

Wastewater: 1,770,000 m³

■ Energy and resource conservation

● Major energy conservation (GHG emission reduction) initiatives

In fiscal 2013, CO_2 emissions rose by 0.5% from the previous year to 378,000 t-CO_2.

<Production changes>

Automobile production efficiency improved thanks to increased production of mini-vehicles and energy conservation activities. Although we worked to improve production efficiency for motorcycles as well, a decline in production volume and the effect of fixed energy use caused per-unit CO_2 emissions to rise.

As efforts to address the power shortage in Japan following the 2011 disaster, in fiscal 2012 we decreased peak power demand by shifting the operation of testing equipment to nighttime and running power generators at full capacity. In fiscal 2013, we introduced five additional power generators to sites in Japan so we could respond quickly to times of peak demand, allowing us to contribute to society while continuing our business activities.

<Site-based CO_2 emission reduction initiatives >

Each of our business sites made efforts to reduce CO_2 emissions, including detailed energy monitoring, creating heat maps to show where heat is utilized and wasted within each facility, upgrading to more efficient devices, encouraging eco-etiquette (Honda Green Action), and recovering waste heat.

CO_2 emissions reduction initiatives in fiscal 2013

■ Efficiency upgrades
・Expanded use of energy-efficient devices (e.g. LED lighting, pumps, motors)

■ Honda Green Action activities
・Reduced artificial lighting by using natural light, achieved further reductions in excess lighting, enforced thermostat settings, unplugged all OA equipment not in use, and provided environmental education.

■ Waste heat recovery
・Expanded the use of reclaimed medium-temperature heat for HVAC

■ Reductions made possible by energy use monitoring
・Reduced fixed energy loss and loss during non-production, water and air pressure loss, and air leaks
・Reviewed the servo-motor operation method

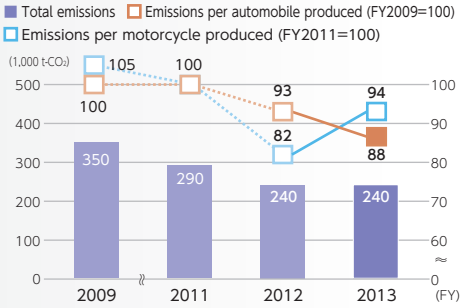
■ Environmental impact reduction case study presentations (E-Domain Green Conference)
・Case studies on 15 themes, 1 per site, were presented to promote cross-fertilization

〈Per-unit CO_2 emissions〉

CO_2 emissions per automobile and motorcycle produced were 12% and 6% lower, respectively, in fiscal 2013 compared to fiscal 2011. In pursuit of ever-greater production efficiency, we will strengthen initiatives to monitor energy use in each production process, work to build more efficient production systems, and standardize all production facilities at higher levels of performance.

CO_2 E W

CO_2 emissions from automobile and motorcycle production

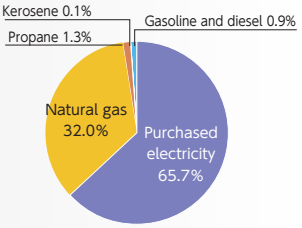


Note: Includes only production of finished vehicles

The following CO_2 emission factors were used:

●Tokyo EPCO: 0.332 t-CO_2/MWh ●Chubu EPCO: 0.424 t-CO_2/MWh ●Kyushu EPCO: 0.348 t-CO_2/MWh ●City gas (13A 46MJ): 2.296 t-CO_2/1,000 Nm3 ●City gas (13A 45MJ): 2.240 t-CO_2/1,000 Nm3 ●Kerosene: 2.489 t-CO_2/kl ●Diesel: 2.585 t-CO_2/kl ●Gasoline: 2.322 t-CO_2/kl ●Propane: 2.999 t-CO_2/t

Energy use by source (based on CO_2 equivalence)



Alternative energy use

Solar panels at our production facilities generated 1,312 MWh of electricity in fiscal 2013. Electricity generated by alternative energy technologies, including natural-gas-powered cogeneration systems, totaled 57,500 MWh, satisfying 15% of electricity demand.

1. PRTR (Pollutant Release and Transfer Registers) are national or regional databases of information on the environmental release and off-site transfer of potentially hazardous chemical substances from industrial and other facilities.

● Major water (resource) use reduction initiatives

A total of 3,234,000 m3 of water was used for production in fiscal 2013, a 6% reduction from fiscal 2011.

Working to recycle wastewater from coating processes and reuse it in the same processes resulted in a reduction in water use at the Kumamoto Factory. CO2 E W

<Example measure>

Kumamoto Factory	Amount of industrial water saved by recycling water in coating shop	Approx. 2,400 m^3/year

■ Zero waste and emissions

● Reducing waste

Production generated 161,100 tons of waste in fiscal 2013, 22,500 tons of which was industrial waste. This represents a 4% reduction in per-unit industrial waste from fiscal 2011.

The Suzuka Factory reduced the discharge of both paint sludge and formaldehyde as a result of using paint separating agents and optimizing the quantities of their application.

The discharge of wastewater sludge also was reduced at the Tochigi Factory by optimizing the combination and amounts of wastewater treatment chemicals that are used. CO2 E W

<Example measure>

Suzuka Factory	Amount of paint sludge reduced by using paint separating agents	Approx. 130 tons/year
Tochigi Factory	Amount of wastewater sludge reduced by using wastewater treating chemicals	Approx. 80 tons/year

● Reducing use of toxic chemicals

<VOC[1] emissions>

A major source of VOC emissions from production is the solvents in paints and coatings used in our coating facilities. Average VOC emissions[2] from coated automobiles in fiscal 2013 was 24.7 g/m^2, a 20.3% reduction from fiscal 2011. This decrease was due largely to a switch to water-soluble coatings at the Suzuka Factory. We will continue efforts to reduce VOC emissions by improving recovery rates for cleaning thinners, reducing inefficiencies and loss as much as possible, and installing more efficient robotic systems.

<Release and transfer of PRTR[3] substances>

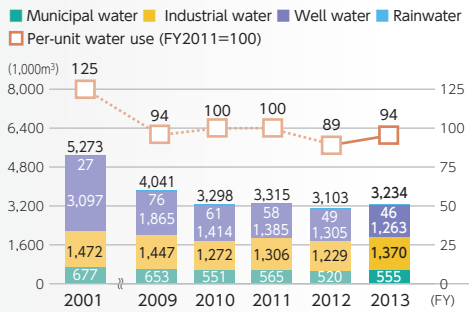
Production released 825 tons of PRTR-listed substances to the atmosphere and hydrosphere in fiscal 2013, a 5% absolute decrease and 16% per-unit decrease from fiscal 2011. This was the result of various efforts to reduce environmental impacts in coating processes, with formaldehyde-based agents being reduced in particular this year. We will continue to make daily efforts to improve the accuracy of our controls in order to further reduce environmental impacts. CO2 E W

<Example measure>

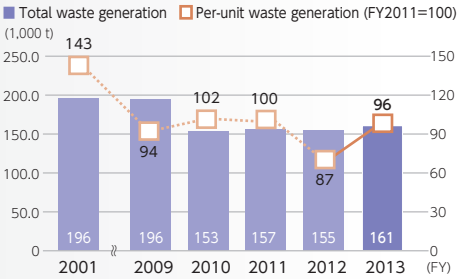
Suzuka Factory	Change and optimization of paint separating agents	Reduction of formaldehyde release

1. VOC (Volatile Organic Compounds): Organic chemical substances that cause photochemical smog and are commonly used in the solvents of paints and thinners.
2. Calculated using a formula agreed upon by members of the Japan Automotive Manufacturers Association. Inc. (JAMA).
3. PRTR (Pollutant Release and Transfer Registers) are national or regional databases of information on the environmental release and off-site transfer of potentially hazardous chemical substances from industrial and other facilities.

Water use



Waste generation

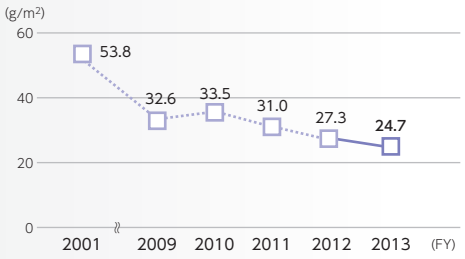


(1,000 t)

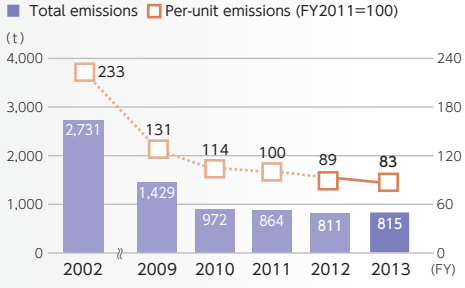
FY2013	Amount generated	Amount recycled
Metal scraps	133.1	133.1
Waste oil	10.2	10.2
Sludge	6.1	5.9
Waste foundry sand	4.5	4.5
Coating waste	1.3	1.2
Other	5.9	5.8
Total	161.1	160.7

Note: Differences between amount generated and amount recycled are due to efforts to reduce volume through incineration or to recycle waste thermally.

VOC emissions per unit of coated automobile body surface area



Emissions of PRTR-listed substances



• Honda Engineering Co., Ltd.

●Energy and resource conservation

Honda Engineering's target for per-unit CO_2 emissions in fiscal 2013 was a 14% reduction from fiscal 2001; it achieved a 40% reduction, far exceeding this target.

Although the company suffered significant damage from the Great East Japan Earthquake, it achieved CO_2 emissions reductions far ahead of schedule by taking advantage of the reconstruction to substantially upgrade its equipment to specifications that incorporate energy efficiency improvements, rather than simply replacing them.

Honda Engineering established measures to achieve CO_2 emissions reduction targets in fiscal 2013, and met its targets through a variety of energy conservation efforts. These measures included using two-system remote controls for portable air conditioners, scheduling automatic switch-off of portable air conditioners through central monitoring control, implementing partial power-down of wastewater treatment facilities, and using warm water boilers. Aside from hardware, the company also implemented an energy conservation poster campaign, carried out awareness raising through the imaging of real-time power demand using power management systems, affixed energy conservation stickers to all computer screens, and configured an energy-saving mode for the air conditioning of individual rooms. Honda Engineering is currently exploring options for introducing alternative energy technologies. It sent environmental representatives from each department to study energy conservation and exhaust gas power generation at the casting factory of another company in order to gather information about new trends in technology.

As a resource conservation measure, the company is promoting the effective use of water resources[1]. Due to a delay in post-disaster reconstruction work and a subsequent increase in workload, however, per-unit water use was reduced by only 18% in fiscal 2013, compared to the initial target calling for a 27% reduction from fiscal 2011. Nevertheless, significant reductions were achieved in day-to-day operations, for example by installing water-saving plugs on taps and devising more efficient ways to wash vegetables in the kitchen.

The company is also promoting water recycling. In 2008, it installed an advanced RO membrane[2]-based wastewater treatment system, allowing on-site sewage and industrial wastewater that was previously treated and discharged to be processed and reused. The treated water is being used to flush toilets, as an equipment coolant, and in cooling towers.

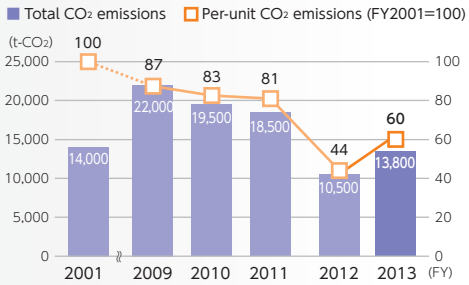
Taking advantage of this system, in fiscal 2013 Honda Engineering reused 100% of its used potable water by combining it with the industrial water that is circulated and reused within its facilities. The company also purchased zero industrial water, an achievement it has maintained since 2009. Going forward, it also will consider using rainwater to reduce water use even further. CO₂ E W

● Zero waste and emissions

Per-unit waste generation at Honda Engineering in fiscal 2013 was 2% higher than in fiscal 2011, compared to the initial target calling for a 7% reduction. This was due to the continued processing of waste created by the Great East Japan Earthquake.

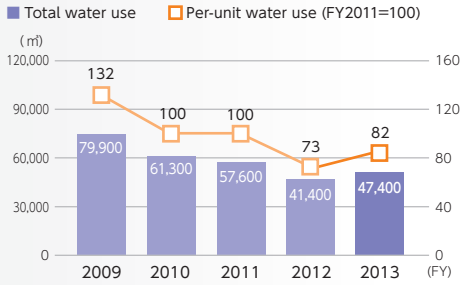
Efforts to reduce waste and emissions in fiscal 2013 included putting into operation a concentration apparatus to condense oil-bearing waste liquids, and partnering and revising the details of contracts with waste-processing contractors. As a result, the company achieved a 100% recycling rate, with 56% being sold for cost recovery. CO₂ E W

CO_2 emissions

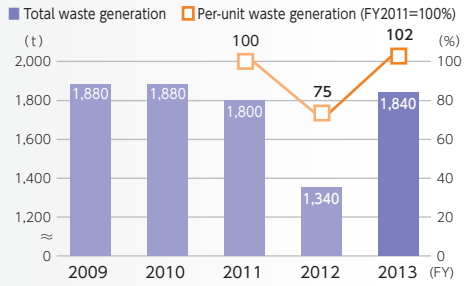


RO membrane - based wastewater treatment system

Water use



Waste generation



1. Read more about environmental impact reduction efforts in the purchasing domain in Case 28 of "Environmental Documentary—Honda Face." (http://world.honda.com/environment/face/).
2. Reverse osmosis membrane: a membrane that allows only water to pass through, thereby removing ions, salts, and other impurities

Striving for efficient, environmentally responsible transportation

Transportation

Honda makes continuous efforts to improve the efficiency of transportation in its operations by promoting modal shifts to ship and rail and by increasing consolidated shipping with other companies. We also are developing environmental management systems jointly with transportation companies and promoting "green logistics" from various approaches, including reducing the amount of packaging materials we use by simplifying packaging, changing packaging materials and specifications, and increasing the use of returnable containers.

Executive officer × Operating manager

Discussion

Head of Supply Chain Management Supervisory Unit, Automobile Production

Ko Katayama

General Manager of Supply Chain Management Planning Office

Hiroyuki Yoshihara

Undertaking radical supply chain reforms that go beyond the framework of logistics

●Katayama: Transportation is the domain responsible for the logistics of delivering the automobiles, motorcycles, power equipment, and service parts to dealers. The transportation domain has achieved substantial reductions in CO_2 emissions and has far exceeded its targets in these past few years, hasn't it?

●Yoshihara: That's right. Making further progress in the modal shift from conventional truck to marine transport played a large part in this. The marine transport rate in Japan increased from 60% to 67% in the last year, and I think this is a result of marine transportation operations having become established. Meanwhile, a primary factor in achieving a reduction in packaging materials was an increase in the application of returnable containers. This allowed us to push ahead with reductions as planned for component parts sets bound for Thailand and also Mexico and China.

●Katayama: Marine transport is more easily affected by weather conditions and takes longer than trucking, so it must not have been easy to achieve a balance between lead times, cost, and CO_2 reductions.

●Yoshihara: That's true. Shipments that take only a day by truck take two to three days by ship depending on the destination. We've had repeated discussions with dealers on how to deliver shipments at low cost, quickly, and with reduced CO_2 emissions in order to find out what works for both parties.
However, I feel we might have reached a limit to what we can achieve in reducing CO_2 emissions by simply shifting modes. From now on, I think it will be necessary to expand the scope of discussion to include the selection of ports, a review of transportation routes, and a reorganization of transportation methods.

●Katayama: I agree. This fiscal year, our division was changed to the Supply Chain Management (SCM) Supervisory Unit so that we can focus on going beyond the existing framework of logistics to managing the entire supply chain. By looking at transportation as a whole, we hope to get an accurate account of the CO_2 emitted in each process and minimize environmental impacts through the most suitable methods. We want these efforts to contribute directly to the Honda Environmental and Safety Vision, "realizing the joy and freedom of mobility and a sustainable society where people can enjoy life."

●Yoshihara: Of course, cooperation between divisions and regions will be necessary in this endeavor. Differences in what is best for a division versus the entire group are prone to occur, as are conflicting opinions. But I believe the goal of reducing CO_2 emissions is a fundamental point we all share for achieving our separate objectives. We all have the same social responsibility to reduce emissions. Let's remain focused on this same objective as we work toward our dream of realizing "Blue Skies for Our Children."

■ Improve transportation efficiency

In fiscal 2013, CO_2 emissions from the transportation of automobiles, motorcycles, power products, and service parts in Japan totaled 64,388 t-CO_2. Japan's revised Rationalization in Energy Use Law, which took effect in April 2006, requires companies that ship 30 million ton-kilometers (weight of shipments in tons multiplied by distance shipped in kilometers) of cargo or more a year to make efforts to reduce energy consumption in transportation. To fulfill our responsibilities as a high-volume shipper under the law, we are working to improve efficiency in the transportation of finished vehicles and equipment, service parts, and parts shipped between factories.

● Initiatives for transport of finished automobiles

We continue to drive improvements in average fuel efficiency by encouraging partner companies that transport finished automobiles to practice eco-driving and to switch to new types of trailers. For years, we have been implementing modal shifts from truck to marine transport for distances of more than 500 kilometers and for shipments to certain areas, such as Niigata and Chiba. In fiscal 2011, we expanded this initiative even further by transporting automobiles by ship instead of truck for distances of less than 500 kilometers between the Kanto and Kansai areas (see figure below).

In fiscal 2013, we expanded the utilization rate of coastal shipping (see note) to 67% as a result of the current increase in domestic production, contributing to a further reduction in CO_2 emissions. CO_2 E W

Transport of finished automobiles from Suzuka and Saitama factories

Marine transport is used for destinations outside a 300-kilometer radius from each factory, while trucks are used for closer destinations. We increased the number of destinations covered by marine transport by reducing that radius from 500 to 300 kilometers in May 2010.

Truck transport

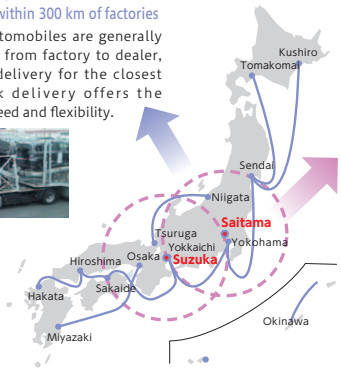
For destinations within 300 km of factories

In this zone, automobiles are generally trucked directly from factory to dealer, with next-day delivery for the closest dealers. Truck delivery offers the advantages of speed and flexibility.

Marine transport

Mainly for destinations over 300 km from factories

Mainly for destinations over 300 km from factories Automobiles are trucked from factories to ports, shipped by boat to ten locations nationwide, and by truck to dealers near each port. Because large numbers of automobiles can be transported at once, this method results in lower CO_2 emissions per vehicle transported.



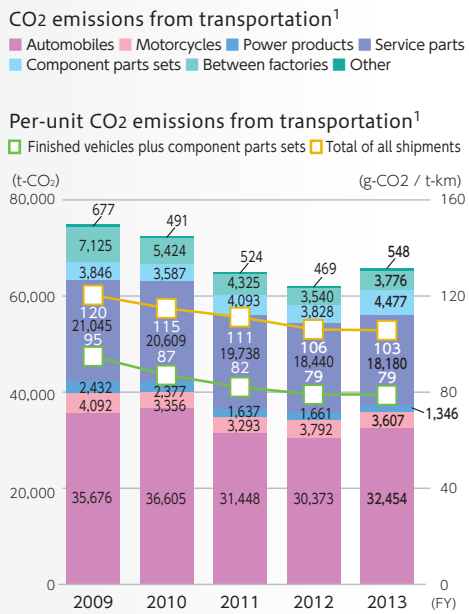
● Trucking is typically cheaper than marine transport for distances of less than 500 kilometers. However, to promote further reductions in transport-related CO_2 emissions, we have identified ways to use marine transport for distances between 300 and 500 kilometers without an increase in costs.

● Initiatives for transport of finished motorcycles

We also have been working with our transportation partners to improve efficiency in the transportation of finished motorcycles. Alongside benefits realized by practicing eco-driving techniques, since November 2008, we have reduced annual CO_2 emissions by 11% annually by using the Tokyo and Kobe ports instead of only the Nagoya port for imported motorcycles from China, bringing shipments closer to major markets in the Kanto and Kansai regions and reducing distances travelled by truck. CO_2 E W

Note: Freighters that carry cargo in Japanese coastal waters

CO_2 emissions from transportation[1]

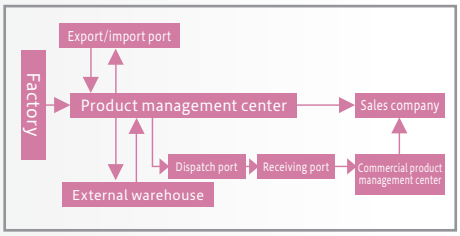


Per-unit CO_2 emissions from transportation[1]

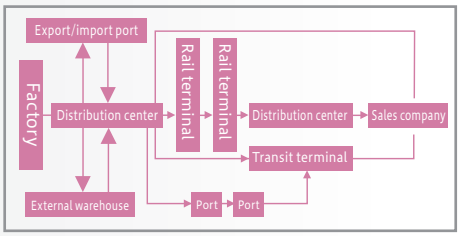
1. CO_2 emission factors based on Japan's Revised Rationalization in Energy Use Law

Transport routes covered by CO_2 emissions calculations

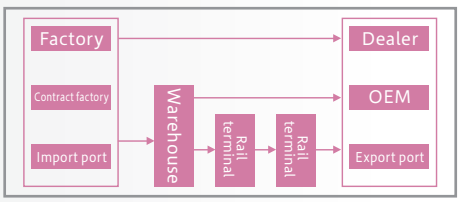
Finished automobiles



Finished motorcycles



Power products



● Initiatives for the transport of service parts

We reduced the number of truck shipments by 1% by increasing the loading efficiency of trucks and returnable containers. We also halved the total distance travelled for shipping in the Tohoku and Kyushu regions by increasing the loading efficiency of returnable containers for transportation in these regions and changing the frequency of collection from daily to once every two days.

We also consolidated shipping combining parts and accessories supplied by Saitama for the Chugoku and Shikoku regions and service parts shipped from the Suzuka Distribution Center into the same charter service.

We will continue to aim to further improve transportation efficiency with a review of delivery destinations in the Chugoku region. CO2 E W

● Conserving energy at warehouses

At the Suzuka Distribution Center, we installed switches for precise control of shelf and aisle lighting on the second floor, and instructed workers to use lighting only when necessary.

We also shortened daily work time in the export shipment work area by two hours by revising the shipment schedule and consolidating two packaging centers into one.

System specifications were also changed so that delivery conveyors could operate independently in warehousing work areas.

As a result, we reduced CO_2 emissions from warehouses by 3%. CO2 E W

Usage rate of exterior returnable containers for component parts sets

Destination	Usage FY2010	FY2011	FY2012	FY2013
North America	87%	89%	88%	87%
South America	61%	59%	49%	44%
Europe	93%	92%	90%	90%
Asia/Oceania	72%	77%	78%	82%
China	43%	60%	53%	55%
Total	73%	79%	77%	78%

● Initiatives for packaging of component parts sets [1]

In fiscal 2013, we took steps to reduce packaging weight and expand the application of exterior and interior returnable packaging. To reduce packaging weight, we switched to thinner polyethylene sheets to wrap parts, and began using lightweight corrugated paperboard liners. We also expanded the use of exterior returnable containers to include parts shipped to Thailand for Accord and CR-V production, and expanded the use of interior returnable containers to include nearly all parts supplied to Indonesia for the growing production (in response to demand growth) of automatic transmissions for the City, CR-V, and Accord. CO2 E W

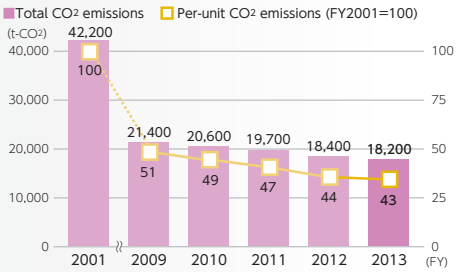
● Initiatives for packaging of service parts

We have made a number of changes to our packaging to reduce corrugated paperboard use, including switching to returnable containers.

For bumper packaging, we reduced corrugated paperboard use by approximately 800 tons by switching from packaging in laminated foam sheets with an exterior of paperboard to packaging in individual Miracloth sheets and storage in returnable containers.

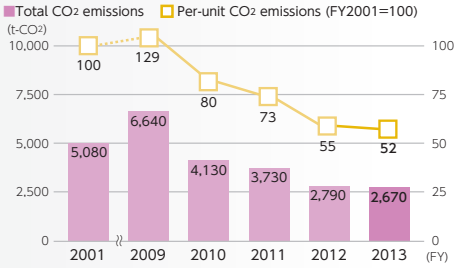
We will continue with initiatives to recycle exterior containers and develop simple packaging for large sheet-metal parts as we strive to reduce packaging use. CO2 E W

CO_2 emissions from transportation[2] of service parts

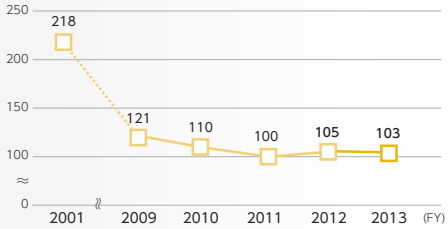


2. Marine transport excluded as per the Rationalization in Energy Use Law

CO_2 emissions from warehouses



Packaging use per unit of component parts set (FY2011=100)

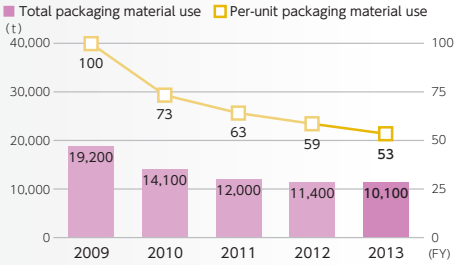


Reduction in packaging material used for component parts sets[3]

Type of material	Reduction
Steel	1,310t
Corrugated paperboard	356t

3. Made possible by replacing disposable packaging with returnable packaging.

Packaging material used for service parts



Reduction in corrugated paperboard made possible by changing packaging and storage methods

Old storage method

New storage method

1. Component parts set: A set of parts representing the majority of a product exported for final assembly in the product's target market.

Building bonds of trust with customers and communities

Sales and Service

To proactively promote environmental conservation in sales and services, Honda provides its sales companies with constant support for implementing Green Dealer initiatives. By taking concrete steps to meet the needs of today, our goal is to cultivate dealerships that demonstrate environmental leadership, bringing enhanced value to the customers and communities they serve.

Executive officer × Operating manager

Discussion

Chief Operating Officer for Regional Sales Operations (Japan)
Sho Minekawa

General Manager of Environment & Recycle Promotion Office
Tomokazu Abe

Fostering environmental leadership among dealers

●Minekawa: In the sales and service domain, 10,552 dealers*, including 7,250 motorcycle dealers, 2,171 automobile dealers, and 1,131 power product dealers (see note), serve the crucial role of delivering Honda products directly to the customer. Looking back on fiscal 2013, I think the most significant development from an environmental perspective was the installation of solar panels at automobile dealerships across Japan and the launch of a monitor on Honda's website showing the energy generated by these panels in real-time.

●Abe: That's right. Because the website is highly visible to our customers, this was a symbolic act in terms of showing our customers Honda's stance on CO_2 emission reductions, and it will also help raise environmental awareness among dealership staff. We started with the goal of installing 1.0 MW of solar generation capacity in the two years through the end of fiscal 2014, but 1.3 MW was already installed by the end of fiscal 2013.

●Minekawa: Reaching the goal so quickly was a significant achievement. What other voluntary initiatives did we see among dealers?

●Abe: The number of dealers that are introducing smart meters to reduce their power consumption is increasing. As the vehicle supplier, we've actively supported their unique ideas and helped them share those ideas with other dealers.

●Minekawa: The public is becoming increasingly aware of environmental issues and whether a dealer is environmentally responsible is becoming an important factor for customers when they choose a car. I think progress in the Green Dealer program in fiscal 2014 will be a key to helping dealers continue to meet customer expectations and remain a step ahead of the competition.

●Abe: That's right. The requirements for Green Dealer certification were revised last fiscal year and the program, which focused on environmental pollution measures such as proper oil disposal and battery processing, was updated to further reinforce CO_2 emissions-reduction measures. This fiscal year we plan to increase the number of new Green Dealers.

●Minekawa: Dealers throughout Japan need to synchronize their efforts to better meet the needs of the time. We need to work together to reduce CO_2 emissions even further.

●Abe: I believe that as dealers interact with customers and strive for environmental harmony with their local communities, they will create increased corporate value for Honda.

●Minekawa: Honda takes pride in having an unparalleled technological capability to deliver the environmental performance and joy of driving that customers expect today. That's why our mission in the Sales and Service domain is to deliver Honda products in a way that best embodies the vision of the designers and other people who made them. Let's motivate each other as we collectively aim to take Honda to the next level.

* As of March 31, 2013

■ CO_2 emissions reductions at sales companies

Honda dealers monitor their CO_2 emissions on a per-unit basis. Although the 2011 disaster had a substantial impact on business activities in fiscal 2012, business activities rebounded in fiscal 2013, during which time motorcycle, automobile, and power product sales companies all managed to keep their total CO_2 emissions below fiscal 2011 levels.

Motorcycle, automobile, and power product dealers have been encouraging environmental stewardship on an individual level through Honda Green Action[1] and also educating customers about strategies to reduce energy use and emissions, such as eco-driving techniques. For site-based CO_2 emission reductions, dealers have been sharing best practices with each other and working to make environmental activities a regular part of business.

● Initiatives by automobile sales companies

All dealers participate every year in the Environmental Etiquette program, a Honda Group-wide initiative to encourage energy conservation through simple day-to-day actions, and realize further reductions in CO_2 emissions through staff education. Awareness was raised further in fiscal 2013 through the soliciting of posters and slogans on the areas for improvement identified in the environmental etiquette survey, and the display of outstanding submissions on company walls.

To further reduce CO_2 emissions from automobile sales companies in Japan, we set a target to install one megawatt in photovoltaic generation capacity distributed across 100 dealers nationwide. By the end of fiscal 2013, we completed the installation of 1.3 megawatts at 119 dealers, exceeding our initial target.

A history of power generation performance at Honda dealers can be seen on the Honda website (in Japanese)[2]. CO2 E W

● Initiatives by motorcycle sales companies

The Japanese motorcycle wholesaler Honda Motorcycle Japan Co., Ltd. and 7 consolidated motorcycle sales companies made efforts to maintain environmental awareness through continued participation in the Environmental Etiquette program and through quarterly self-assessments conducted at their respective outlets, which total 5 and 54, respectively.

In addition, the environmental poster design contest held in fiscal 2012 to raise environmental awareness among staff was broadened in scope to include consolidated motorcycle sales companies.

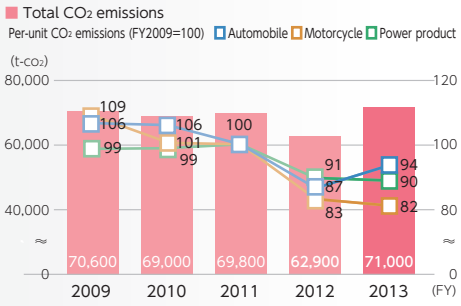
Power demand systems were introduced at 20 outlets by consolidated motorcycle sales companies and are currently being used to conserve energy. The companies are also reducing their environmental impact by installing LED lighting at new outlets. CO2 E W

● Initiatives by power product sales companies

Based on Environmental Household Bookkeeping System[3] data, two consolidated power product sales companies are working as Green Dealers to raise environmental awareness and focus on reducing CO_2 emissions at all eight of their outlets through continued participation in the Environmental Etiquette program.

Also, exemplary environmental practices in the service department of individual outlets are shared on an ongoing basis among 197 preferred authorized dealers (226 outlets) and 128 service network dealers (149 outlets) to show them ways in which they can improve environmental performance. CO2 E W

CO_2 emissions from sales companies



CO_2 emission factor (electricity) used: 0.378 t-CO_2/MWh

Initiatives by automobile sales companies

Posters to build awareness on areas for improvement identified in the environmental etiquette survey

5 areas for improvement in the Environmental Etiquette survey	Winning slogans
1. Close laptop screen when away from your desk	Stand up, close screen, cut waste
2. Switch off mobile-phone chargers when away from your desk for long periods	Charger OFF, environmental etiquette ON t
3. Use a handkerchief or a towel after washing hands	Use a handkerchief for a green lifestyle
4. Use public transportation	Start using buses and trains for those short journeys
5. Turn off desktop devices when leaving work	Good job! Down time for you and your equipment Say goodbye and switch off

Initiatives by motorcycle sales companies

Switched to LED lighting at dealerships

Initiatives by power product sales companies

Examples
● Honda Hokkaido Reduced the number of fluorescent lights used at the head office and installed reflectors for more efficient light distribution
● All Honda Sales Switched all fluorescent lighting at the dealer outlet to LEDs

1. See page 57.
2. http://www.honda.co.jp/solar-power
3. An accounting journal used to calculate household CO_2 emissions by making a monthly record of waste output and energy use for such things as electricity, gas, and water.

Leading the way to a closed-loop economy

Product Recycling (3Rs)

Even before the introduction of Japan's Law on the Recycling of End-of-Life Vehicles (the ELV Recycling Law) in 2005, Honda was putting the 3Rs (reduce, reuse, and recycle) into practice for product materials. We were the first Japanese automaker to sell recycled parts and to collect and recycle parts such as oil filters and bumpers, activities we have continued to this day. We are now developing equipment for efficiently and safely disassembling used parts and products to support proper disposal and material recycling, and actively working to build networks to promote reuse and recycling.

Executive officer × Operating manager

Discussion

Chief Operating Officer for Customer Service Operations
Hiroyuki Yamada

General Manager of Spare Parts Supply Division
Wataru Karo

Addressing global environmental challenges with Japanese recycling technology

●Yamada: Product recycling and the 3Rs (reduce, reuse, recycle) is where we make efforts to conserve resources, reduce waste, reuse end-of-life products, and recycle materials. In this domain, a broad range of divisions, spanning laboratories and dealers, cooperate to reduce environmental impacts. There were some significant developments, especially in the area of recycling in fiscal 2013, weren't there?

●Karo: Yes. We established the world's first technology and process for extracting rare earth metals from used nickel metal hydride batteries from hybrid vehicles (IMA batteries) and recycling them as material for new batteries[1]. Previously, it was commonly accepted in the industry that, although the process was technically possible, the quantity of rare earths that could be reclaimed wasn't worth the work it required, which was why the process never reached practical implementation. Forming a team with Japan Metals & Chemicals, Honda began research in 2008 and recently achieved commercialization on a production scale.

●Yamada: This was a very significant accomplishment in terms of fulfilling our social responsibility as a manufacturer by recycling products. However, electromotive technologies such as batteries are expected to evolve dramatically going forward. It's safe to say that this will be a turning point for the field of recycling. Rather than simply developing new vehicles such as plug-in hybrids and EVs, we must also develop new recycling technologies to make sure the materials in these products don't go to waste. For this purpose, we must continue to strengthen ties with research institutions and actively engage in product development with a focus on recycling.

●Karo: I think the same can be said for reuse, where we restore broken and used parts so they can be used again. The Earth Dreams Technology[2] line of automobiles that are planned for launch starting this year comes to mind. We hope to develop reuse technologies in conjunction with the development of parts, such as CVTs, to make sure they can be reused. In this way we hope to maximize the benefits of smaller environmental impacts and lower prices for customers.

●Yamada: Because Honda's production operations are located all over the world, recycling and reuse initiatives are also required on a global scale. Our next objectives are to provide technical support for implementing the solutions we are carrying out in Japan in every region and to raise the global standard of Honda's 3R technologies. Just imagine how good it would feel if our work helped solve the world's toughest environmental challenges.

1. Read more about the Carbon-Smart Development Project in Case17 of "Environmental Documentary Honda Face." (http://world.honda.com/environment/face/2012/)
2. "Earth Dreams Technology" is a next-generation powertrain technologies that greatly enhances both driving performance and fuel economy, building on advancements in environmental performance to pursue a joy of driving unique to Honda.

3R initiatives in product development

3R pre-assessment system

Honda's efforts to reduce, reuse, and recycle (the 3Rs) begin at the R&D stage with measures that include making products lighter and more compact, extending their service life, standardizing components, improving ease of maintenance and fluid replacement, using recycled materials, minimizing use of environmental pollutants, and labeling products to indicate the types of resin and rubber used. We evaluate performance based on a 3R pre-assessment system for each new model being developed, and are constantly working to improve the system. Our motorcycles have been assessed under this system since 1992, our automobiles since 2001. CO_2 E W

Reducing by design

We have made considerable efforts to reduce the size and weight of our products through innovative use of designs and materials for all parts, including body structures, engines, and even individual screws. In the N-ONE mini-vehicle that went on sale in 2012, we reduced body-in-white weight by about 10% by adopting a high-efficiency successor body structure with an inner frame, strong lightweight side panels made from tailored blanks, and ultra-high-strength stiffeners made using a hot stamping process. And in the next-generation eSP engine for small scooters, we worked to make the engine more lightweight and compact, and also reduce consumables use. As a result, we reduced gear oil capacity by 20% and radiator coolant use by 20% compared to the 2011 PCX. CO_2 E W

Reusing and recycling by design

We strive to improve the reusability and recyclability of product parts by making special considerations during structural design, using recycled resins and materials that are easy to recycle, and labeling resin and rubber parts to indicate the types of materials used.

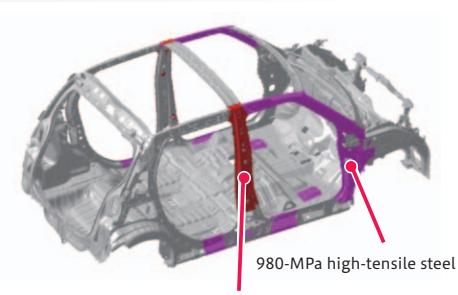
In the N-ONE, for example, we used easy-to-recycle materials[1] in the bumper face and other exterior and interior components. We also use recycled materials for sound absorbers and labeled rubber materials wherever possible. All of these decisions help create a product conducive to recycling.

In fiscal 2013, we achieved at least 90% recyclability for all new and redesigned automobile models and at least 95% for motorcycles, according to the definitions and calculation methods of the Japan Automobile Manufacturers Association (JAMA), and a recoverability rate[2] of at least 95% for parts used in power products. CO_2 E W

Reducing chemicals in products

We have been working to reduce levels of lead, mercury, hexavalent chromium, and cadmium—four heavy metals that have negative environmental and human health impacts—in our products. In fiscal 2013 we adopted mercury-free HID headlamps in the N-ONE, a first for Honda mini-vehicles. For all automobile and motorcycle models manufactured in Japan, we have achieved JAMA's voluntary reduction targets[3]. For power products, no specific regulations exist in Japan, but we have been making efforts to comply with JAMA's voluntary targets and working to reduce chemicals in all models produced in Japan. CO_2 E W

Places where ultra high-strength stiffener is used



eSP next-generation engine for small scooters, which reduces the use of consumables

	Recycling rate	Major parts
Automobiles	At least 90%	**N-ONE** ● Interior and exterior parts, such as bumper faces **Fit EV** ● Battery box ● Sound absorber
Motorcycles	At least 95%	**Integra** ● Rear fender ● Battery box
Power products	At least 95%	**Propane gas electric generator** ● Front cover ● Side covers ● Maintenance cover

Voluntary reduction targets[3] proposed by JAMA (for new models)

Target substance	Reduction target
Lead	Amount used per vehicle Automobiles: One-tenth (compared to 1996[3]) Motorcycles: 60 grams or less
Mercury	Complete ban, with exceptions (HID headlamps, navigation LCD panels, etc.)
Hexavalent chromium	Complete ban
Cadmium	Complete ban

3. Baseline for reduction is based on typical amount used per vehicle in 1996 (1,850 grams). One-tenth is equal to 185 grams.

N-ONE HID headlamp, a first for Honda mini-vehicles

1. Thermo-plastics such as polypropylene and polyethylene.
2. The recoverability rate includes both the recyclability rate and the thermal energy recovery rate. It is based on the calculation method stipulated in ISO 22628 for automotive recyclability rates.

■ 3R initiatives for parts

● Recycling used oil filters

Since 2004, we have been collecting and recycling used oil filters from Honda dealers and general repair shops. By disassembling the collected parts, reusing some components in maintenance parts and recycling the rest as material, Honda is realizing 100% percent recycling of scrap parts. In fiscal 2013, we collected and recycled 280,000 used parts. CO2 E W

● Recycling nickel metal hydride batteries for hybrid vehicles

Since launching the Insight in 1999, Honda has been voluntarily collecting the IMA (Integrated Motor Assist) nickel metal hydride batteries from hybrid vehicles and recycling them as stainless steel material. In April 2012, we established the world's first process for extracting rare earth metals from these batteries in mass-production processes at a recycling plant, in partnership with Japan Metals & Chemicals Co. We also processed IMA batteries from approximately 300 unsold cars damaged in the Great East Japan Earthquake and started using them as hybrid battery material in March 2013. CO2 E W

Note: Read more about rare earths recycling in Case 17 of "Environmental Documentary—Honda Face."
(http://world.honda.com/environment/face/2012)

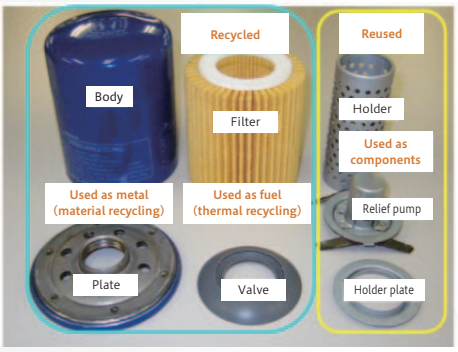
■ 3R initiatives for end-of-life products

● Automobiles

<Initiatives to comply with the ELV Recycling Law>

Honda makes various efforts to reduce environmental impacts across the life cycles of its automobiles, from development to disposal. Japan's ELV Recycling Law, which came into full force on January 1, 2005, is intended to protect the environment and promote the effective use of resources through measures that ensure the responsible and efficient recycling of end-of-life vehicles. Under the law, automakers are responsible for collecting and properly disposing of fluorocarbons (which are used as air conditioner refrigerants, but can damage the ozone layer and contribute to global warming if released into the atmosphere), airbags (explosive and difficult to handle), and automobile shredder residue (ASR; material that remains after all reusable materials are extracted). Honda charges recycling fees, which are set as low as possible for the customer, but high enough to sufficiently offset the costs of proper processing and recycling. For more information, please visit our website. CO2 E W

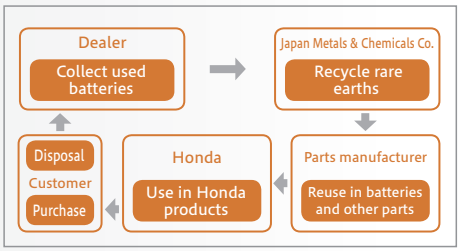
"Initiatives for three recycled items"
http://www.honda.co.jp/auto-recycle/recycle_02.html
(in Japanese only)
"A word about recycling fees"
http://www.honda.co.jp/auto-recycle/recycle_03.html
(in Japanese only)



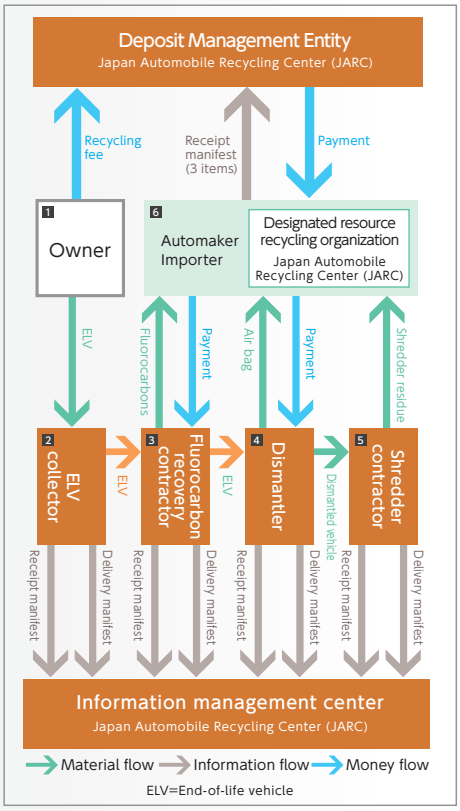
Above: Oil filter breakdown and recycling method

Left: Collected used oil filters are cut and their components sorted for reuse

Rare earth recycling process



Automobile recycling process flow-chart



<Complying with the ELV Recycling Law>

In fiscal 2013 we recovered fluorocarbons from about 410,000 vehicles (up 27% from the previous year), air bags from about 350,000 vehicles (up 42%), and automobile shredder residue (ASR), which is generated in the final process of automobile recycling, from about 470,000 end-of-life vehicles (up 28%).

We met regulatory requirements for the recycling rates of gas generators (85%) and ASR (70%), recycling 93.5% and 94.2% of these materials, respectively.

Recycling all of these items cost 4.45 billion yen, 0.57 billion less than the 5.02 billion yen in recycling deposits received to process them.

● Motorcycles

<Voluntary initiatives to recycle motorcycles>

On October 1, 2004, working in partnership with other motorcycle manufacturers and motorcycle importers in Japan, Honda launched a voluntary motorcycle recycling initiative that continues to this day. With support from sales companies and other entities, our goal was to create a backup recycling system for the proper disposal of end-of-life motorcycles—the world's first voluntary effort of its kind in the motorcycle industry. In this system, end-of-life motorcycles are accepted by dealers and certified collection centers for proper handling at recycling facilities. We monitor the material recycling routes we established in fiscal 2009 for certain resins and aluminum from engines. To increase user convenience and reduce illegal dumping, since October 2011 we have been recycling end-of-life motorcycles free of charge when receiving motorcycles that display no recycling symbol, having been sold in Japan before this system was launched. We have also introduced an information system for confirming the status of motorcycles that are submitted for recycle processing. The Japan Automobile Recycling Promotion Center (see note) publishes a control number for each motorcycle, as well as data provided by the companies and facilities that collect, transport, and recycle the motorcycles.

In fiscal 2013, the recycling rate improved as a result of the thermal use of shredder dust being promoted in some disposal and recycling facilities.

Note: http://www.jarc.or.jp/en/message/

<Results of voluntary recycling initiatives in FY2013>

The price tags of all Honda motorcycles sold in Japan include the cost of recycling, and all motorcycles are labeled with a sticker to indicate that no recycling fees will be levied at the time of disposal. Of the end-of-life motorcycles accepted at certified collection centers in fiscal 2013, a total of 1,724, or 58%, were Honda products.

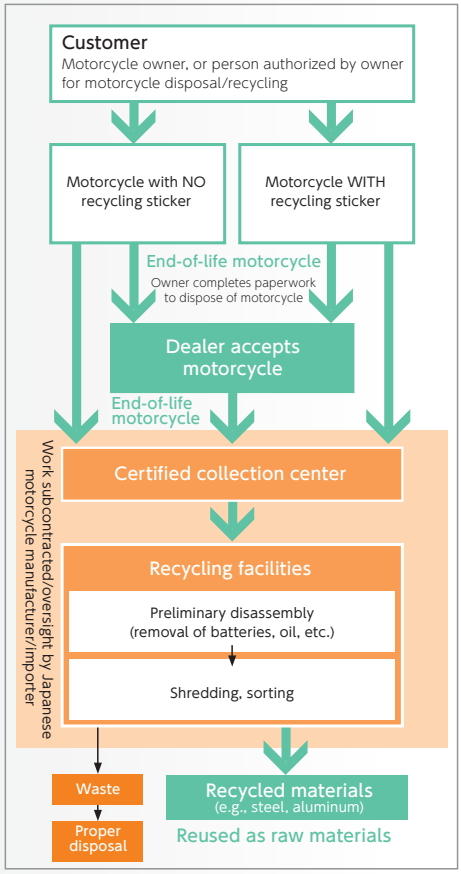
The recycling rate for Honda products in fiscal 2013, calculated from the actual amount of each type of material recovered at 14 recycling facilities, was 92.3% by weight. CO_2 E W

FY2013 recycling results

Fluorocarbons	Amount recovered	118,554 kg from 408,003 vehicles
Airbags (gas generators)	Recovered	102,209 units from 34,293 vehicles
	Recovered after deployment	985,746 units from 308,703 vehicles
	Recycling rate	93.5% (legal minimum 85%)
Automobile shredder residue (ASR)	Volume received	87,161 t from 448,677 vehicles
	ASR that would have been generated had full recycling not been done	4,519 t from 23,375 vehicles
	Recycling rate	94.2% (minimum as per FY2015 law 70%)
Total recycling deposits received		5,021,258,997 yen
Total recycling costs		4,454,361,583 yen

【URL】
http://www.honda.co.jp/auto-recycle/recycle_06_2012.html
http://www.honda.co.jp/auto-recycle/recycle_06_2012.html

Motorcycle recycling process flow-chart



Taking responsibility for the environment in daily operations

Administration

Honda is working to reduce the environmental impacts of its business support operations. We try to consider the environment in all business activities, to operate environmentally friendly "green offices," and to constantly improve our environmental performance. Our hope is that these efforts will also have an indirect positive impact on the environment by encouraging our customers, suppliers, and business partners to take similar action.

Aiming for steady results through communication and constant effort

●Yoshida: The administration domain encompasses 9 offices in Japan, including the Aoyama head office building, and 13 group companies. Each office and company is working to reduce environmental impacts in all areas of its operations. It's actually more difficult to realize change in this domain compared to, say, production. Looking back on fiscal 2013, we reduced waste by just a minor amount compared to fiscal 2011, but we fully met our reduction targets for CO_2 emissions and water use.

●Aoki: The low rate of reduction for waste was the result of a one-time increase in waste from holding anniversary events and changing floor layouts to match organizational changes. In fact, improving performance every year is very difficult in the administration domain, because the only time we can achieve something significant is when we replace old equipment, such as air conditioners. That's why I feel it's so important for associates to solve issues in their immediate vicinity and make their own steady progress, however small.

●Yoshida: The annual Green Conference, where associates present the best examples of environmental initiatives and solutions, is extremely important in that respect. It gives each office the opportunity to hear new ideas that it can then adopt for itself. I think there's still room for improvement to be made by accumulating ideas in this way, even if dramatic changes are difficult to realize.

●Aoki: We started monitoring the results of such initiatives in fiscal 2013. At the Aoyama Building we're trying to increase motivation and break old habits by posting monthly reductions in power consumption, waste, and copier paper use for each floor and making everyone's efforts and achievements widely known. In fiscal 2014, this information will be broadcast on the in-house televisions installed on each floor, and power use will be broken down by unit of time to show the results of everyone's efforts in even more detail.

●Yoshida: That should help. Customers visit the Aoyama and district offices more often than they do the plants and research centers, so this is an important initiative for maintaining a high level of awareness throughout the building.

●Aoki: While promoting these initiatives, it's important to strike a balance between environmental impact reductions and work efficiency. For example, an extreme approach such as turning off air conditioning on a hot summer day for the purpose of CO_2 reduction would defeat the purpose of administration, which is to create a comfortable environment in which to work efficiently. We want to create an environment that increases work motivation and also contributes to the global environment at the same time. We need to give serious thought to this balance.

●Yoshida: I think that's true. And in the long term, we want Honda in Japan to take leadership and work with Honda offices around the world on promoting Green Office initiatives throughout the administration domain.

■ Administration activities

All Honda office buildings and other business sites of the 14 Honda Group companies in Japan work together to advance environmental conservation. Group companies can be divided into three functional areas, with initiatives conducted in each area: administration, which includes head office buildings; services, such as racetracks and driving schools; and production, which includes aluminum smelting and parts manufacturing.

● Site tours for sharing best practices

Tours of sites experiencing the most success in their efforts are held periodically to expand such initiatives to other group companies and provide inspiration for future improvement. In fiscal 2013, tours of Suzuka Circuit and the environmental facilities of Honda Suzuka Factory were held. Various measures were shared at Suzuka Circuit, such as methods used to process the enormous quantity of waste generated by events and energy conservation measures in the media center.

CO_2 E W

● Honda head office ISO14001 certification

In fiscal 2012, we integrated two separate certifications (Aoyama, Wako, and Shirako head office buildings, and Sapporo, Sendai, Yaesu, Nagoya, Osaka, and Fukuoka regional office buildings). In fiscal 2013, we reviewed the entire administrative structure with the goal of strengthening cooperation between the head office and regional office buildings, and bolstered the organization to facilitate rapid responses to issues at regional buildings. In addition, floor-by-floor monitoring of environmental impacts was commenced at the Aoyama Building with an eye toward raising environmental awareness among associates. The consumption rate per person on each floor is now being calculated to encourage individual efforts. We will continue environmental efforts like these while setting ever-higher targets .

CO_2 E W

● Reducing CO_2 emissions

In fiscal 2013, CO_2 emissions from the administrative operations of group companies in Japan totaled 29,400 tons, a 3% reduction from fiscal 2011.

Since most CO_2 emissions from administrative operations, which comprise over half of the group companies in Japan, stem from electricity consumption, we implemented various energy conservation measures, such as switching to LED lamps, revising lighting schedules, culling lamps, and turning off lights in sunny weather.

Furthermore, we are continuing efforts in environmental etiquette, including closing laptop screens, disconnecting electrical appliances when not in use, and taking care to turn off lights.

CO_2 E W

Major initiatives in FY2013

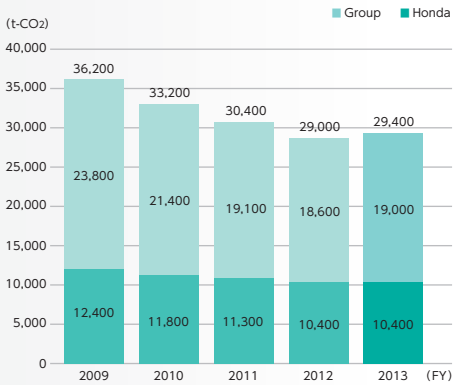
Cut energy consumption by reducing the number of vending machines and replacing old models with energy-efficient ones	Honda Wako Building
Switched to LED lighting during the refurbishment of the Honda Collection Hall	Twin Ring Motegi
Reduced power consumption by integrating servers	Honda Commtec Inc.
Installed sunlight control film on windows	Honda Airways Co., Ltd.
Raised environmental awareness among associates by monitoring power consumption and displaying results	Honda Finance Co., Ltd.
Installed solar panels	Honda Sun Co., Ltd.
Switched to more fuel-efficient motorcycle and automobile instructionvehicles and courtesy buses	Rainbow Motor School Co., Ltd.

Note: Fiscal 2013 data includes all 9 office buildings (Aoyama, Wako, Shirako, Yaesu, Sapporo, Sendai, Nagoya, Osaka, Fukuoka) of Honda Motor Co., Ltd. and all facilities of 12 consolidated group companies and 1 educational institution in Japan: Mobilityland Corporation, Honda Kaihatsu Co. Ltd., Honda Sun Co., Ltd., Honda Commtec Inc., Honda Airways Co., Ltd., Honda Trading Corporation, Honda Finance Co., Ltd., Rainbow Motor School Co., Ltd., Kibonosato Honda Co., Ltd., Honda R&D Sun Co., Ltd., Circuit Service Creates, Japan Race Promotion Inc., and Honda Technical College.

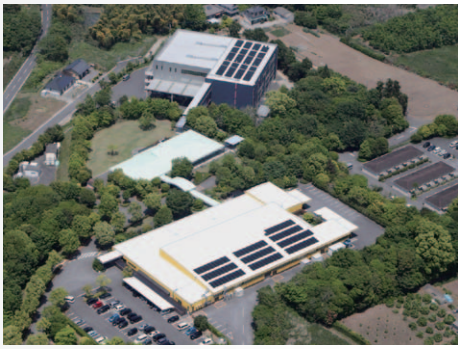
Tour at Suzuka Circuit

"The Bumbetsu Quartet" talking recycling bins at Suzuka Circuit (bumbetsu means to separate)

Group CO_2 emissions



·Historical figures have been adjusted to reflect a change in the scope of data



Solar panels installed at Honda Sun

● Reducing waste generation

In fiscal 2013, waste generated by the administrative operations of group companies in Japan totaled 1,658 tons, a reduction of just 1% from fiscal 2011. Although there was a one-time increase in waste from the holding of anniversary events, we managed to keep the impact of these events to a minimum by implementing careful waste separation and boosting recycling rates at each group company. For example, the Honda Wako Building, which is the largest business site in the administration domain by associate numbers, has increased its waste and recycling rate to 97% through diverse measures including using waste plastics and cigarette butts to make RPF[1], and washing and recycling plastic cafeteria packaging.

The Kansai school of Honda Technical College is working with recycling companies to review the sorting methods, with the beautification committee, a student organization, taking a leading role in carrying out thorough sorting. CO2 E W

Major initiatives in FY2013

Started using plastics that were previously burned to make RPF	Honda Aoyama Building
Recycled used mixed paper	Honda Trading Corporation
Recycled burnable refuse through revision of separation rules	Honda Kaihatsu Co., Ltd.
Converted used corrugated paperboard into salable material	Honda Technical College (Kanto)
Switched to returnable packaging materials for parts from manufacturers	Kibonosato Honda Co., Ltd.

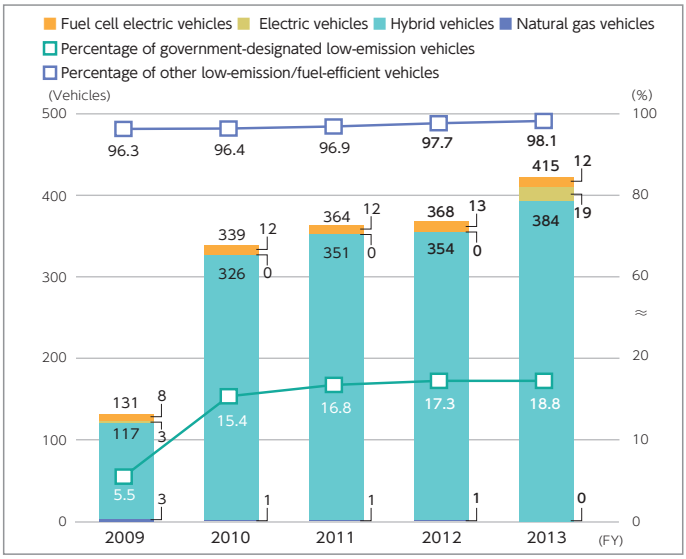
● Reducing water use

In fiscal 2013, water used by the administrative operations of group companies in Japan totaled 833,000 m^2, a 7% reduction from fiscal 2011. The Honda Aoyama Building made more efficient use of greywater by treating kitchen wastewater and rainwater for use in flushing toilets. The Wako Building reduced water use in its cooling towers through the summer Cool Bir program carried out in continuation from last year. CO2 E W

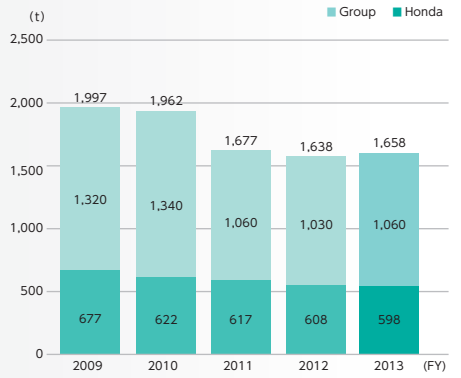
Major initiatives in FY2013

Reduce water use by switching to water-saving toilets	Honda Shirako Building Honda Finance Co., Ltd.

● Number of vehicles added to corporate fleets at major business sites: Government-designated low-emission vehicles (meet national government's green procurement standards) and other low-emission/fuel-efficient vehicles[2]



Waste generation

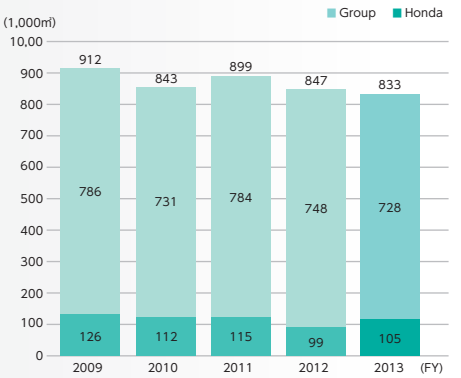


Note: Historical figures have been adjusted to reflect a change in the scope of data.

The Kansai school of Honda Technical College has increase its recycling rate and increase the efficiency of recycling processes by separating waste into 21 categories.

One example of the switch to returnable containers at Kibonosato

Group water use



Note: Historical figures have been adjusted to reflect an increase in the scope of data

1. Refuse Paper and Plastic Fuel: a type of high-quality refuse-derived fuel made primarily from paper and plastic waste that is difficult to recycle
2. Includes gasoline, hybrid, and natural gas vehicles

Honda environmental conservation initiatives are based on a global perspective but carried out with the goal of building constructive relationships between our operations and the communities that host them. As a responsible corporate citizen, we try to anticipate our neighbors' needs and carry out activities at the local level, to share positive experiences with communities and pass on something valuable to future generations. For more information please visit:
http://world.honda.com/community/

■ Beach clean-up efforts

So future generations can inherit the beautiful natural environment of the Earth, Honda has been carrying out environmental conservation activities worldwide. One of these is the Honda beach clean-up effort made possible by Honda technologies and volunteering.

In this activity, Honda Group associates cooperate with regional communities to clean beaches throughout Japan using a towable beach cleaner. Lightweight, compact, simply designed, and easy to operate, the beach cleaner was developed by Honda with the desire to ensure that future generations can continue to walk barefoot on Japan's beaches. Launched in May 2006, the project so far has overseen more than 250 cleanup events at more than 100 beaches across Japan. In 2012, over 4,000 community residents worked with us to clean these beaches.

Volunteer Honda staff also host environmental studies classes for elementary and junior high schools students in communities that most need it. Picture-card stories are used to communicate to younger generations the importance of the natural environment and explain to the children how much trash humans produce every day, how that trash is washed to sea by rivers, and how it has an adverse effect on marine life.

Honda Group associates also joined the local government and residents of a community in Miyagi Prefecture in cleaning up a beach wrecked by the tsunami that followed the Great East Japan Earthquake, and helping return the beach to its former condition.

■ Watershed conservation

The water we use every day is given to us by rivers that flow from the mountains to the sea. At the sources of these rivers are watershed forests, which produce fresh air in addition to clean water and abundant marine life. These forests also play a role in preventing disasters by stabilizing the ground. And they provide places for people to feel refreshed and enjoy the wonders of nature.

Starting with the Community Forest initiatives in the 1970s, Honda has been tending eight watershed forests that benefit the communities surrounding our business sites, with the goal of promoting grassroots-level forest conservation across Japan. Rather than simply planting trees, we engage in sustained conservation activities, including cutting back undergrowth and removing certain trees to promote healthy growth.

Beach Clean
Hondaビーチクリーン活動

Honda beach cleanups held in FY2013

No. of cleanups	No. of participants
25	4,100

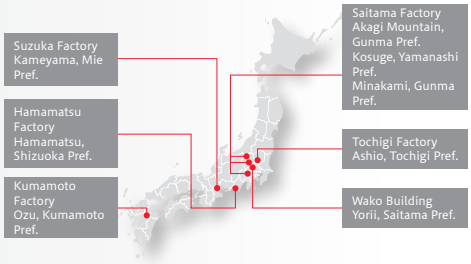
September 2012 - Locals and Honda Group associates work together in a beach clean-up event at Maehara Beach in Kamogawa, Chiba

June 2012 – An environmental studies class is held to teach children the importance of the natural environment at Futami Seaside Park in Iyo, Ehime

Watershed conservation efforts in FY2013

No. of locations	No. of events	No. of participants
6	15	420

Areas where watershed conservation activities were held



July 2012 – Watershed conservation activities in Ashio, Tochigi

Environmental education

Nature Wagon

In this visiting environmental studies program, Honda Step WGNs and other vehicles are loaded with natural materials from the sea and mountains and driven to primary schools, community centers, and other public facilities. The program consists of a lecture about the importance of natural systems and environmental conservation, combined with craftwork and other activities using natural materials. Volunteer Honda retirees tell stories about the environment using the natural materials as props, and support the children in learning how to do things by themselves.
Started in 2000, Nature Wagon has expanded gradually to become a highly popular year-round program.

Nature Wagon workshops

Forest Fantasy Workshop
Participants learn about the importance of forest conservation and the role of trees and forests by experiencing log-cutting and nature craft activities that use wood from forest thinning, driftwood, and other materials.

Stone painting
By painting stones of various shapes and sizes gathered from riverbeds, participants gain an understanding of the power of flowing water and develop an interest in the mysteries of nature.

Natural salt production
Participants make natural salt by boiling mineral-rich seawater brought up from great depths. Through this experience, they learn about the process through which salt is produced and become aware of the importance of marine conservation.

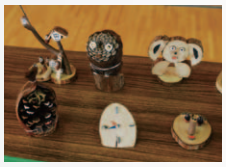
Natural vegetable dyes
Participants learn about the vivid colors that can be created with natural pigments, and about the links between nature and our lives as people, through a hands-on experience of tie-dying with vegetable dyes made from flowers, grasses, and other plants.

環境わごん
あなたの街で海と山に出会える

Nature Wagon activities in FY2013

No. of business sites	No. of events	No. of participants
5	172	8,000

Nature Wagon workshop



Creations from a Forest Fantasy Workshop

Stone painting

Natural salt production

Natural dying

Community Topic 1

Hello Woods Symposium 2013

Hello Woods Symposium 2013 was held on March 3, 2013. This event provides a venue for contemplating the vitality of children and the forest, the perennial theme of Hello Woods, and for introducing programs offered by the Hello Woods nature-learning center, where the great outdoors is used to promote learning and play and the restoration of a local satoyama environment. Mr. Takeshi Yoro, Professor Emeritus at Tokyo University, delivered the keynote speech to a Hotel Twin Ring conference room filled almost to its capacity of 200 people.

Community Topic 2

Beach Monpal makes its debut

The Beach Monpal, based on an existing Honda product, was developed by engineers who wished more people could experience Honda's beach cleaner and have fun participating in beach cleaning events

A new vehicle made an appearance in Honda's long-running beach cleaning initiative. The Beach Monpal was made by modifying the commercially available Monpal four-wheel electric scooter—which can be driven without a license—to run on sand. Like the ATV before it, the Beach Monpal was used to pull a custom Honda "beach cleaner" and comb the beach for trash.
More people had an easy time pulling the beach cleaner compared to the ATV, which could only be driven by trained personnel.

• Facilities in Japan that Disclose Environmental Data

■ See the following website for environmental data disclosed by facilities in Japan (in Japanese only).
http://www.honda.co.jp/environment/report/data/

• Honda Motor Co., Ltd.

Saitama Factory	●Address: 1-10-1 Shin-Sayama, Sayama City, Saitama Prefecture, Japan ●Established : 1964 http://www.honda.co.jp/environment/report/data/facilities/saitama/ (in Japanese only)
Ogawa Plant, Saitama Factory	●Address: 2-1-1 Hibaridai, Ogawa-cho, Hiki-gun, Saitama Prefecture, Japan ●Established: 2009 http://www.honda.co.jp/environment/report/data/facilities/ogawa/ (in Japanese only)
Suzuka Factory	●Address: 1907 Hirata-cho, Suzuka City, Mie Prefecture, Japan ●Established: 1960 http://www.honda.co.jp/environment/report/data/facilities/suzuka/ (in Japanese only)
Kumamoto Factory	●Address: 1500 Hirakawa, Ohzu-machi, Kikuchi-gun, Kumamoto Prefecture, Japan ●Established: 1976 http://www.honda.co.jp/environment/report/data/facilities/kumamoto/ (in Japanese only)
Hamamatsu Factory	●Address: 1-13-1 Aoi Higashi, Naka-ku, Hamamatsu City, Shizuoka Prefecture, Japan ●Established: 1954 http://www.honda.co.jp/environment/report/data/facilities/hamamatsu/ (in Japanese only)
Hosoe Plant, Hamamatsu Factory	●Address: 5794-1 Kiga, Hosoe-cho, Kita-ku, Hamamatsu City, Japan ●Established: 2001 http://www.honda.co.jp/environment/report/data/facilities/hosoe/ (in Japanese only)
Tochigi Factory	●Address: 19 Matsuyama-cho, Moka City, Tochigi Prefecture, Japan ●Established: 1970 http://www.honda.co.jp/environment/report/data/facilities/tochigi/ (in Japanese only)
Production Planning Division	●Address: 2900 Kamitakanezawa-oaza, Takanezawa-machi, Shioya-gun, Tochigi Prefecture, Japan ●Established: 1995 http://www.honda.co.jp/environment/report/data/facilities/seisan/ (in Japanese only)
Quality Innovation Center (Tochigi)	●Address: 52-1 Hagadai, Haga-machi, Haga-gun, Tochigi Prefecture, Japan ●Established: April 2003 http://www.honda.co.jp/environment/report/data/facilities/qct/ (in Japanese only)

• Honda R&D Co., Ltd.

Automobile R&D Center, Wako Fundamental Technology Research Center Aircraft Engine R&D Center	●Address: 1-4-1 Chuo, Wako City, Saitama Prefecture, Japan ●Established: 1960 (established as independent company from Honda Motor Co., Ltd.) http://www.honda.co.jp/environment/report/data/facilities/rd_wako/ (in Japanese only)
Automobile R&D Center (Tochigi / Tochigi Proving Ground)	●Address: 4630 Shimotakanesawa, Haga-machi, Haga-gun, Tochigi Prefecture, Japan ●Established: 1982 http://www.honda.co.jp/environment/report/data/facilities/rd_tochigi/ (in Japanese only)
Motorcycle R&D Center / Power ProductsR&D Center	●Address: 3-15-1 Senzui, Asaka City, Saitama Prefecture, Japan ●Established: 1973 http://www.honda.co.jp/environment/report/data/facilities/rd_asaka/ (in Japanese only)
Takasu Proving Ground	●Address: 21-10, Takasu-cho, Kamikawa-gun, Hokkaido, Japan ●Established: 1996 http://www.honda.co.jp/environment/report/data/facilities/rd_takasu/ (in Japanese only)

• Honda Engineering Co., Ltd.

Honda Engineering Co., Ltd.	●Address: 6-1 Hagadai, Haga-machi, Haga-gun, Tochigi Prefecture, Japan ●Established: 1990 http://www.honda.co.jp/environment/report/data/facilities/eg/ (in Japanese only)

• Promoting environmental communication

● Communicating with local communities

Honda communicates with people affected by our business operations, including consumers and people living near our business sites, as part of our environmental management efforts. We distribute environmental information widely through various media and over the Internet and have also established communication channels to allow us to gather and respond to input from local communities.

Environmental publications

Brochures

Honda Environmental Annual Report
This report provides a bird's eye view of Honda environmental initiatives, including basic policies, initiatives in each business domain, and long-term goals, while explaining specific progress made in each area.
http://world.honda.com/environment/report/media/download/environmental-report_2013/

Honda Ecology+
(in Japanese only)
This report describes the various efforts we are making to realize the Honda Environmental and Safety Vision, with a special focus on initiatives in product research and development.
http://www.honda.co.jp/environment/report/media/download/pdf/Honda_ecoplus.pdf

e-dream
(in Japanese only)
This informative magazine presents initiatives at Honda dealers and the latest environmental technologies for all product categories—automobiles, motorcycles, and power products—to facilitate better communication between dealers and customers.
http://www.honda.co.jp/environment/e-dream/

Honda Eco Book
(in Japanese only)
Written for upper-level elementary school children, Honda Eco Book uses photographs and illustrations to clearly explain what Honda is doing and what kids can do at home to tackle major environmental problems.
http://www.honda.co.jp/environment/report/media/download/pdf/kids-ecobook.pdf

Websites

Environment section of the Honda Worldwide website
A web portal for environment related-information from Honda.
http://www.honda.co.jp/environment/
http://world.honda.com/environment/

Environmental Documentary—Honda Face
This regularly updated website introduces Honda environmental initiatives, with a special focus on our associates and technologies.
http://www.honda.co.jp/environment/face/
http://world.honda.com/environment/face/

Leafel's Forest
(Japanese only)
This web content provides information about Leafel, Honda's environmental mascot, introducing Honda environmental initiatives through Leafel's story.
http://www.honda.co.jp/leafel

Video libraries

Blue Skies for Our Children
This animated global ad brings to life the key elements of the Honda global environmental symbol and slogan, a declaration of our commitment to do more to realize the Honda Environmental and Safety Vision.
http://www.honda.co.jp/environment/report/media/download/blue_skies/

Blue Skies for Our Children: Part 1 Triple Zero Initiatives
(Japanese only)
This video introduces Honda environmental initiatives while highlighting environmental technologies for products and initiatives in our business activities.
http://www.honda.co.jp/environment/report/media/download/triple_zero/

Leafel's Blue Sky Class Part 1 – What Kind of Home is HSHS? (Japanese only)
Created for upper-level elementary school children, this video introduces global warming and Honda's efforts to fight it, narrated by Honda Green Action mascot Leafel.
http://www.honda.co.jp/environment/report/media/download/aozora-guide1/

GRI Content Index

The table below indicates the pages in the Honda Environment Annual Report that correspond to standard disclosure items and the environmental performance indicators in the Sustainability Reporting Guidelines issued by the Global Reporting Initiative (GRI).

Plofile			Page
Strategy and Analysis	1	Provide a statement from the most senior decisionmaker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy for addressing sustainability.	4-9
	2	Provide a description of key impacts, risks, and opportunities.	12-18,52-54
Organizational Profile	3	Report the name of the organization.	C3
	4	Report the primary brands, products, and services.	C3-C4
	5	Report the location of the organization's headquarters.	C3
	6	Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	C3-C4
	7	Report the nature of ownership and legal form.	C3
	8	Report the markets served.	C3-C4
	9	Report the scale of the organization	C3-C4
	10	a. Report the total number of employees by employment contract and gender. b. Report the total number of permanent employees by employment type and gender. c. Report the total workforce by employees and supervised workers and by gender. d. Report the total workforce by region and gender. e. Report whether a substantial portion of the organization's work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors. f. Report any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries).	□
	11	Report the percentage of total employees covered by collective bargaining agreements.	□
	12	Describe the organization's supply chain.	66-68
	13	Report any significant changes during the reporting period regarding the organization's size, structure, ownership or its supply chain.	42,55
	14	Report whether and how the precautionary approach or principle is addressed by the organization.	13,42,55
	15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorces.	2,23,28-29,33-34
	16	List memberships of associations (such as industry association) and national or international advocacy organizations in which the organization holds a position on the governance body.	2
Identified Material Aspects and Boundaries	17	a. List all entities included in the organization's consolidated financial statements or equivalent documents. b. Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.	□
	18	a. Explain the process for defining the report content and the Aspect Boundaries. b. Explain how the organization has implemented the Reporting Principles for Defining Report Content.	14-15,52
	19	List all the material Aspects identified in the process for defining report content.	C5-C6
	20	For each material Aspect, report the Aspect Boundary within the organization	2-3
	21	For each material Aspect, report the Aspect Boundary outside the organization	2-3
	22	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	47,60
	23	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.	2-3
Stakeholder engagement	24	Provide a list of stakeholder groups engaged by the organization	12
	25	Report the basis for identification and selection of stakeholders with whom to engage.	14-15,18,52
	26	Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	14-15,18,52
	27	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	14-15,18,52
Report Profile	28	Reporting period for information provided	2
	29	Date of most recent previous report (if any).	2
	30	Reporting cycle	2
	31	Provide the contact point for questions regarding the report or its contents	C7
	32	a. Report the 'in accordance' option the organization has chosen. b. Report the GRI Content Index for the chosen option. c. Report the reference to the external Assurance Report if the report has been externally assured. GRI Content Index for 'in accordance' - Core GRI Content Index for 'in accordance' - Comprehensive	C5-C6 (Comprehensive)
	33	a. Report the organization's policy and current practice with regard to seeking external assurance for the report. b. If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided. c. Report the relationship between the organization and the assurance providers. d. Report whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability report.	1
Governance	34	Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.	42,55
	35	Report the process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees.	42,55
	36	Report whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body	42,55
	37	Report processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics. If consultation is delegated, describe to whom and any feedback processes to the highest governance body.	42,55-57
	38	Report the composition of the highest governance body and its committees by: ・executive or non-executive ・Independence ・Tenure on the governance body ・Number of each individual's other significant positions and commitments, and the nature of the commitments ・Gender ・Membership of under-represented social groups ・Competences relating to economic, environmental and social impacts ・Stakeholder representation	□
	39	Report whether the Chair of the highest governance body is also an executive officer.	4-9
	40	Report the nomination and selection processes for the highest governance body and its committees, and the criteria used for nominating and selecting highest governance body members	□
	41	Report processes for the highest governance body to ensure conflicts of interest are avoided and managed. Report whether conflicts of interest are disclosed to stakeholders	□
	42	Report the highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts.	42,55
	43	Report the measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics.	6-9

Governance	44	a. Report the processes for evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics. Report whether such evaluation is independent or not, and its frequency. Report whether such evaluation is a self-assessment. b. Report actions taken in response to evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics, including, as a minimum, changes in membership and organizational practice.	□
	45	a. Report the highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities. Include the highest governance body's role in the implementation of due diligence processes b. Report whether stakeholder consultation is used to support the highest governance body's identification and management of economic, environmental and social impacts, risks, and opportunities.	14-15,52
	46	Report the highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics.	42,55
	47	Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities.	42,55
	48	Report the highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material Aspects are covered.	4-5
	49	Report the process for communicating critical concerns to the highest governance body	42,55
	50	Report the nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s) used to address and resolve them.	14-15,42,52,55
	51	Report the remuneration policies for the highest governance body and senior executives for the below types of remuneration	□
	52	Report the process for determining remuneration. Report whether remuneration consultants are involved in determining remuneration and whether they are independent of management. Report any other relationships which the remuneration consultants have with the organization.	□
	53	Report how stakeholders' views are sought and taken into account regarding remuneration, including the results of votes on remuneration policies and proposals, if applicable.	□
	54	Report the ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country	□
	55	Report the ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country.	□
Ethics and Integrity	56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	12-13,19
	57	Report the internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines.	□
	58	Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines.	□

Environmental Performance Indicators			Page	Disclosure level			
				Non-consolidated		Consolidated	
				Partly	Fully	Partly	Fully
		Disclosures on Management Approach (DMA)	12-19,22-24,41-46,51-59		○		○
Materials	EN-1	Materials used by weight or volume.	70		○		
	EN-2	Percentage of materials used that are recycled input materials.	—	Not disclosed			
Energy	EN-3	Energy consumption within the organization.	47,60		○		○
	EN-4	Energy consumption ouside of the organization.	47,60		○		○
	EN-5	Energy intensity	—	Disclosed as CO_2 equivalent			
	EN-6	Reduction of energy consumption	23-24,62-77,82-84		○		○
	EN-7	Reduction in energy requirements of products and services	22,25-40		○		○
Water	EN-8	Total water withdrawal by source.	47,60		○		○
	EN-9	Water sources significantly affected by withdrawal of water.	71	○			
	EN-10	Percentage and total volume of water recycled and reused.	72			○	
Biodiversity	EN-11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	10-11		○		
	EN-12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	10-11,19-21		○		○
	EN-13	Habitats protected or restored.	10-11,20-21,85		○		○
	EN-14	Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	10-11,19-21		○		
Emissions	EN-15	Direct greenhouse gas (GHG) emissions. (Scope 1)	47,60		○		○
	EN-16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	47,60		○		○
	EN-17	Other indirect greenhouse gas (GHG) emissions. (Scope 3)	44-45		○		○
	EN-18	Greenhouse gas (GHG) emissions intensity	22-24		○		○
	EN-19	Reduction of greenhouse gas (GHG) emissions	22-24,48-50,62-77,82-84		○		○
	EN-20	Emissions of ozone-depleting substances (ODS)	—	Not disclosed			
	EN-21	NOx, SOx, and other significant air emissions.	47		○		○
Effluents and Wastes	EN-22	Total water discharge by quality and destination.	47,60		○		○
	EN-23	Total weight of waste by type and disposal method.	47,60		○		○
	EN-24	Total number and volume of significant spills.	56-57		○		
	EN-25	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	—	No waste transported			
	EN-26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	10-11,19-21 EN-Web		○		
Products and Services	EN-27	Extent of impact mitigation of environmental impacts of products and services.	13-18,22-40		○		○
	EN-28	Percentage of products sold and their packaging materials that are reclaimed by category.	75,80		○		
Compliance	EN-29	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.	46,56-57,59		○		
Transport	EN-30	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	24,44-45,54,62-63,73-75		○		○
Overall	EN-31	Total environmental protection expenditures and investments by type.	46,59		○	○	
Supplier Environmental Assessment	EN-32	Percentage of new suppliers that were screened using environmental criteria.	67-68	○		○	
	EN-33	Significant actual and potential negative environmental impacts in the supply chain and ations taken.	67-68	○		○	
Environmental Grievance Mechanisms	EN-34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms.	56-57		○		

□: Indicators related to non-environmental categories
This index contains tentative translations used by Honda.

Design concept

The clear blue sky in the background symbolizes Honda's global environmental slogan, "Blue Skies for Our Children," while the sunflower, a prolific producer of seeds, represents Honda's ambition to build a rich and beautiful world and to pass that world on to the next generation.

This visual illustrates Honda's hope and dream to realize "a sustainable society where people can enjoy life," a society where future generations can live prosperously and in equilibrium with a vibrant natural environment.

● Domain coodinators

Sales and services

Automobiles ····· Shigeaki Kato
Yasumasa Shimizu
Motorcycles ····· Masaharu Iuchi
Power Products ····· Kazuhiro Yokoyama
Service and Parts ····· Hiroyuki Eguchi
Environment & Recycle Promotion Office ····· Wataru Karo

Purchasing ····· Yukitaka Okanoya

Environmental Administrators in Production and Office Operations

Saitama Factory ····· Chihiro Morimoto
Tochigi Factory ····· Koichi Aonami
Hamamatsu Factory ····· Kozo Iida
Suzuka Factory ····· Ken Ikeda
Kumamoto Factory ····· Takayoshi Fukai
Production Planning Division ····· Koji Kawanaka
Quality Innovation Center Tochigi ····· Yosito Hora
Green Factory Promotion Center ····· Yuji Mukano

Head Office ····· Takao Aoki
Honda R&D Co., Ltd.
Automobile R&D Center (Wako) /
Fundamental Technology Research Center/
Aircraft Engine R&D Center ····· Shinya Inamura
Motorcycle R&D Center/Power Products R&D Center
····· Fumihiko Nakamura
Automobile R&D Center (Tochigi) ····· Shinya Ogawa
Automobile R&D Center (Takasu Proving Ground) ··· Toru Sasaki
Honda Engineering Co., Ltd. ····· Masuhiro Sakurai

Transportation

Products and component part sets ····· Masakatsu Sato

Administration

Human Resources ····· Manabu Ozawa
Corporate Communications ····· Masaya Nagai
Intellectual Property ····· Hirokazu Bessyo

Note: Current as of June 1, 2013.

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● About the Honda global environmental slogan and symbol

BLUE SKIES FOR OUR CHILDREN

Our goal, as expressed in the Honda Environmental and Safety Vision, is to leave the joy and freedom of mobility for future generations (for our children). Our environmental slogan and symbol embody this aspiration as we strive to create a sustainable society where people can enjoy life (blue skies).

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You can read this report, the latest news and updates on the Honda Worldwide website.
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HONDA

The Power of Dreams

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